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An Analysis of Staff Development Practices in Selected Illinois Elementary School Districts

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AN ANALYSIS OF STAFF DEVELOPMENT PRACTICES IN SELECTED ILLINOIS ELEMENTARY SCHOOL DISTRICTS

by

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VITA

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CHAPTER I

INTRODUCTION

In 1983, the National Commission on Excellence in Education was appointed by then Secretary of Education Terrell Bell in response to the broadly held belief that the educational system in the United States was seriously lacking. In its report, the Commission declared that "Our nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovations is being overtaken by competitors throughout the world." (National Commission on Excellence in Education, 1983 p.3)

As a nation, we had allowed ourselves to slip into mediocrity in a number of significant areas, and all of these traced back to weaknesses in our public elementary and secondary education programs. It was becoming increasingly clear that the one factor indispensable to our nation's continued success was the quality of the education of the citizens. (Moore, 1989) The renewed concern with education in this country, similar to that of the post-Sputnik era, brought an unprecedented number of state and national study groups, commissions and educational reports before the public.

School Reform Initiatives

State legislatures and education departments assumed a leadership role in many reform initiatives. These "first wave" reform efforts consisted primarily of legislation, regulations and mandates that were to be implemented at the local school or district level. (Passow, 1988) Throughout the country, high school graduation requirements were raised, teacher certification procedures were tightened, teacher salaries rose at twice the rate of inflation, and teacher training improved. (Boyer, 1988)

A "second wave" of school reform emerged as a result of two conflicting trends in the original reform movements. Although this era noted a shift from local to state control of much of the educational program, there was increased recognition that school improvement required local school and district involvement. In 1986, Governor Lamar Alexander reported in Time for Results: The Governors' 1991 Report on Education that although the governors were not prepared to put aside the new minimum standards that some states were setting, they had learned that excellence cannot be imposed from a distance. They recognized that local school leaders, teachers and parents create excellence in schools. (in Passow, 1989)

California has been recognized as one of the more active states with regard to school reform. The Policy Analysis for California Education (PACE) group established

by the California legislature in its report Conditions of Education in California, 1985-86 recognized that if educational reform and improvement are to be accomplished, the action and responsibility must shift from the state to local level, to the "persons who actually manage and deliver educational services to students." (Passow, 1988, p. 248)

Other reform agencies of the eighties such as the Holmes Group in Tomorrow's Teachers, the Carnegie Forum in A Nation Prepared: Teachers for the 21st Century and the Education Commission of the States What Next? More Leverage for Teachers were in agreement that teachers and teaching are the central element to address the crisis in our educational programs. These later reports suggested that teacher preparation programs needed to be substantially improved. (Passow, 1984) They also emphasized that education cannot be improved without the help of the teachers already in the classroom, and emphasized the need to enhance teachers' morale, motivation and participation. (Passow, 1984 and Evans, 1989) The second wave of school reform in this country attempted to reach into the classroom and influence what teachers and principals believe, think and do.

Boyer (1988, p. 61) suggests that "the quality of education in this country can be no greater than the dignity we assign to teaching". There are, however, profound demographic changes among our nation's teachers. They have

become a veteran, middle aged, frequently immobile group. The average age of teachers in the United States today is close to 50. Half of them have taught for at least 15 years, many in the same school. Many of today's teachers are experiencing the changes in perception and behavior that are common to all professionals at mid-career: boredom, loss of enthusiasm, diminished job interest and a leveling off of performance. (Evans, 1989)

> Renewed attention should be given to the professional growth of veteran teachers so that they can continue to approach teaching with zest and can have access to new knowledge that will allow them to improve their teaching. The nations corp of teachers is older, more stable and more experienced than at any time in history. It is a simple matter of arithmetic that reforms in education depend upon sustaining the vigor and skill of veteran teachers. (Anderson, 1985, p. 111)

Americans have begun to see teachers as part of the solution to our educational crisis, rather than the problem. Rather than curriculum development, staff development for all professional personnel is now seen as the primary means of improving school learning. (Wood, Freeland and Szabo, 1985)

During the past decade, interest in staff development has experienced a tremendous growth among educators. The National Staff Development Council (NSDC) was founded in 1969 as an organization dedicated to improving schools through staff development. NSDC strongly believes in collaboration among professionals and includes school

administrators, teachers, university professors and state department personnel as members. From 1980 to 1990, membership in NSDC grew from approximately 400 educators to more than 6,000. (Dennis Sparks, Executive Director, National Staff Development Council; personal interview; February, 1992) In 1985, the Association for Supervision and Curriculum Development (ASCD) also facilitated the formation of a member network dedicated to staff development.

Staff Development Through Illinois School Reform

During the 1985 legislative session in Illinois, sweeping school reforms were acted upon by the General Assembly. Through Illinois Senate Bill 730 (1985) the primary purpose of schooling was for the first time clearly defined as "the transmission of knowledge and culture through which children learn in areas necessary to their continuing development and entry into the world of work." School Districts were to give priority in the allocation of resources, including funds, time allocation, personnel, and facilities to fulfilling this purpose. The Illinois State Board of Education was directed to establish goals in each of the fundamental areas of learning. Local and state assessment plans were to follow to monitor school and district achievement toward these goals. Teacher and administrative certification requirements were increased, and school districts were required to

> Design and conduct staff development programs which provide continuing education to update or improve teachers' skills or knowledge in order to maintain a high level of performance. These staff development programs must conform to locally developed plans which specify outcome goals, including the improvement of specific instructional competencies. (Illinois State Board of Education, 1985, p. 11)

From the first year of implementation of the Illinois Reform Act in 1986 through the 1990-91 school year, approximately $18 million has been given to local school districts in Illinois in the form of entitlement grants for staff development. School districts are required to submit a Staff Development Plan for approval by the Illinois State Board of Education which must include goals and objectives, activities and the method of evaluation as well as evidence that teachers were included in the planning. Districts receive approximately $30 per certified teacher per year to fund these staff development activities. (Ward Iaun, Program Support Section, Illinois State Board of Education; personal interview; October, 1990)

By including staff development as a part of their school reform imperative, the Illinois legislature has recognized that inservice for educators is a key element in school improvement. How closely these staff development plans and activities reflect the recommendations of the experts in the field is not known.

Focus of The Study

This study concentrates on staff development efforts in

elementary school districts in Illinois since the 1985 School Reform Act. The purpose of staff development is to bridge the gap between theory and practice, to provide those who work directly with students the most current information regarding instructional methodology and curriculum content. (Beegle and Edelfelt, 1977) There is evidence, however, that staff development programs have been "erratic, occasional activities" rather than a "continuous and constant effort". (Edmonds, Ogletree and Wear, 1963, p. 6)

Experts in the field of staff development have recommended a number of components to ensure that inservice for teachers accomplishes its ultimate goal, the improvement of education for students.

> Staff development is one of the most critical factors in school improvement, and numerous studies suggest that its planning and delivery need to be substantially altered. The value of participant involvement, long term planning, workshop practice, classroom trial and feedback, and collegial study groups for refining implementation are well documented. (Glickman and Calhoun, 1991, p. 6)

These suggestions are based on research with teachers in the field, and are considered crucial for long term change to occur.

This study will investigate the existence of the recommended staff development components in elementary school districts in downstate Illinois. The following questions will be addressed:

1. Do currently recommended practices in staff development

occur more frequently in school districts which receive a large allocation of Illinois State Board of Education Staff Development funds?

2. Do currently recommended practices in staff development occur more frequently in school districts which have a high per pupil expenditure?
3. Do currently recommended practices in staff development occur more frequently in school districts which serve a high socioeconomic level of students?
4. Do currently recommended practices in staff development occur more frequently in school districts where students achieve at above average levels?
5. Do currently recommended practices in staff development occur more frequently in school districts where the pupil teacher ratio is low?

Chapter II contains a review of the literature on recommended staff development practices. The methodology and research design which were used to investigate the above questions are described in Chapter III. The responses to the surveys of elementary school districts and an analysis of these responses are presented in Chapter IV. Chapter V discusses the research questions, the implications of the data collected and recommendations for further investigation.

Definition of Terms

For the purpose of this study, certain terms have been

defined as follows:

Staff development: any systematic attempt to reinforce and/or bring about effective change in the professional practices, skills, beliefs and understandings of a person. The term "inservice" is used throughout the professional literature interchangebly with staff development.

Elementary school district: a school district which teaches students from pre-Kindergarten or Kindergarten through eighth grade exclusively. Unit districts which also teach students in Grade 9 through 12 are not included.

Downstate Illinois: A local term which refers to all areas of the state outside of the City of Chicago, regardless of their geographic direction from Chicago.

Per pupil expenditure: The total expenditures of a school district divided by the total student enrollment.

Socioeconomic level: A description of a school community based on the number of Elementary and Secondary Education Act (ESEA) Chapter I eligible students who reside in the district. This data was calculated by the Illinois State Board of Education from the 1980 census figures.

Pupil teacher ratio: The number of certified teachers divided by the student enrollment.

Limitations of the Study

1. The survey instrument used was developed by this author and the results were not normed previous to this study.

2. Some of the data collected was self reported.

CHAPTER II

REVIEW OF RELATED LITERATURE

Historical Perspective

The need for continuing education of the practicing teacher was first recognized in the early 1830's as a response to the rapid changes affecting society during that period and a growing awareness of the complexities of teaching. For the next century, reading, summer and extension schools and corresponsdence study allowed practicing teachers to improve their professional knowledge while maintaining their full time jobs. This inservice education was reactive rather than proactive, and seen as a means to implement a new program or to overcome gross deficiencies in teachers' attitudes, knowledge and skills as perceived by their superordinates. (Schiffer, 1980)

Based on the belief that the school program as well as the teachers' performance would improve as teachers worked together on problems that were significant to them, inservice education took on a new focus as early as the 1920's. This new direction sought to develop individual skills that were relevant to the local school situation. Change occurred slowly, usually as a result of "haphazard

involvement of individuals in a variety of programs." (Rogers, 1962)

The present era of staff development began approximately 15 years ago. There has been a renewed interest in staff development based on the recent trends of student population decline, decreased teacher mobility, and reduction in force clauses which have produced a stable, tenured teaching staff. Most school districts are confronted with the problem of trying to stimulate an aging, secure staff through inservice activities. (Zion, 1987)

Experts in the field of staff development identify one of the weaknesses in previous staff development efforts as focusing on "teacher training" rather than "teacher education." (Bruce, 1979; Shambier, 1983; Zion, 1987) Those responsible for staff training and retraining have begun to view teachers as adult learners and have identified those factors which make adult learning successful. The research regarding staff development by Joyce and Showers (1980) has shown that teachers are wonderful learners - nearly all can improve their competence by learning new skills. The Joyce and Showers research has also found that in order to improve their skills, teachers need certain conditions not present in most inservice settings. The involvement of staff in planning and management, activities appropriate to adult learners including practice and feedback, coaching, evaluation and administrative support

are crucial elements of a successful staff development program.

Studies of the educational change process have consistently found that productive staff development activities have four major characteristics. These successful staff development programs usually consist of more than one or two sessions and pay particular attention to follow-through. They are designed to focus on teachers' current needs; teachers should be involved in identifying those needs. Successful staff development programs also use the individual school as the site for inservice activities. This allows the program to be tailored to the needs of an individual school and ensures that the principal and teachers are involved in the topic selection and new approaches to instruction. Teachers themselves have been identified as important resources for staff development, and should be encouraged to take advantage of shared experience and expertise. (McDonnell, 1985)

Program Planning

For most of their working day, teachers are alone with their students. They have virtually complete decision making power within their classroom. Beyond their own classroom, however, teachers feel relatively powerless. (Tye and Tye, 1984) In a recent Carnegie Foundation survey, nearly one third of the thousands of teachers surveyed said they have no role in shaping the curriculum they are asked

to teach and more than half said that they do not participate in designing their own inservice education programs. (Boyer, 1988)

Throughout the literature on staff development, teacher involvement in program planning is considered of primary importance to program relevancy and success. (Hinson, Caldwell and Landrum, 1989; National Staff Development Council, 1991; Schambier, 1983; Schiffer, 1980; Sparks, 1983) In a meta-analysis of 160 staff development studies, Daresh (1985) found that inservice education is viewed by teachers as more effective when the content is based on the self-reported needs of participants. Staff involvement in planning and shared leadership among teachers and administrators when planning inservice were two of nine essential practices identified by Wood, McQuarrie and Thompson (1983) in a national survey of over 300 professors and practioners with staff development expertise.

A needs assessment can serve as the basis for program planning. It should be a systematic review of how the school has done its job and how it can do the job even better. It is part of the cycle of program change - evaluation, goal setting, planning, implementation, data collection. The first step in the cycle is the compilation of evaluation data. An analysis of the data collected provides the information for the staff to identify needs and set goals. (Marshall and Caldwell, 1984)

A questionnaire is often used to ask teachers and administrators what they need or want to improve. Where differences in teacher and administrator perceptions exist, classroom observations or interviews can be used to verify the needs of individuals and groups of teachers. Another effective means of assessing inservice needs is to interview teachers about the objectives they and their colleagues should focus on during inservice programs. Interviews with teachers and administrators provide accurate and honest feedback concerning where gaps exist between desired and actual competencies. (Wood, Thompson and Russell, 1981) Effective staff development programs need not always develop from grass-roots concerns, and at times may need to be initiated by administration from research and recognized sound practice. (Loucks-Horsley and others, 1987; Sparks, 1983; Zion, 1987)

The major foci of staff development programs is the "fine tuning" of present skills and approaches to teaching and the mastery and implementation of new approaches. (Joyce and Showers, 1980) Administrators working together with teachers, both individually and collectively, are in an ideal position to facilitate this "fine tuning" and implementation.

Program Structure

Readiness

Information from research and model practices can

stimulate reflection, discussion and a desire to improve on the part of staff members. Providing a presentation of the theoretical basis for a recommended teaching strategy or other topic for inservice facilitates the conceptual understanding, skill development and later transfer of the newly learned skills and knowledge. (Joyce and Showers, 1982) Hinson, Caldwell and Landrum (1989) agree that staff development should attempt to increase the theory or knowledge base of the program participants. An individual who understands the conceptual background of new material presented is much more likely to transfer that learning to a new setting.

Readiness activities, or the inservice activities needed prior to skill training, do have an effect on how well the inservice program will be accepted and eventually implemented. Zion (1987) suggests that the number of readiness activities needed depends on the complexity of the program to be presented, i.e., the number of activities, skills or understandings participants will develop or refine.

Shared Leadership

"Leadership in inservice education programs should be situational and emphasize authority based on competence and expertise rather than by position." (Wood, Thompson and Russell, 1981, p. 90) This includes leadership roles in presentation and implementation of staff development

programs as well as in the planning. Lambert (1989, p. 79) criticizes what she calls the "premiere" model for staff development presented by Bruce and Showers. Her major criticism is based on the passive role for teachers that the model suggests, and challenges teachers to take charge of their own profession. Collegiality and shared leadership provide teachers with options, authority and responsibility which in turn lead to real professional development. "Creating collegial or collaborative relationships is a vital strategy for supporting individual and organizational change." (Loucks-Horsley and others, 1987)

Transformational leadership is currently being discussed as a vehicle for fostering self-management in teachers. Sergiovanni (1992) suggests that "the more professionalism is emphasized, the less leadership is needed. The more leadership is emphasized, the less likely it is that professionalism will develop." If nurturing a truly professional teaching staff is a goal, then traditional school leadership must be abandoned in favor of leadership styles. One strategy that has been suggested as a cost effective method to foster collaboration and collegial relationships among staff members is the evolution of a "peer model" for staff development. In this model, a small cadre of teachers is trained by experts usually from outside of the district or school, often in intensive summer sessions. These teachers then become the in-house experts

and conduct inservice sessions for their colleagues and help in the implementation of the new program or model. (Dillon-Peterson, 1981; McDonnell, 1985) They are available on site to provide support and assistance to teachers and administrators.

Transformational leadership has been suggested as a style of leadership that fosters the collegiality and collaboration discussed above. Transformational leaders focus on changing the culture of the school by sharing strategies for coping with problems and resolving problems. They encourage teacher development as career-long inquiry and learning and develop collaborative work cultures that raise individual and group commitment and capacity.

> In short, transformational leaders focus on instructional improvement, not by dwelling on the latest innovation, but by helping to develop every teacher as an instructional leader (Fullan, 1992).

Scheduling

The scheduling of programs appears throughout the literature as an important factor in planning staff development activities. When the program is held as well as its duration are critical.

> Staff development activities which take place at the end of a school day are often less successful than those offered when participants are fresh. Further, staff development activities are less likely to be successful when they are scheduled at time of the year when seasonal activities (e.g., parent conferences, holiday celebrations) occur (National Staff Development Council, 1991).

However, Lawrence and Harrison (1980) found that effective inservice programs tend to be scheduled during evening and summer so as not to interfere with the teachers' other duties. Similar programs considered in their research offered during the school year were less productive.

Of even greater concern is the duration of a staff development program. Inservice programs consisting of a single session are largely ineffective. The one day institute should be avoided. This is especially true if the purpose of the inservice is to implement an innovation that is significantly different from what is already in practice. (Sparks, 1983; Zion, 1987) A comprehensive staff development program must provide time for teachers to adapt the new behaviors to their classroom in their own way and allow for feedback to teachers after practice. Most staff development programs that have an impact on teaching behavior are spaced over time, extending in some cases through a full school year. (Ellis, 1989; Hinson, Caldwell and Landrum, 1989; Sparks, 1983) Multiple training sessions separated by at least one week were found to have a significant effect on teaching practices and classroom management. Four to six three-hour workshops spaced one or two weeks apart allows sufficient time for teachers to implement and perfect a new strategy, raise questions and otherwise adapt the concepts to their unique situation. (Anderson, Evertson and Brophy and Stallings, Needels and

Stayrook in Sparks, 1983)

Participation

There is limited research on the merits of voluntary vs. mandatory participation in inservice programs. Perceiving staff development as an opportunity to facilitate the growth of adult learners rather than an action designed to remediate deficits leads one to conclude that voluntary participation is more effective in sustaining changes in teaching practices. Zion (1987) concludes that whether an activity should be voluntary or mandatory depends on its purpose, i.e., programs designed for individual professional growth and those that are new and untested could be voluntary. Inservice programs that have school-wide significance and a strong research base should be mandatory. He points out that if staff developers have provided for teacher involvement in the planning stages and the purpose of the activity is clear, participants are less likely to feel coerced into participating.

Other Considerations

Schoolwide professional development programs provide an opportunity for school pride, collegiality and a sense of community. For this reason, the current target of change for school improvement is no longer the district or individual staff member but the school (Wood, Freeland and Szabo, 1985).

Schools, however, are not independent of a school

system. Staff development programs exist in the larger context of school district goals and state and federal guidelines. Inservice programs may be coordinated among schools that are organized in districts or in networks based on shared goals, demographics or other common criteria. These programs should also involve participants with a common set of expectations in the planning and coordination of the training. One of the major advantages of a cluster system is a more efficient use of resources (Wood, Thompson and Russell, 1981).

Wood, McQuarrie and Thompson (1982) collected expert opinions regarding the practices and underlying assumptions of the widely recognized Readiness, Planning, Training, Implementation and Maintenance (RPTIM) model for staff development presented in the 1981 ASCD Yearbook. The results of this national survey showed that

> Strong positive support was found for the ten assumptions the RPTIM Model is based on. Well over 90 percent of both practitioners and professors agreed or strongly agreed with all of the assumptions except that 'the school is most appropriate unit of change, not the district or the individual.' While about three-fourths of the professors agreed or strongly agreed with this assumption, only a little more than half of the practitioners agreed with it (p. 30).

The literature also suggests that inservice activities take place as close to the actual teaching location as possible. A school building is considered ideal as a staff development site. (Wood, Thompson and Russell, 1981; Hinson, Caldwell and Landrum, 1989)

Activities

Adult Learning Theory

Motivation, clear learning objective, appropriate learning tasks, confidence that supports a willingness to attempt a task, sequential practice, rewards and feedback, and transfer are conditions necessary for learning to take place. (Tyler, 1985) Each of these components reflects what is necessary for adults as well as children to learn.

Several conditions which are specifically necessary for adult growth have been identified. Adult training designs should include study of the theory or rationale for the desired teaching practice or change, modeling and demonstrations of the practice, discussion of the application, practice and feedback and coaching for application in the work setting. (Joyce and Showers, 1982; Loucks-Horsley and others, 1987; Sparks, 1983) Staff development programs which do not take into consideration what is know about adult learning have little chance for success and subsequent school improvement.

Demonstration, Modeling and Discussion

The presentation of information and demonstration components are central to most staff development programs. It is important that the verbal presentation of a concept be clear and detailed. (Sparks, 1983) Demonstrations of recommended practices are also important in attempting to change behavior. Such demonstrations can include live

modeling, videotapes and even vividly described examples. (Joyce and Showers, 1981; Sparks, 1983)

The National Staff Development Council (1991) suggests that staff development activities in which participants share and provide assistance to one another are more likely to accomplish their purpose than activities in which participants work alone. Opportunities for small group discussions of the application of new practices and the sharing of ideas and concerns about effective instruction appear to be important to teachers. (Holly, 1982; Sparks, 1983)

Practice and Feedback

Although the theoretical and base of an instructional practice to be learned is necessary for conceptual understanding to take place, "abstract, word-oriented talk sessions are not adequate to change behavior." (Wood and Thompson, 1980) Detailed presentations with modeling or demonstrations are necessary, but not sufficient. It is extremely important to provide all learners with opportunities to practice a new behavior until it become part of their usual repertoire (Tyler, 1985).

Successful staff development activities are those which provide participants with a chance to be actively involved. Practice in a simulated classroom setting during inservice or microteaching (teaching a small group of students for a five to twenty minute lesson) are common practice

activities. Participants are more likely to apply what they have learned when they have had actual experience with materials and have actively participated in exercises that will later be used with students (Joyce and Showers, 1980; National Staff Development Council, 1991; Sparks, 1983; Wood and Thompson, 1980).

As important as practice for the mastery of an instructional practice is the concept of feedback. Feedback can take many forms; the simplest form occurs in the classroom itself where a teacher observes the effect of a given practice on his or her students. Peer observation is considered very effective as long as it is non-judgemental, i.e., one teacher merely collecting information for another teacher. To ensure real trust and collaboration, peer observation activities should be voluntary and completely separate from evaluation (Sparks, 1983).

In his synthesis of the research regarding staff development and effective teaching, Sparks (1983) found that for the improvement or "fine-tuning" of skills, presentation and modeling were adequate for some teachers. As methods presented became less familiar and more complex, however, consistent practice with feedback was necessary for the majority of teachers. Some teachers also needed direct coaching before the transfer of the new skills was attained.

Coaching

The findings from John Goodlad's The Study of Schooling

as analyzed by Tye and Tye (1984) indicate that most teachers work alone in self-contained classrooms and have little or no opportunity to observe other teachers at work. Peer coaching can provide the companionship and interpersonal professional support lacking in our school systems. It is a natural setting to provide technical feedback between staff development training sessions, and teachers working together can help each other better adapt new instructional models to the unique needs of their students. Coaching promotes hand-on, in-classroom assistance with the transfer of skills and strategies from inservice to the classroom, and can be provided by another teacher, administrator or trainer (Joyce and Showers, 1981).

Coaching provides psychological support as well as technical assistance for teachers who are integrating skills and knowledge from inservice training into their regular teaching practice. In order to be effective, the coach must understand that his or her role is one of a facilitator rather than a supervisor. A relationship built on mutual trust and understanding must be allowed to develop over time between the coach and trainee. Good coaches do not solve problems for teachers, but help teachers through the problem solving process (Zion, 1987).

To initiate a coaching program, Sparks (1983) suggests that teachers be encouraged to visit each others classrooms between workshop sessions, preferably with a simple,

objective student centered observation instrument. This observation data provides an opportunity to discuss the effects of various teaching practices on student behavior. This student centered data may help the observed teacher feel less self-conscious. After a mutual trust is developed between observer and trainee, teaching behavior may become the major focus of the observation.

Transfer

The outcomes of training can be classified into several levels of impact: awareness, the acquisition of concepts or organized knowledge, the learning of principles and skills, and the application of principles and skills in problem solving activities. This highest level of impact, the application of principles and skills, is what constitutes the transfer of training. Horizontal transfer refers to a condition in which a skill can be used to solve problems directly from the training situation. Vertical transfer requires that a skill be adapted to fit the conditions of the workplace before it can be used to solve problems. In vertical transfer, an extension of learning is required before the learning can be applied (Joyce and Showers, 1980 and 1983).

Vertical transfer can also be explained as "executive control."

> Executive control consists of understanding the purpose and rational of the skill and knowing how to adapt it to students, apply it to subject matter, modify or create instructional materials

> attendant to its use, organize students to use it, and blend it with other instructional approaches to develop a smooth and powerful whole. (Joyce and Showers, 1983, p. 8)

Although certain military or industrial circumstances may demand the use of specific skills in a "standard operating procedure", most educational settings require that a teacher maintain executive control over his or her instructional strategies.

The problem of transfer needs to be considered throughout the training process. Training for vertical transfer or executive control requires developing a very high degree of skill prior to classroom practice. Practice in the workplace immediately following skill development must be provided and coaching by peers must occur as vertical transfer is being accomplished (Joyce and Showers, 1981, 1983, 1988).

During transfer, many teachers experience some degree of discomfort. Using new skills involves greater effort and frequently "feels" more awkward than using more familiar ones. The use of an important new skill also involves some risk on the part of the teacher. This discomfort reduces the desire to practice a new strategy and can lead to avoidance. Unfortunately, the teacher who may need the most practice, the one for whom vertical transfer may by most difficult, is the one most likely to avoid that practice (Joyce and Showers, 1983).

Evaluation

The purpose of evaluation in staff development is to gather information that can be used to assess the impact of training and improve the training program.

Evaluation of staff development programs is difficult for a number of reasons. First, it is difficult to assess the program in isolation, since the energy and interest of the schools and teacherscan amplify or diminish the training effects. Further, staff development influences student learning in a complicated series of events, some of which are beyond the purview of the inservice program. In many cases, tests of student behavior and learning have to be constructed since commercially prepared paper and pencil testing instruments may not be appropriate for the new program's learning objectives. Finally, cost limitations frequently allow only a sample of the population affected by a training program to be studied through evaluation. An in depth evaluation of a sample, however, is recommended in place of a superficial study of the population (Joyce and Showers, 1988).

The most common method of evaluating staff development programs is through participant opinion surveys. These surveys, however, do not measure the impact of an inservice program on actual practice. This kind of anecdotal "evidence" of program effectiveness is generally based on participant satisfaction and not on a measure of changed

teacher behavior or student learning (Howey and Vaughan, 1983).

Zion (1987) suggests that inservice evaluation should assess the program's impact on the total organization rather than just the participants. Consideration must be given to the history, belief system and power structure of the school as well as to the changes in teacher and student behavior. He suggests that inservice evaluation should be formative as opposed to summative. Because staff development programs should be continuous and long-term, their evaluation must also be continuous. Periodic analysis of a program allows for modifications to better meet the needs of the school constituency.

Program Support

Staff Incentives

The professional literature regarding staff incentives for participation in inservice programs suggests that the traditional approaches to stimulating professional growth are generally ineffective. A Rand study of federal innovations found that teachers who are paid to attend workshops may value them less than do teachers who pay to participate in the same program. Receiving partial funding for attendance at a conference enables the staff member to attend the activity and feel supported by the district. Requiring staff members to partially fund their attendance at conferences and courses may actually increase the value

to the teacher (Ellis, 1989).

Extrinsic rewards, such as salary increments, materials and advanced degrees are certainly acceptable to teachers, but intrinsic rewards are much more important. Opportunities for leadership positions and the personal satisfaction gained from actual instructional improvement have often been more successful motivators. Opportunities for teachers to share ideas and work together to increase knowledge and competence assume recognition, respect and reinforcement by administration. Perhaps the most powerful motivator is a sense of efficacy, the belief that what one does makes a difference. (Anderson, 1985; Hinson, Caldwell and Landrum, 1989; Loucks-Horsley and others, 1987)

Sergiovanni's (1992) discussion of transformational leadership suggests that traditional rewards discourage people from becoming self-managing and self-motivated. The transformational leadership style fosters collegiality and a new view of rewards:

- What is rewarding gets done.
- What we believe in, think to be good, and feel obligated to do gets done.

<u>District Commitment</u>

District commitment through time, money and personnel support are critical for the success of a staff development program. Scheduling time for teachers to work together fosters the collegiality and collaboration needed for

professional growth. Any improvement goals which a board of education adopts should have appropriate funds to support them, and ideally, discretionary funds for teacher innovation, experimentation and research should be available. Clerical, paraprofessional and technical support should be made available for teachers working on professional development projects (Ellis, 1989; Lambert, 1989).

From three to five years may be needed to introduce, explain and maintain an innovation (Zion, 1987). Learning includes watching, practicing, committing to changes and working them smoothly into the regular routine. Only time can permit these facets of learning to occur. Finding the time for this kind of teacher growth involves increased costs, but "time efficient staff development efforts that do not produce teacher learning are clearly not cost effective" (Loucks-Horsley and others, 1987).

Involvement of Principals

More consistent than any other theme throughout the literature on staff development is the importance of the role of the building principal. One of the nine staff development practices which were viewed as essential by professors and practitioners in the study by Wood, McQuarrie and Thompson (1983) was having principals actively support teachers' efforts to implement change in their behavior after inservice. The Readiness Planning Training

Implementation Maintenance (RPTIM) assumptions also include the principal as the key element to adoption and continued use of a new instructional practice (Wood, Thompson and Russell, 1981).

McEvoy (1987, p. 73) reports findings from a five year study that principals appear to exercise instructional leadership through staff development by:

- informing teachers of professional opportunities,
- disseminating professional and curriculum materials,
- focusing staff attention on a specific theme,
- soliciting teachers' opinions,
- encouraging experimentation, and
- recognizing individual teachers' achievements.

The National Staff Development Council (not dated) suggests that in order to positively support staff development and school improvement principals create a clear vision and mission for their school with the staff, involve teachers in planning to nurture a collaborative attitude, encourage faculty involvement in inservice and view supervision and evaluation as opportunities for growth. The Council also suggest that principals stay abreast of current research and use the recognized sequence - theory, presentation/demonstration, practice, feedback and peer coaching - when planning staff development activities.

While promoting inservice activities, focusing the work and providing the time and resources that contribute to program success are important actions for a principal,

changes in practice appear to be more effective and long lived when the principal is an active participant in staff development with teachers. Through active involvement, the principal is able to offer an innovation his or her knowledgeable support (Anderson, 1985; National Staff Development Council, 1991; Zion, 1987).

Summary

Staff development has evolved from a series of sporadic activities designed to remediate deficits in individual teachers to a long range model of collaboration for school improvement. "It is no longer considered a 'frill' that schools and districts may engage in...it is instead, an essential concern that needs to be addressed on an ongoing basis in all school systems" (Daresh, 1985 p. 3).

The involvement of teachers in planning and management of inservice improves staff morale and promotes collegiality and collaboration. Experts in the field of staff development suggest five major components necessary for a program that will sustain long term results. An explanation of the research or theory on which a practice is based, a presentation and demonstration of the new concept or skill, opportunities for participants to practice the new skill and receive feedback, and the coaching of participants to facilitate transfer of the new behavior to their teaching situation have been identified as critical components of an inservice program.

Evaluation of most staff development programs is generally accomplished through a survey of participant satisfaction. In order for evaluation to provide a true assessment on which improvement efforts can be based, evaluation should include a measure of the training's impact on teachers, students and the total school program.

Researchers have found that incentives which have been considered motivators for staff involvement in inservice programs, such as stipends or additional training credits, are less important than intrinsic rewards. The opportunity for leadership and a feeling of efficacy by teachers provide a much stronger motivation for professional growth.

In order for staff development to effect change in schools, it must have the support of the administration. It must be recognized that change occurs slowly, and that for an innovation to become a part of the working repertoire of a teacher, time for practice and collaboration will be needed. Principal participation in staff development is the most significant factor for program success.

CHAPTER III

RESEARCH DESIGN

This study identified and analyzed the current staff development activities practiced in downstate Illinois elementary schools since the Illinois School Reform Act in 1985. Comparisons were made among districts on five criteria: the amount of funding received from Illinois State Board of Education (ISBE) Staff Development Program funds; the districts' annual per pupil expenditure; the socioeconomic level of the district; the academic achievement of students in grades three, six and eight in reading and mathematics; and the average pupil teacher ratio.

Participants

Illinois supports three types of school districts, each servicing different grade level patterns: 415 elementary districts serving students in pre-kindergarten through grade 8, 111 secondary districts serving students in grades 9 through twelve, and 424 unit districts servicing students in pre-kindergarten through grade twelve. Tax rates for schools among the various types of districts are different, and comparisons across district types could be misleading. For this study, school districts were selected to

participate from a list of elementary school districts existing in Illinois on October 1, 1989 which was provided by the ISBE. Districts were ranked by their number of full time classroom teachers. Only teachers who had "homeroom" class responsibilities were included in the count. Alternating school districts, beginning with the smallest, were selected for the study. Code numbers were assigned to each district from 1 through 208.

Instrument Design

Research Base

An extensive review of the current recommended practices for planning and implementing an effective staff development program was conducted (Dillon Peterson, 1981; Hinson, Caldwell and Landrum, 1989; Joyce and Showers, 1980, 1981, 1982, 1983, 1988; Lambert, 1989; National Staff Development Council, 1991; Wood, Thompson and Russel, 1981). Sixteen practices consistently appear in the literature as having a significant impact on the success of inservice programs for teachers. Briefly, the recommended practices are:

1. Inclusion of teachers in program planning.
2. Use of a trained in-house cadre of teachers as trainers.
3. Readiness activities conducted.
4. Consideration of adult learning styles.

5. A theoretical or research base for the new program or practice.
6. Demonstration or modeling of the new practice.
7. Simulated practice opportunities.
8. Classroom practice opportunities.
9. Feedback to program participants.
10. Opportunities for peer coaching.
11. Evaluation of the inservice programs.
12. Financial support by the district.
13. Scheduling which respects the professional responsibilities of teachers.
14. Incentives for staff participation.
15. Administrative participation and support.
16. Long term commitment to a new program or practice.

These sixteen recommended practices served as the basis for the instrument constructed for use in this study. Practices which had multiple components, such as administrative support, were broken into several survey questions, i.e., principal participation, central office participation and financial support. Each of the single component characteristics served as the basis for a single survey question.

Part One of the survey included those practices which were consistently recommended in the professional literature as effective in improving instruction and student learning. Practices which were a part of most traditional staff

development programs as well as currently recommended alternatives to these practices were included in Part Two of the questionnaire.

Pilot Study

A pilot study was conducted prior to the full scale survey distribution. A sample of twenty districts that were not included in the final survey group were selected on a random basis. A survey (Appendix A) was mailed each district with a cover letter (Appendix B) requesting that it be completed by the superintendent or a designee who has the primary responsibility for staff development in that district. Results were obtained from fourteen districts. The pilot data was analyzed for reliability using the Statistical Package for the Social Studies (SPSS) software. An alpha coefficient of .61 was calculated. This correlation was considered strong enough to accept the pilot survey items as written for the actual survey.

Data Collection

The data collected for this study was of two types, demographic information about each of the districts in the study and data regarding staff development practices used.

Demographic Information

Information regarding the number of teachers and student enrollment for 1990 in each school district was obtained from reports prepared by the ISBE Program Support Section specifically for this study. The amount of funding

each school district receives from their Staff Development entitlement grant was computed by multiplying the number of staff members reported as "regular elementary or junior high/middle school teachers" on the fiscal year 1990 Teacher Service Record Form ISBE 87-05 submitted annually by each Illinois school district by the annual amount received per teacher for staff development from ISBE. For fiscal year 1990, this amount was $29 per regular classroom teacher.

Test scores from the 1990 Illinois Goal Assessment Plan (IGAP) Reading and Mathematics tests at grades three, six and eight were used to provide comparison academic achievement information among the sample school districts. The annual IGAP assessment, like the mandated Staff Development Plan for each district, is a requirement which emanated from the 1985 School Reform Act. All Illinois public school students in grades three, six, eight and eleven participate in the annual IGAP assessment.

Reading and mathematics were the subjects selected because they are considered strong predictors of general academic functioning. The IGAP assessments in reading and mathematics have been phased in since 1988 and 1989 respectively, with language, science, social science, fine arts and physical education to follow in succeeding years.

The reading tests were primarily developed by the staff of the Center for Reading at the University of Illinois at Champaign-Urbana. The test addresses reading as a dynamic

process which requires students to use their knowledge of a topic, context, text and reading strategies to construct meaning from an author's work. (Illinois State Board of Education, 1990) The mathematics test is consistent with the National Council of Teachers of Mathematics (NCTM) Curriculum and Evaluation Standards for School Mathematics which considers mathematics a problem solving tool which is used in a broad range of scientific disciplines, business and everyday life. (Illinois State Board of Education, 1990) The reliability coefficient for the IGAP Reading Assessment ranges from .78 to .83 across the various grade subtests. The reliability coefficient for the mathematics tests are .88, .87 and .88 for grade three, six and eight respectively (Illinois State Board of Education, 1990).

IGAP test data used in this study, as well as the reports of mean scores throughout downstate Illinois were received from the Illinois State Board of Education Assessment Section and were also prepared specifically for this study.

The annual operating expense per pupil for each school district in the study was obtained from the Illinois Public Schools Financial Statistics 1988-89 School Year distributed by the ISBE Department of School Finance. Financial information regarding Illinois school districts is regularly available one year after the other demographic information which was used in this study. Financial information from

fiscal year 1989 was the most current financial data available at the time of the study.

The number of students eligible for services through the Elementary and Secondary Education Act (ESEA) Chapter I program in each district was used to establish the socioeconomic level of the school district communities involved in this study. The most recent data available regarding the number of Chapter I eligible students in each school district is based on information from the 1980 United State Census. The Chapter I information used for this study was obtained from the Annual State Aid Entitlement Statistics 1990-91 publication prepared by the ISBE Department of School Finance.

Staff Development Information

A survey instrument (Appendix A) was sent to the superintendent of each of the sample school districts. It was sent with a cover letter (Appendix C) explaining the objectives of the study. A postage paid return envelope accompanied each instrument. It was requested that the questionnaire be completed by the person in the district who has the primary responsibility for staff development. The position of the person completing the questionnaire was obtained and is reported as part of the data analysis in Chapter 4. Part I and III of the instrument requested information in a multiple choice format, while Part II solicited a frequency percentage regarding specific staff

development practices.

Of the original 207 questionnaires mailed, 80 (39%) were returned after the initial mailing. (Two of the original districts chosen for the study consolidated between the time of the sample selection and the survey mailing.) A second survey and letter were sent to those district superintendents who did not respond to the original request. An additional 40 returns (19%) were received as a result of the second request. A follow-up post card (Appendix D) yielded no additional responses. Personal telephone contacts solicited the remaining 7 returns (3%) to provide the 127 responses (61%) used in the study.

Statistical Procedure

Pearson correlation and chi-square statistical procedures using the SPSS software program were applied to the data collected. The hypotheses tested were:

1. There is a significant difference in staff development practices among districts based on the amount of funding they receive from ISBE entitlement grants.
2. There is a significant difference in staff development practices among districts based on their annual per pupil expenditure.
3. There is a significant difference in staff development practices among districts based on the socioeconomic level of the community they serve.
4. There is a significant difference in staff development

practices among districts based on the academic achievement level of the students in Reading and Mathematics.

5. There is a significant difference in staff development practices among districts based on their pupil teacher ratio.

Descriptive statistics are included for each of the variables tested. These have been reported for each survey item as well as item clusters related to a single recommended staff development practice. A Pearson correlation and chi-square test were used to ascertain if a significant relationship existed between each of the demographic and staff development variables.

Summary

Current staff development practices in downstate Illinois elementary schools since the Illinois School Reform Act in 1985 were compared using five criteria: the amount of funding received from ISBE Staff Development Program funds; the districts' annual per pupil expenditure; the socioeconomic level of the district; the academic achievement of students in grades three, six and eight in reading and mathematics; and the average pupil teacher ratio. Districts were chosen to participate in the study in a random selection and information regarding their enrollment, staff and funding levels was obtained from the Illinois State Board of Education.

A survey instrument was designed based on recommended practices in staff development found in a review of the professional literature. These instruments were sent to district superintendents, and the data collected will be analyzed with regard to the criteria listed above. Descriptive statistics as well as correlation and chi-square tests were used to ascertain significant differences among the districts sampled.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The results of the survey as they relate to the research questions are presented in this chapter. The reported data is organized into three sections: (1) Description of the demographic characteristics of the sample used to compare survey responses, (2) comparisons of survey responses for those items which are recognized as effective staff development practices, and (3) comparisons of other survey responses for those items in which respondents chose staff development practices which are or are not recommended by experts.

Description of the Sample

Sample districts included 127 elementary school districts from downstate Illinois. The survey requested the title of the person in the district who has the primary responsibility for staff development. Returns indicated that this was: superintendent 56%, assistant superintendent 16%, principal 10%, staff developer 5%, teacher 1% and other, usually curriculum director, 13%.

The survey also requested the title of the person who completed the questionnaire. The results were: superintendent 65%, assistant superintendent 13%, principal

9%, staff developer 3%, teacher 2%, and other 7%. The result of a Pearson correlation coefficient test used to determine the degree of correlation between the person completing the survey and the person in charge of staff development was $r = .5936$, $p < .01$. It can be concluded that the information gathered was provided by the person most knowledgeable regarding staff development practices in the sample districts.

Of the 127 districts which responded to the survey, 94 districts (74%) did not claim to be a part of a multi-district staff development plan. 30 districts (24%) stated that they were a part of a multi-district Illinois State Board of Education funded staff development plan.

Demographic Information

Information was gathered regarding each of the school districts that returned the questionnaire. This data is presented in Table 1. The number of teachers in the school districts responding ranged from 5 to 603 with the mean = 67.58. The annual expenditure for each pupil by the respondent school districts averaged $4070, and ranged from $2423 to $7947. Sample districts ranged from 0 to 1,034 Chapter I eligible students with an average of 92.45 students eligible to receive Chapter I services. Pupil teacher ratios extended from 8.81 to 18.7 with the mean = 16.75.

Illinois Goal Assessment Plan Reading and Mathematics

scores were reported for Grades 3, 6 and 8. These scores were then averaged by subject area across the three grade levels. Reading scores had a mean = 270.97 with a low score of 180 and a top score of 340.67. Mathematics scores ranged from 168.67 to 367.67 with a mean score of 275.74.

Effective Staff Development Practices

Part One of the questionnaire included thirteen practices identified in the literature as recommended components of effective staff development programs. In order to provide a more comprehensive study, survey results for selected items were combined for statistical analysis. Survey items 6, 7, 8 and 9 are related to the opportunity for practice and feedback of the skills and techniques presented in a staff development program. These items were combined for analysis and the results of the statistical procedures applied to this combined value appears in the Tables as "Practice and feedback" and in the Appendices as X1. Similarly, items 10, 11 and 12 are related to a district's administrative support for staff development practices. These items were combined for analysis and the results of the statistical procedures applied to this combined value appears in the Tables as "District commitment" and in the Appendices as X2.

Mean scores for each item were computed (Appendix E). Of the recommended practices, peer coaching was reported to occur less frequently than the others with a mean frequency

Table 1

Demographic Information

Variable	Mean	SD	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
Number of teachers	67.58	76.82	5-14	17-42	43-89	91-603
Per pupil expenditure	4070.9	1311.08	2423-3068	3083-3623	3641-4556	4571-7947
Chapter I eligibles	92.54	143.08	0-18	18-49	50-112	113-1034
Pupil/Teacher Ratio	16.75	3.2	8.81-14.47	14.68-17.26	17.27-18.62	18.7 24.7
IGAP Reading score	270.97	28.34	180-255.67	256.67-271.33	271.67-285.67	285-340.67
IGAP Mathematics score	275.74	37.92	168.67-252.33	253.33-276.33	277-301	302-367.67

of 24.31. The participation of building principals had a mean frequency of 75.27 and occurred more frequently than all other recommended practices.

There was a wide range in the frequency of implementation of the recommended staff development components by respondent districts. Table 2 reports that 71 (56%) of 127 respondents indicated that principals participated as learners in staff development sessions at least 75% of the time. Active involvement by program participants was also implemented frequently, with 62 (49%) of 127 respondents reporting its occurrence more than 75% of the time. Peer coaching is reported to be the least frequently implemented. 65 (51%) of 127 respondents indicate that peer coaching is used to provide support between and after staff development sessions less than 25% of the time.

A Pearson correlation test was applied to survey items 1 through 13 and the combined variable X1 and X2 with the demographic factors of number of teachers, per pupil expenditure, number of Chapter I eligibles, pupil/teacher ratio, average reading and mathematics scores. Appendix F presents the coefficients for each item and the combined variables. Although a number of the resulting coefficients were found to be statistically significant ($p < .05$ or $.01$), none had substantive significance and were rejected.

Comparisons among the survey items and combined

Table 2

Frequency of Implementation of Recommended Staff Development Practices

Variable	N	< 25% of the time	25% and 75% of the time	> 75% of the time	Mean	SD
Modeling	127	14 (11%)	101 (80%)	12 (9%)	51.14	24.4
Adult learning styles	127	25 (20%)	70 (55%)	32 (25%)	58.84	28.6
Active participation	127	1 (.79%)	64 (50%)	62 (49%)	73.95	19
Practice and feedback	127	14 (11%)	94 (74%)	19 (15%)	51.07	21.8
Coaching	127	65 (51%)	57 (45%)	5 (4%)	24.32	23.9
Theory/research base	127	9 (7%)	90 (71%)	28 (22%)	61.59	24.1
Principal involvement	127	8 (6%)	48 (38%)	71 (56%)	75.27	26.4
District committment	127	2 (2%)	75 (59%)	50 (39%)	68.14	19.3

variables and the demographic factors of number of teachers, per pupil expenditure, number of Chapter I eligibles, pupil/teacher ratio, average reading and mathematics scores were made. Chi-square tests were used to ascertain the differences between the expected and the observed frequency of each practice and the level of significance was obtained. Frequencies of practices were reclassified as 25% or less of the time, between 26 and 75% of the time and greater than 76% of the time. Demographic variables were reclassified into quartiles. The results of all chi-square tests of items one through thirteen and the combined variables are reported in Appendices G and H. Seven of ninety chi-square values were found to be statistically significant. Tables 3 through 9 which follow list the findings.

The relationship between the number of teachers in a school district and the inclusion of theory and research regarding the content or strategy taught in an inservice program is reported in Table 3. The greatest differences between expected and observed frequencies exist in the top and bottom quartiles where it was expected that 9.4 rather than the 15 and 3 districts observed would include theory and research as part of staff development more than 76% of the time. In general, large school districts include theory and research as part of their readiness activities significantly more often than small districts. Differences in these variables were significant at the .047 level.

Table 3

Inclusion of Theory and Research as Part of Staff Development Programs and Number of Teachers

	INCLUSION OF THEORY AND RESEARCH			
Number of Teachers	Less than 26% of the time	26 to 75% of the time	More than 76% of the time	Total
Top Quartile				
Expected	3.3	19.3	9.4	
Observed	2	15	15	32
3rd Quartile				
Expected	3.4	19.9	9.7	
Observed	2	21	10	33
2nd Quartile				
Expected	3	17.5	8.5	
Observed	3	17	9	29
Bottom Quartile				
Expected	3.3	19.3	9.4	
Observed	6	23	3	32
	13	76	37	126

Chi-square (6)=. 12.77, p=.047

Table 4 reports the relationship between the availability of district economic support for staff development program implementation and the number of teachers in that school district. Minimal differences exist in most cells between the observed and expected frequencies. In the smaller districts included in the bottom quartile, it was expected that 3.1 districts would provide economic support for staff development less than 25% of the time instead of the 9 districts reported. In general, the

Table 4

District Economic Support and Number of Teachers

Number of Teachers	DISTRICT ECONOMIC SUPPORT: Less than 26% of the time	26 to 75% of the time	More than 76% of the time	Total
Top Quartile				
Expected	3	14.5	13.5	
Observed	0	13	18	31
3rd Quartile				
Expected	3.1	15.5	14.4	
Observed	1	16	16	33
2nd Quartile				
Expected	2.8	13.6	12.7	
Observed	2	16	11	29
Bottom Quartile				
Expected	3.1	15.5	14.4	
Observed	9	14	10	33
	12	59	55	126

Chi-square (6)=19.50, p=.003

smaller districts did not/could not afford to maintain the inservice program implementation. In other words, the reseults may confirm economy of scale. Eighteen larger districts included in the top quartile experienced district economic support more than 75% of the time rather than the 13.5 expected. Differences were significant at the .003 level.

Table 5 shows there was a significant difference at the .03 level between the per pupil expenditure in school districts and the frequency of opportunities for practice of

Table 5

Practice in a Simulated Setting and Per Pupil Expenditure

	PRACTICE IN A SIMULATED SETTING			
Number of Teachers	Less than 26% of the time	26 to 75% of the time	More than 76% of the time	Total
Top Quartile				
Expected	11.9	15.5	4.8	
Observed	9	17	6	32
3rd Quartile				
Expected	11.9	15.2	4.8	
Observed	20	16	2	32
2nd Quartile				
Expected	11.9	15.2	4.8	
Observed	12	15	5	32
Bottom Quartile				
Expected	11.2	14.3	4.5	
Observed	6	18	6	30
	47	60	19	126

Chi-square (6)=13.98, p=.03

new skills and techniques in a simulated classroom setting. Twenty rather than the expected 11.9 districts spending slightly more than average per pupil identified practice in a simulated setting as occurring infrequently. This difference was caused by the cumulative effect of slight differences in other cells. In general, practice in a simulated classroom setting was one of the least frequently implemented inservice components of this study, occuring less that 26% of the time in 85% of the participating

districts.

As indicated in Table 6, opportunity for feedback to staff after classroom practice occurred more frequently than expected in districts with a slightly greater than average per pupil expenditure. This difference was significant at the .018 level. Twenty-one rather than the expected 12 districts spending slightly more than the average per pupil identified opportunities for feedback after classroom practice as occurring infrequently. Similar to the findings reported in Table 5 , this difference was caused by the cumulative effect of slight differences in other cells. In general, feedback after practice in a real classroom setting was also one of the least frequently implemented inservice components of this study. Feedback occurred less that 26% of the time in 82% of the participating districts.

The differences between the expected and observed frequencies of the number of students eligible for Chapter I services in a district and the opportunities for feedback after actual classroom practice are reported in Table 7. Although these differences were significant at the .014 level, only a slight difference was noted in most cells. Districts falling in the bottom quartile are those in the highest socioeconomic levels since they have the least number of students eligible for Chapter I services. An assumption that additional resources in the wealthier districts would provide staff time to facilitate this

Table 6

Opportunities for Feedback After Classroom Practice and Per Pupil Expenditure

	OPPORTUNITIES FOR FEEDBACK AFTER CLASSROOM PRACTICE			
Number of Teachers	Less than 26% of the time	26 to 75% of the time	More than 76% of the time	Total
Top Quartile				
Expected	12.1	14.1	5.8	
Observed	9	17	6	32
3rd Quartile				
Expected	12.1	14.1	5.8	
Observed	21	8	3	32
2nd Quartile				
Expected	12.1	14.1	5.8	
Observed	11	14	7	32
Bottom Quartile				
Expected	11.7	13.7	5.6	
Observed	7	17	7	31
	48	56	23	127

Chi-square (6)=15.35, p=.018

Table 7

Opportunities for Feedback After Classroom Practice and Number of Chapter I Eligible Students

	OPPORTUNITES FOR FEEDBACK AFTER CLASSROOM PRACTICE			
Chapter I Eligibles	Less than 26% of the time	26 to 75% of the time	More than 76% of the time	Total
Top Quartile				
Expected	11.7	13.7	5.6	
Observed	14	14	3	31
3rd Quartile				
Expected	12.5	14.6	6	
Observed	21	17	4	33
2nd Quartile				
Expected	12.9	15	6.2	
Observed	16	7	11	34
Bottom Quartile				
Expected	11	12.8	5.3	
Observed	6	18	5	29
	48	56	23	127

Chi-square (6)=15.98, p=.014

practice was not proven.

As indicated in Table 8, one of the largest differences in expected and observed cell frequencies was in the top quartile of reading scores and the commitment of a district to economic support for long term staff development projects. Samaller differences also existed in the cells of the lower quartiles of reading scores and limited district economic support. The differences found by this chi-square

Table 8

District Economic Support For New Content and IGAP Reading Scores

	DISTRICT ECONOMIC SUPPORT FOR NEW CONTENT			
IGAP Reading	Less than 26% of the time	26 to 75% of the time	More than 76% of the time	Total
Top Quartile				
Expected	3.2	15.9	14.8	
Observed	0	11	23	34
3rd Quartile				
Expected	2.8	13.6	12.7	
Observed	2	16	11	29
2nd Quartile				
Expected	3.1	15.5	14.4	
Observed	5	18	10	33
Bottom Quartile				
Expected	2.9	14	13.1	
Observed	5	14	11	30
	12	59	55	126

Chi-square (6)=14.91, p=.021

test were significant at the .021 level. Student achievement, especially in the area of reading, can therefore be considered related to a district's ability or willingness to financially support the implementation of new knowledge and strategies presented to teachers.

Differences between expected and observed frequencies were evident in districts scoring high on the IGAP

mathematics assessment and that frequently plan active involvement by inservice participants. This difference was significant at the .02 level. Because expected frequencies were small (.5) and observed frequencies in three cells was zero, one would expect the value of chi-square to be inflated. This value (15.09) however, is not seriously inflated. The relationship identified between student achievement in mathematics and active involvement by inservice participants could be indicative of a relationship between mathematics achievement and generally strong inservice programs.

Recommended Staff Development Practices

Part two of the questionnaire included seven considerations for structuring inservice programs that must be made by those responsible for staff development. Choices regarding each item were given, and respondents were asked to choose only one answer which best described their district's staff development program.

A description of the responses to items fourteen through twenty are presented in Table 10. The choices for each item which are recommended in the literature are asterisked.

Response choices which were identified in the literature on staff development as recommended practices and those which were described as not recommended were combined into separate categories and frequencies were calculated.

Table 9

Active Involvement in Inservice Activities and IGAP Mathematics Scores

IGAP Mathematics	Less than 26% of the time	26 to 75% of the time	More than 76% of the time	Total
	ACTIVE INVOLVEMENT IN INSERVICE ACTIVITIES			
Top Quartile				
Expected	0.5	15.9	15.6	
Observed	0	9	23	32
3rd Quartile				
Expected	0.5	15.9	15.6	
Observed	0	20	12	32
2nd Quartile				
Expected	0.5	15.9	15.6	
Observed	0	17	13	32
Bottom Quartile				
Expected	0.5	15.4	15.1	
Observed	0	17	14	31
	2	63	62	127

Table 10

Description of Survey Responses - Part Two

Program Consideration	Frequency
Participation	
* Voluntary	66 (52%)
Mandatory	52 (41%)
Other	6 (5%)
Incentives	
Monetary	13 (10%)
Additional training increment	10 (8%0
Released time	64 (50%)
* Personal/professional enrichment	32 (25%)
* Professional status	3 (2%)
None	1 (1%)
Structure	
Building meeting	22 (17%)
District single session	29 (23%)
* District multi-session	54 (43%)
Independent study	29 (23%)
Other	18 (14%)
Instructor	
University personnel	17 (13%)
Consultant	81 (64%)
* Local supervisory staff	8 (6%)
* Local teacher expert(s)	11 (9%)
Other	6 (5%)
Evaluation	
* Student achievement data	6 (5%)
* Teacher performance	26 (21%)
Opinion questionnaire	91 (72%)
Other	1 (1%)
Needs assessment	
Teacher survey	60 (47%)
* Teacher planning committee	50 (39%)
* Student achievement data	2 (2%)
Administrative judgement	8 (6%)
Other	2 (2%)
Readiness activities	
* Sharing needs assessment information	62 (49%)
* Research/journal information	31 (24%)
Pilot workshop	7 (5%)
None	22 (17%)
Other	2 (2%)

frequencies were calculated. These frequencies are reported in Table 11.

Table 11

Frequencies of Combined Survey Responses

	N	Recommended Practices	Practices Not Recommended
Participation	124	66 (52%)	58 (46%)
Incentives	123	35 (28%)	88 (69%)
Structure	125	54 (43%)	71 (56%)
Instructor	123	19 (15%)	104 (82%)
Evaluation	125	32 (25%)	93 (73%)
Assessing needs	122	52 (41%)	70 (55%)
Readiness activities	124	93 (73%)	31 (24%)

Comparisons between the recommended and not recommended practices in the survey responses and the demographic factors of number of teachers, per pupil expenditure, number of Chapter I eligibles, pupil/teacher ratio, average reading and mathematics scores were made. Demographic variables were reclassified into quartiles. Chi-square was used to ascertain the differences between the expected and the observed frequency of each category and the level of significance was obtained. The results of all chi-square tests of survey items fourteen through twenty are

reported in Appendix I. Six of thirty-six chi-square values were found to be statistically significant. Tables 12 through 17 list the findings.

The relationship between the number of teachers in a school district and voluntary or mandatory participation by teachers in staff development programs is reported in Table 12. Major differences were found in districts of above average size in both voluntary and mandatory participation. Large districts are much more likely to support voluntary participation in inservice than small districts. This variance among districts may be created by the luxury larger districts have in the size of their potential staff development pool. Differences in this area were significant at the .006 level.

Table 13 presents the differences between the expected and observed frequencies in the structure most often used for staff development. These differences are greatest in the largest districts where the recommended practice of holding multi-session workshops occurred more frequently than expected. It can be accepted that larger districts receiving a greater allocation of state staff development monies have greater resources to provide extended staff development programs. Differences shown in Table 13 were significant at the .043 level.

As reported in Table 14, some differences in expected and observed frequencies occurred in districts with the

Table 12

Participation Requirements and Number of Teachers

Number of Teachers	Recommended Practice*	Not Recommended Practice	Total
Top Quartile			
Expected	17	15	
Observed	24	8	32
3rd Quartile			
Expected	17	15	
Observed	10	22	32
2nd Quartile			
Expected	14.4	12.6	
Observed	14	13	27
Bottom Quartile			
Expected	17.6	15.4	
Observed	18	15	33
	66	58	124

Chi-square (3)=12.35, p=.006

* Recommended practice is voluntary participation

Table 13

Program Structure and Number of Teachers

Number of Teachers	Recommended Practice*	Not Recommended Practice	Total
Top Quartile			
Expected	13.4	17.6	
Observed	19	12	31
3rd Quartile			
Expected	14.3	18.7	
Observed	16	17	33
2nd Quartile			
Expected	12.5	16.5	
Observed	9	20	29
Bottom Quartile			
Expected	13.8	18.2	
Observed	10	22	32
	54	71	125

Chi-square (3)=8.12, p=.043

* Recommended practice is multi-session workshops or minicourses

Table 14

Participation Inventives and Per Pupil Expenditure

Per Pupil Expenditure	Recommended Practice*	Not Recommended Practice	Total
Top Quartile			
Expected	8.8	22.2	
Observed	14	12	31
3rd Quartile			
Expected	9.1	22.9	
Observed	8	24	32
2nd Quartile			
Expected	8.5	21.5	
Observed	9	21	30
Bottom Quartile			
Expected	8.5	21.5	
Observed	4	26	30
	35	88	123

Chi-square (3)=7.84, p=.049

* Recommended incentives are professional enrichment or status

Table 15

Program Structure and Per Pupil Expenditure

Per Pupil Expenditure	Recommended Practice*	Not Recommended Practice	Total
Top Quartile			
Expected	13.8	18.2	
Observed	17	15	32
3rd Quartile			
Expected	13.4	17.6	
Observed	17	14	31
2nd Quartile			
Expected	13.4	17.6	
Observed	6	25	31
Bottom Quartile			
Expected	13.4	17.6	
Observed	14	17	31
	54	71	125

Chi-square (3)=10.23, p=.017

* Recommended structure is multi-session workshops or minicourses

Table 16

Program Evaluation and Reading Performance

IGAP Reading Score	Recommended Practice*	Not Recommended Practice	Total
Top Quartile			
Expected	8.7	25.3	
Observed	3	31	34
3rd Quartile			
Expected	7.4	21.6	
Observed	7	22	29
2nd Quartile			
Expected	8.4	24.6	
Observed	9	24	33
Bottom Quartile			
Expected	7.4	21.6	
Observed	13	16	29
	32	93	125

Chi-square (3)=10.73,p=.013

* Recommended evaluation measures are improved student achievement and teacher performance

Table 17

Program Evaluation and Mathematics Performance

IGAP Mathematics Score	Recommended Practice*	Not Recommended Practice	Total
Top Quartile			
Expected	8.2	23.8	
Observed	5	27	32
3rd Quartile			
Expected	8.2	23.8	
Observed	6	26	32
2nd Quartile			
Expected	7.9	23.1	
Observed	7	24	31
Bottom Quartile			
Expected	7.7	22.3	
Observed	14	16	30
	32	93	125

Chi squared (3)=9.60, p=.022

* Recommended evaluation methods are improved student achievement and teacher performance

greatest per pupil expenditure. Professional enrichment or status as a participation incentive occurred more frequently than expected in districts falling in the top quartile in annual per pupil expenditure, and additional training increments, monetary stipends and released time as participation incentives occured where annual spending was the least. In general, low spending districts may experience a limited number of opportunities for improved professional

status to offer staff members. Difference in participation incentives were significant at the .049 level.

Differences in observed and expected frequencies regarding program structure are reported in Table 15. Districts with a slightly lower than average per pupil expenditure rely less on the recommended multi-session workshop structure than was expected. The differences were significant at the .017 level. It can be accepted that districts which are able and/or willing to spend more than the annual norm have greater resources to provide extended staff development programs. Those with fewer resources limit their staff development structure to single session programs or staff meetings.

Tables 16 indicates that program evaluation differs from the expected practice in districts scoring in the top and bottom quartiles on the IGAP Reading Assessment. Differences in this area were significant at the .013 level. Where students score high in comparison to their neighbors, staff opinion is the primary source of inservice evaluation. It can be assumed that where students consistently score low on standardized tests, weak areas are selected as the focus of future inservice programs.

Differences in expected and observed frequencies in program evaluation as related to IGAP Mathematics assessment scores were significant at the .022 level as indicated in Table 17. The greatest differences again occurred in the

lowest scoring districts. As in the case of IGAP Reading described in Table 16, it can be assumed that where students consistently score low on standardized tests, weak areas are selected as the focus of future inservice programs. Where student achievement is high, staff opinion serves as the vehicle for staff development program evaluation.

Summary

The intent of this research was to ascertain if there were differences in staff development practices in districts based on state funding for staff development, the district's per pupil expenditure, the socio-economic level of the community served, the pupil teacher ratio, and achievement of students in reading and mathematics. Pearson correlation and chi-square statistical tests were performed with the data and although there are some statistically significant differences in staff development practices among the districts, these differences are rarely substantively significant. Conclusions regarding this data will be presented in Chapter V.

CHAPTER V

DISCUSSION

Summary

This study examined current staff development practices in elementary school districts in Illinois. Through the School Reform Act legislated by the Illinois General Assembly in 1985, school districts throughout the state were mandated to design and implement staff development plans. Minimal funding was provided to support this legislation. At the same time, experts in the field of staff development were making clear recommendations regarding practices found to be effective in promoting educational improvement. The growth of staff development as an critical factor in school improvement and the legislative mandate in Illinois served as the bases for this investigation.

207 elementary school districts in Illinois were selected to participate in the study. Demographic information about the participating districts was gathered which included the number of classroom teachers, the annual expenditure per child, the number of students eligible for Chapter I services, the pupil - teacher ratio and the average reading and mathematics scores from the Illinois

Goal Assessment Plan annual testing. Recommended components of effective staff development practices were identified in the professional literature and synthesized into a survey instrument.

The survey instrument consisted of two parts. Part I asked respondents to estimate the frequency that particular recommended staff development practices occurred in their district. Part II asked about the existence of certain inservice practices that may or may not be considered effective by staff development experts. Relationships between the demographic factors and the staff development practices were studied.

Surveys were returned by 127 of the school districts selected to participate in the study. The information received from the survey indicates that while there are differences in staff development practices in elementary school districts throughout Illinois, these differences are not related to the demographic characteristics of the district. Further, recommended staff development practices have not been implemented in Illinois elementary school districts either frequently or consistently.

Conclusions

Conclusions resulting from the study are presented below. Each research question is discussed separately with conclusions that are supported by the data presented. General conclusions regarding this study are presented

following the research questions.

The first question for investigation was: Do currently recommended practices in staff development occur more frequently in school districts which receive a large allocation of Illinois State Board of Education Staff Development funds?

The Pearson correlation and chi-square tests indicated a strong statistically significant relationship ($p < .01$ and $p = .003$ respectively) between the number of teachers in a district and the economic support that can be expected for the implementation of new content and/or skills learned through staff development. Economic support may be attributable to district size because the number of teachers in a district is the determining factor in the amount of ISBE funding received by a school district for staff development.

The next question examined through this research was: Do currently recommended practices in staff development occur more frequently in school districts which have a high per pupil expenditure?

Per pupil expenditure had the strongest statistical relationship ($p = .017$) with the most commonly used staff development structure. The ability and/or willingness of school districts to absorb the expense of multi-session long term workshops or courses offered on-site to teachers can be considered a determinant in staff development program

structure.

Question three asked: Do currently recommended practices in staff development occur more frequently in school districts which serve a high socioeconomic level of students?

No strong statistically significant relationship existed between the socio-economic level of the school communities served and the staff development practices of the sample school districts. It can be concluded that the socio-economic level of a community does not impact on school staff development practices.

The fourth research question considered was: Do currently recommended practices in staff development occur more frequently in school districts where students achieve at above average levels?

A statistically significant relationship exists between specific staff development practices and student achievement in reading and mathematics as measured by the IGAP assessments. The Pearson correlation and chi-square tests indicated a statistically significant relationship ($p < .05$ and $p = .021$ respectively) between reading achievement and the economic support that can be expected for the implementation of new content and/or skills learned through staff development. Because the actual correlation (.24) is weak and no significant relationship as measured by the chi-square test exists with mathematics, it can be concluded

that district economic support and student achievement are only minimally related.

Teacher performance and student achievement as methods of evaluating staff development programs were found to be significantly related to actual student achievement in reading ($p = .013$) and mathematics ($p = .022$) as measured by a chi-square test. Teacher performance and student achievement as evaluation measures occured most frequently where student achievement was low. It can be concluded that low achieving districts are probably implementing this staff development strategy as means of improving student achievement.

The last research question asks: Do currently recommended practices in staff development occur more frequently in school districts where the pupil teacher ratio is low?

No significant relationship existed between the pupil teacher ratio of the sample school districts and the staff development practices of the district. Pupil teacher ratio does not impact on school staff development practices.

In examining the data presenting the frequency of implementation of recommended staff development practices alone, it was evident that most of the recommended inservice components occurred only slightly more than half of the time (see Table 2, p. 53? and Table 11, p. 68?). However, the data also indicated that demographic differences in school

districts and their communities are virtually unrelated to differences in staff development practices.

Although the ability and/or willingness of a school district to provide state or local financial support for staff development, good staff development practices do not rely solely on finances. The more affluent school districts, i.e., those with greater funding levels or low pupil teacher ratio or Chapter I eligible count, did not consistently or even frequently exhibit better staff development practices than their poorer neighbors throughout the state. Similarly, there was no staff development pattern that could be identified in districts with high achieving students.

The negative responses to each of the research questions and the inconsistent pattern of effective practices in the sample districts has led this researcher to conclude that the impetus for effective staff development must be inferred from sources other than community demographics. Each of the elements of strong inservice programs discussed in Chapter II has educators themselves as its central component. It can therefore be inferred that those responsible for staff development set the stage for effective or ineffective practices.

Staff development which includes teachers as planners and facilitators and which encourages and provides time for peer coaching requires leadership that is flexible and

committed to human resource development. Shared decision making and respect for the time, expertise and needs of teachers thrive where motivational rather than authoritarian or paternalistic systems are in place. The characteristics of the people rather than the place are critical to program effectiveness.

There is little or no monetary expense to incorporate the recommended staff development practices into a district's inservice program. Awareness of the effective practices, a flexible leadership style which maximizes teacher strengths and administrative commitment to the program's success are the personal rather than financial costs which a district may incur.

Program Recommendations

Based on the premise that people rather than circumstances are central to effective programs, the researcher recommends the following:

1. Human resource skills should be an important criteria in selecting the personnel responsible for professional development.
2. A thorough investigation of staff development practices which have been found to be effective in improving teacher performance and student learning be conducted by the personnel responsible for professional development. This investigation could serve as the foundation for program change.

3. Student achievement, which is the "bottom line" for school effectiveness, should become a critical component in the evaluation - teaching - evaluation cycle of staff development. The positive acceptance by teachers of inservice activities and even improved teacher performance are meaningless without student learning.
4. School districts should weigh the cost effectiveness of providing long term, multi-session staff development programs using an in-house cadre of experts.

Research Recommendations

The findings and conclusions of the study suggest further research in the following areas:

1. It is recommended that research be conducted to study districts which experience high student achievement to ascertain if conditions other than those related to economics are consistent.
2. It is recommended that research be conducted in districts experiencing a frequent occurrence of effective staff development practices to ascertain the characteristics of the leadership responsible for professional improvement.
3. It is recommended that research be conducted to provide cost comparisons of more and less effective staff development practices.

4. It is recommended that this study be replicated at the secondary school level.

The task of educators today is more difficult than it has been at any other time in history. Society is changing rapidly, and teachers must be able to adapt to the changes in what they teach, who they teach and how they teach. School districts are faced with the challenge of helping teachers adapt to these changes with limited budgets and broadening public scrutiny.

Staff development programs are the crucial factor in providing school districts and teachers with a cost effective vehicle to meet these challenges. With the decline in teacher turnover, inservice may be the only opportunity schools have to bring new ideas, techniques and understandings to those with the greatest responsibility in educating our students.

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APPENDIX A

Code _____

Please answer the following items and return this survey in the enclosed envelope by June 4, 1991. Note that the code number included on this instrument is only for the purpose of follow up mailings.

Mark the person who has the primary responsibility for staff development in your district.

_____ Superintendent
_____ Asst Superintendent
_____ Principal(s)
_____ Staff developer
_____ Teacher
_____ Other, please specify _____

Your school District is part of a multi-district staff development plan supported by ISBE Staff Development allocated funds

_____ yes _____ no

PART 1

Directions:

Please judge the following statements with regard to staff development. Respond to the statements by marking an X on the line which best reflects the percent of the time each practice occurs in your District as part of staff development.

1. Training includes modeling of the skills/techniques to be learned by teachers.

0 25 50 75 100%
+----------+----------+----------+----------+

2. An organized peer coaching system is used to provide support between and after training sessions.

0 25 50 75 100%
+----------+----------+----------+----------+

3. The methods used for staff development take into account adult learning styles.

0 25 50 75 100%
+----------+----------+----------+----------+

4. Active involvement by participants is a major component of local staff development programs.

0 25 50 75 100%
+----------+----------+----------+----------+

5. The presentation of theory and research regarding the content or strategy taught is included as part of your local staff development program.

0 25 50 75 100%
+----------+----------+----------+----------+

6. Participants have an opportunity to practice the skills and techniques learned in a simulated classroom setting.

0 25 50 75 100%
+----------+----------+----------+----------+

7. Training sessions provide an opportunity for participants to receive feedback from peers or presenters after simulated practice of skills and techniques learned.

0 25 50 75 100%
+----------+----------+----------+----------+

8. Participants have an opportunity to practice the skills and techniques learned in a real classroom setting soon after the training.

0 25 50 75 100%
+----------+----------+----------+----------+

9. Training sessions provide an opportunity for participants to receive feedback from peers or presenters after classroom practice of skills/techniques learned.

0 25 50 75 100%
+----------+----------+----------+----------+

10. Building level administrators participate as learners in staff development sessions.

0 25 50 75 100%
+----------+----------+----------+----------+

11. District level administrators participate as learners in staff development sessions.

0 25 50 75 100%
+----------+----------+----------+----------+

12. District economic support for implementation of new content/skills learned through staff development is available.

0 25 50 75 100%
+----------+----------+----------+----------+

13. A long term commitment to new content/skills learned through staff development is evident.

0 25 50 75 100%
+----------+----------+----------+----------+

PART 2

Directions:

Please place a check ( ) mark on the line next to the one best answer which describes your District's staff development opportunities. Although your District may fit in more than one category of an answer, please check ONLY ONE for each item.

14. Which best describes your District's method of accomplishing/encouraging participation in staff development training?

_____ voluntary participation
_____ mandatory participation
_____ other, please describe
_____

15. Which incentive is most commonly used to encourage staff participation?

_____ monetary stipend
_____ additional training increment
_____ released time
_____ personal/professional enrichment
_____ improved professional status
_____ none

16. Which structure is most commonly used for staff development?

_____ building/department staff meetings
_____ district wide single session workshop
_____ district wide multi-session workshop/mini-course
_____ self-instruction/independent study
_____ other, please describe
_____

17. What type of instructor is most commonly used for your staff development program?

_____ university personnel
_____ outside consultant
_____ local District supervisory staff
_____ local teacher expert(s)
_____ other, please describe
_____

18. Which method best describes the evaluation method most commonly used for your staff development program?

_____ student achievement data
_____ improved teacher performance/competence
_____ staff opinion questionaire
_____ other, please describe
_____

19. What method of assessing District needs is most frequently used prior to planning your staff development program?

_____ teacher input survey
_____ teacher planning committee
_____ student achievement data
_____ administrative judgement
_____ other, please describe
_____

20. "Readiness activity" refers to any pre-training experience provided to teachers prior to a particular staff development program. Which method is most commonly used by your District?

_____ sharing needs assessment information
_____ sharing research information/journal articles
_____ introductory pilot workshop
_____ none
_____ other, please describe
_____

21. Your position in your District is:

_____ Superintendent
_____ Assistant Superintendent
_____ Principal
_____ Staff developer
_____ Teacher
_____ Other, please specify _____

THANK YOU FOR YOUR COOPERATION IN COMPLETING THIS SURVEY.

_____ Please indicate here if you would like a copy of the results of this study.

APPENDIX B

LOYOLA
UNIVERSITY
CHICAGO

Water Tower Campus
820 North Michigan Avenue
Chicago, Illinois 60611
Telephone: (312) 915-6046

Department of Curriculum and Human Resource Development

April 22, 1991

Dear Colleague,

I am a doctoral student at Loyola University of Chicago and am seeking your assistance with my dissertation research. The focus of my research is an investigation of staff development practices in elementary school districts since the 1985 Illinois School Reform Act. The results of the enclosed survey will identify which staff development practices occur in districts of varying sizes and types.

I recommend that the questionaire be completed by the person who has the primary responsibility for staff development in your District. Data is being gathered in terms of District staff development activities, rather than an individual school or department.

Information from the questionaires will be kept confidential and will be reported only as collective data. Please return the enclosed survey in the envelope provided by April 30, 1991. Because of the wide variance in district sizes throughout suburban and downstate Illinois, your questionaire return is critical to this research.

This survey will take approximately 10 to 15 minutes to complete. I recognize that your time is valuable and I thank you in advance for your cooperation and assistance.

Sincerely,

Barbara J. Mackey
Doctoral Student

Dr. Diane P. Schiller
Chairman and Associate Professor
Curriculum and Human Resource Development

APPENDIX C

LOYOLA
UNIVERSITY
CHICAGO

WATER TOWER CAMPUS

Water Tower Campus
820 North Michigan Avenue
Chicago, Illinois 60611
Telephone 312 915 6000

May 27, 1991

Dear Colleague,

I am a doctoral student at Loyola University of Chicago and am seeking your assistance with my dissertation research. The focus of my research is an investigation of staff development practices in elementary school districts since the 1985 Illinois School Reform Act. The results of the enclosed survey will identify which staff development practices occur in districts of varying sizes and types.

I recommend that the questionaire be completed by the person who has the primary responsibility for staff development in your District. Data is being gathered in terms of District staff development activities, rather than an individual school or department.

Information from the questionaires will be kept confidential and will be reported only as collective data. Please return the enclosed survey in the envelope provided by June 4, 1991. Because of the wide variance in district sizes throughout suburban and downstate Illinois, your questionaire return is critical to this research.

This survey will take approximately 10 to 15 minutes to complete. I recognize that your time is valuable and I thank you in advance for your cooperation and assistance.

Sincerely,

Barbara J. Mackey
Doctoral Student

Dr. Diane P. Schiller
Chairman and Associate Professor
Curriculum and Human Resource Development

APPENDIX D

LOYOLA UNIVERSITY OF CHICAGO

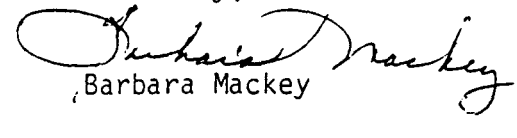
Dear Colleague, July 26, 1991

Several weeks ago, a survey regarding staff development practices in your school district was sent to you. The survey results are the basis of my doctoral dissertation research.

If your school offices were closed for the summer and you received the survey after the deadline for returns, I am requesting that you return the survey at this time if it is still available. Because of the wide range of district enrollments throughout Illinois, each return is important.

Thank you for your cooperation and professional support.

Sincerely,



Barbara Mackey

APPENDIX E

Frequency of occurence of each staff development practice

Survey Question	Mean	SD
One	51.14	24.39
Two	24.31	23.92
Three	58.84	28.64
Four	73.95	18.97
Five	61.59	24.07
Six	43.45	29.57
Seven	42.66	28.41
Eight	73.35	23.66
Nine	45.17	30.67
Ten	75.27	26.35
Eleven	65.94	29.81
Twelve	69.79	25.89
Thirteen	69.77	23.78
X1	51.07	21.81
X2	68.14	19.33

X1 = items 6, 7, 8 and 9 combined
X2 = items 11, 12 and 13 combined

APPENDIX F

Pearson Correlation Coefficients

Survey Item	Recommended Practice	Number of Teachers	Per pupil expenditure
One	Modeling	0.0647	0.0297
Two	Coaching	0.0932	-0.0689
Three	Adult learners	0.1722	0.0183
Four	Active participation	0.1334	0.0920
Five	Theory/research base	.1917*	0.0330
Six	Simulated practice	-0.0046	-0.0268
Seven	Feedback	-0.0364	-0.1093
Eight	Classroom practice	-0.0640	-0.0886
Nine	Feedback	-0.0703	-0.0923
Ten	Principal involvement	-0.0432	0.0210
Eleven	District administrative involvement	-0.0801	-0.0384
Twelve	Economic support	.2424**	.2423**
Thirteen	Long term commitment	0.1244	0.0165
X1	Practice & feedback	-0.0542	-0.0966
X2	District committment	0.1150	0.0802

X1 = items 6, 7, 8 and 9 combined
X2 = items 11, 12, and 13 combined

* $p < .05$ ** $p < .01$

APPENDIX F (Continued)

Chapter I eligibles	Pupil/teacher ratio	IGAP Reading	IGAP Mathematics
.1781*	0.1254	-0.0531	-0.0613
0.1407	0.1388	-0.1634	-0.1585
0.1595	-0.0904	-0.0264	0.0515
0.1422	0.0053	-0.0124	0.0355
.1915*	0.1506	-0.0049	0.0065
0.0893	0.1591	-0.1173	-0.1316
0.0860	0.1720	-0.1186	-0.1370
0.0257	-0.1548	-0.0815	-0.0855
0.0566	0.0679	-0.1554	-0.1426
0.0339	-0.1239	0.0099	-0.0374
0.0232	-0.1097	-0.0336	-0.0833
0.1252	-0.1624	.2280*	.1810*
0.0967	0.0750	0.0104	0.0464
0.0845	0.0926	-0.1531	-0.1581
0.1100	-0.0886	0.0805	0.0442

* p < .05 ** p < .01

APPENDIX G

APPENDIX G

Chi Square Statistic

Variable by	Variable	Chi-Square	DF	Significan
Number of teachers	Item 1	4.009	6	0.676
Number of teachers	Item 2	1.600	6	0.953
Number of teachers	Item 3	5.221	6	0.516
Number of teachers	Item 4	6.879	6	0.332
Number of teachers	Item 5	12.773	6	0.047
Number of teachers	Item 6	5.996	6	0.424
Number of teachers	Item 7	9.853	6	0.131
Number of teachers	Item 8	4.808	6	0.569
Number of teachers	Item 9	8.445	6	0.207
Number of teachers	Item 10	3.156	6	0.789
Number of teachers	Item 11	2.367	6	0.883
Number of teachers	Item 12	19.501	6	0.003
Number of teachers	Item 13	10.000	6	0.125
Per pupil expenditure	Item 1	4.934	6	0.552
Per pupil expenditure	Item 2	3.277	6	0.773
Per pupil expenditure	Item 3	7.370	6	0.288
Per pupil expenditure	Item 4	9.384	6	0.153
Per pupil expenditure	Item 5	7.627	6	0.267
Per pupil expenditure	Item 6	13.979	6	0.030
Per pupil expenditure	Item 7	9.991	6	0.125
Per pupil expenditure	Item 8	3.461	6	0.749
Per pupil expenditure	Item 9	15.345	6	0.018
Per pupil expenditure	Item 10	6.422	6	0.378
Per pupil expenditure	Item 11	3.938	6	0.685
Per pupil expenditure	Item 12	8.590	6	0.198
Per pupil expenditure	Item 13	3.281	6	0.773
Chapter I eligibles	Item 1	4.746	6	0.577
Chapter I eligibles	Item 2	4.213	6	0.648
Chapter I eligibles	Item 3	2.442	6	0.875
Chapter I eligibles	Item 4	4.892	6	0.558
Chapter I eligibles	Item 5	9.183	6	0.163
Chapter I eligibles	Item 6	7.899	6	0.246
Chapter I eligibles	Item 7	6.195	6	0.402
Chapter I eligibles	Item 8	3.508	6	0.743
Chapter I eligibles	Item 9	15.977	6	0.014
Chapter I eligibles	Item 10	7.474	6	0.279
Chapter I eligibles	Item 11	0.669	6	0.995
Chapter I eligibles	Item 12	8.965	6	0.176
Chapter I eligibles	Item 13	4.351	6	0.629

APPENDIX G (Continued)

Pupil/teacher ratio	Item 1	4.814	6	0.568
Pupil/teacher ratio	Item 2	4.499	6	0.610
Pupil/teacher ratio	Item 3	10.086	6	0.121
Pupil/teacher ratio	Item 4	3.739	6	0.712
Pupil/teacher ratio	Item 5	10.453	6	0.107
Pupil/teacher ratio	Item 6	4.864	6	0.561
Pupil/teacher ratio	Item 7	3.272	6	0.774
Pupil/teacher ratio	Item 8	6.090	6	0.413
Pupil/teacher ratio	Item 9	1.678	6	0.947
Pupil/teacher ratio	Item 10	11.272	6	0.080
Pupil/teacher ratio	Item 11	7.320	6	0.292
Pupil/teacher ratio	Item 12	5.265	6	0.510
Pupil/teacher ratio	Item 13	2.375	6	0.882
IGAP Reading	Item 1	6.732	6	0.346
IGAP Reading	Item 2	6.710	6	0.349
IGAP Reading	Item 3	4.121	6	0.660
IGAP Reading	Item 4	5.360	6	0.499
IGAP Reading	Item 5	6.540	6	0.366
IGAP Reading	Item 6	5.825	6	0.443
IGAP Reading	Item 7	8.732	6	0.189
IGAP Reading	Item 8	3.080	6	0.799
IGAP Reading	Item 9	5.057	6	0.537
IGAP Reading	Item 10	2.737	6	0.841
IGAP Reading	Item 11	3.809	6	0.702
IGAP Reading	Item 12	14.910	6	0.021
IGAP Reading	Item 13	4.172	6	0.653
IGAP Mathematics	Item 1	9.329	6	0.156
IGAP Mathematics	Item 2	4.937	6	0.552
IGAP Mathematics	Item 3	8.817	6	0.184
IGAP Mathematics	Item 4	15.087	6	0.020
IGAP Mathematics	Item 5	5.817	6	0.444
IGAP Mathematics	Item 6	4.979	6	0.547
IGAP Mathematics	Item 7	3.933	6	0.686
IGAP Mathematics	Item 8	7.732	6	0.258
IGAP Mathematics	Item 9	3.427	6	0.754
IGAP Mathematics	Item 10	10.497	6	0.105
IGAP Mathematics	Item 11	4.006	6	0.676
IGAP Mathematics	Item 12	10.727	6	0.097
IGAP Mathematics	Item 13	9.322	6	0.156

APPENDIX H

APPENDIX H

Chi square statistic for combined items

Variable by	Variable	Chi-Square	DF	Significan
Number of teachers	X1	5.89	6	0.435
Number of teachers	X2	11.08	6	0.086
Per pupil expenditure	X1	6.83	6	0.336
Per pupil expenditure	X2	3.25	6	0.777
Chapter I eligibles	X1	7.87	6	0.248
Chapter I eligibles	X2	4.22	6	0.646
Pupil/teacher ratio	X1	3.76	6	0.710
Pupil/teacher ratio	X2	9.62	6	0.141
IGAP Reading	X1	2.71	6	0.844
IGAP Reading	X2	9.76	6	0.135
IGAP Mathematics	X1	5.30	6	0.506
IGAP Mathematics	X2	11.05	6	0.087

X1 = items 6, 7, 8 and 9 combined
X2 = items 11, 12 and 13 combined

APPENDIX I

APPENDIX I

Chi Square Statistic

Variable by	Variable	Chi-Square	DF	Significan
Number of teachers	Item 14	12.345	3	0.006
Number of teachers	Item 15	7.135	3	0.068
Number of teachers	Item 16	8.122	3	0.044
Number of teachers	Item 17	3.470	3	0.325
Number of teachers	Item 18	1.467	3	0.690
Number of teachers	Item 19	2.830	3	0.419
Number of teachers	Item 20	2.465	3	0.482
Per pupil expenditure	Item 14	5.248	3	0.155
Per pupil expenditure	Item 15	7.842	3	0.049
Per pupil expenditure	Item 16	10.228	3	0.017
Per pupil expenditure	Item 17	0.867	3	0.833
Per pupil expenditure	Item 18	6.253	3	0.100
Per pupil expenditure	Item 19	5.870	3	0.118
Per pupil expenditure	Item 20	1.505	3	0.681
Chapter I eligibles	Item 14	4.928	3	0.177
Chapter I eligibles	Item 15	0.438	3	0.932
Chapter I eligibles	Item 16	3.506	3	0.320
Chapter I eligibles	Item 17	7.206	3	0.066
Chapter I eligibles	Item 18	5.558	3	0.135
Chapter I eligibles	Item 19	3.566	3	0.312
Chapter I eligibles	Item 20	0.418	3	0.923
Pupil/teacher ratio	Item 14	1.588	3	0.662
Pupil/teacher ratio	Item 15	4.187	3	0.242
Pupil/teacher ratio	Item 16	1.781	3	0.619
Pupil/teacher ratio	Item 17	5.964	3	0.113
Pupil/teacher ratio	Item 18	1.024	3	0.795
Pupil/teacher ratio	Item 19	1.486	3	0.686
Pupil/teacher ratio	Item 20	0.410	3	0.938
IGAP Reading	Item 14	1.517	3	0.678
IGAP Reading	Item 15	3.142	3	0.370
IGAP Reading	Item 16	0.690	3	0.876
IGAP Reading	Item 17	0.392	3	0.942
IGAP Reading	Item 18	10.730	3	0.013
IGAP Reading	Item 19	6.759	3	0.080
IGAP Reading	Item 20	0.578	3	0.901

APPENDIX I (Continued)

IGAP Mathematics	Item 14	1.772	3	0.621
IGAP Mathematics	Item 15	1.447	3	0.695
IGAP Mathematics	Item 16	4.300	3	0.231
IGAP Mathematics	Item 17	0.223	3	0.974
IGAP Mathematics	Item 18	9.599	3	0.022
IGAP Mathematics	Item 19	2.503	3	0.475
IGAP Mathematics	Item 20	1.432	3	0.698

* used by Illinois State Board of Education
to determine funding for staff development

APPROVAL SHEET

The dissertation submitted by Barbara J. Mackey has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy

April 14, 1992
Date

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