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Lana L. Callihan
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AN INVESTIGATION OF ELEMENTARY TEACHERS' SELF-PERCEPTION OF BURNOUT
WHILE PARTICIPATING IN A PROFESSIONAL DEVELOPMENT CHANGE PROCESS

by

Lana L. Callihan

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AN INVESTIGATION OF ELEMENTARY TEACHERS' SELF-PERCEPTION OF BURNOUT WHILE PARTICIPATING IN A PROFESSIONAL DEVELOPMENT CHANGE PROCESS

Lana L. Callihan, Ed.D.
Western Michigan University, 1989

Teachers are experiencing pressures from the demands of educational change required in their profession. The quality of education is reflected by the competency of the teacher. The research suggests that efforts should be directed toward identifying a process for change that will reduce the feelings of burnout which block the energy and enthusiasm needed for change.

This study investigated the question, "Does involvement in a professional development process modify a teacher's perceived feelings of burnout?" The professional development models studied were the Collaborative Curriculum and Professional Development Process (CCPDP), Instructional Theory Into Practice (ITIP), and the Michigan School Improvement Process (M-SIP). It used a self-administered questionnaire based on the Maslach Burnout Inventory (MBI-Educator's Survey, 1988) to measure three aspects of burnout (emotional exhaustion, depersonalization, and personal accomplishment).

The results of analysis of the data were inconclusive. No differences were found between mean change scores of teachers' perceived feelings of burnout prior to involvement and current involvement in a professional development model. No relationship
was found relative to length of time in a professional development model and burnout.

Further research is recommended to address the possible pressures of educational change regarding teachers' feelings of burnout and to know what actually happens at the classroom level as individual teachers attempt change.
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Western Michigan University, 1989

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As I reach the culmination of this project, I am once again reminded of the impact that human support has on my life. I am appreciative of and indebted to the following individuals who have contributed greatly to the completion of this study.

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CHAPTER I

STATEMENT OF THE PROBLEM

The future of education lies not in the shifting vogues of progress, teaching methods, government reports, or curricula, but in the acceptability and competence of teachers. As educational research, staff development programs, public demands, and isolated workshops increase, so does the teacher's struggle to determine quality education (Goodlad, 1975). The stress thus placed on teachers can be debilitating, not only to the teacher, but also to the entire educational system.

By the nature of the profession, teachers have little time or assistance in coping with and resolving pressures placed on them. This combination of continued stress and lack of support makes the teacher ripe for cynicism, disappointment, and depersonalization—typical symptoms of the burnout syndrome. This reduction of enthusiasm and energy blocks the movement of educational change at the individual level. Symptoms of burnout increase when schools fail to provide an environment in which teachers can achieve their expectations.

An increasing number of articles detailing descriptions and case studies of burned out teachers is found in the literature (Cardinell, 1980). "The principle problem in schools today is teacher burnout" (Barnes, 1983, p. 5).
Efforts should be directed toward identifying a process for change that will reduce the negative effects of the burnout syndrome which block the energy and enthusiasm needed for change. "Burnout prevents growth, hinders change, and lacks direction. It is the antithesis of the goals of education. Surely burnout, so costly in terms of staff and productivity, must be addressed by educators with an aggressive program of elimination" (Matthews, Hill, & Casteel, 1985, p. 2).

In this complex process, one finds many models and methods of innovation and professional development, but in the end, little, if any, change occurs (Sarason, 1971). New teaching methods and tools may be beneficial, but education cannot change without effective changes within the staff. The change literature supports the fact that the process of implementation is crucial to the success of individuals actually changing (Fullan, 1982).

Educators must recognize the people-oriented nature of education, and create cooperative learning activities and support groups to provide an environment in which the change process can occur. Current professional staff development models must be investigated as to individual participants' feelings of exhaustion, depersonalization, and personal accomplishment.

Purpose of the Study

Burnout is a syndrome of emotional exhaustion and cynicism occurring among individuals who do "people-work" (Maslach &
Jackson, 1986). Teachers plagued with stress and the demands of educational change are immersed in an isolating profession which permits very little assistance in coping with or resolving the pressures placed upon them. Their reduced levels of enthusiasm and energy block the movement of educational change at the individual level.

Conceptually, the issue of burnout (i.e., emotional exhaustion, depersonalization, and personal accomplishment) can be addressed by investigating the relationships between the professional development change process, professional development models, and the length of time involved in a professional development process.

The professional development change process is defined as an organized and designed method provided to teachers to help them improve their skills for classroom instruction. Burnout is defined as having three separate components: Emotional exhaustion, depersonalization, and low personal accomplishment. Emotional exhaustion is the tired and fatigued feeling that develops as emotional energies are drained. Teachers who no longer have positive feelings about their students experience the second component of burnout, depersonalization. The third aspect is a feeling of low personal accomplishment from the job. Time in staff development is defined as that of the teacher's awareness that he or she is consciously involved in a defined process of staff development and improvement.
The basic question that can be raised is: Does involvement in a professional development process modify a teacher's perceived feelings of burnout? This basic question was viewed from the perspective of three auxiliary questions:

1. Does participation in any professional development modify an individual teacher's perceived feelings of burnout?

2. Does participation in a particular professional development model (Collaborative Curriculum and Professional Development Process [CCPDP], Instructional Theory into Practice [ITIP], or the Michigan School Improvement Process [M-SIP]) result in a difference in a teacher's perceived feelings of burnout?

3. Does the length of time that a teacher is involved in a professional development process modify a teacher's perceived feelings of burnout?

Significance of the Study

Data gathered and analyzed during this study will enable educators to examine individual teachers' perceived feelings of burnout while they are actively involved in a professional staff development model of change. Knowledge gained will help teachers and administrators better determine what types of staff development activities reduce or modify the symptoms of burnout.

Analyzing teachers' feelings of emotional exhaustion, depersonalization, and personal accomplishment during their involvement in the stressful process of change will be useful for educators
when examining the success or failure of a particular staff development project. It's important to know why a collaborative staff development process was or was not successful in producing anticipated results. The details of what actually happens during the continued process of change when teachers and principals work together to improve the learning of students is important for the total educational program.

The findings may be helpful to teachers as they try to maintain their enthusiasm and commitment to their students. The literature in the field of burnout indicates that researchers now recognize that any demand placed upon the body which calls for an emotional response, whether pleasant or not, causes stress (Alley, 1980). Burnout is not just a fad. It is an actual problem with important correlates to unsatisfactory performance in the classroom. It deserves serious attention and continued investigation. The promise inherent in understanding burnout is the possibility of doing something about it (Maslach, 1982).

Knowing why professional change occurs, as well as what happened, is essential in future planning. Thus, this study will enable others to examine staff development models put into practice to analyze individual teachers' perceptions of burnout.

Overview of the Study

This chapter presented an introduction to the study. Included were a description of the background of the problem, the statement
of the problem, the research questions being studied, and the significance of the study.

The review of literature in Chapter II includes the background of professional development, the complexity of school change, and the impact of teacher burnout. The chapter also acquaints the reader with existing studies on change and descriptions of three existing staff development models. The chapter also relates how these models include elements that appear in the literature on reducing teacher burnout.

Chapter III presents research methods used in conducting the study. Chapter IV discusses the analysis and evaluation of data. Included in Chapter V are the summary of the study, conclusions, implications, and recommendations for future research.
CHAPTER II

REVIEW OF RELATED LITERATURE

National attention has been placed on education since the Nation at Risk report of 1983 (National Commission). Since then, a number of reports and differing recommendations on how to improve local school districts have been published. This has been a period of vigorous growth for staff development, strategies for school improvement, and administrative policies.

Spady and Marx (1984) discussed nine basic reports of 1983 which contained more than 500 explicit recommendations, plus over 200 other guidelines and principles (p. 6). More than 75% of all these recommendations imply local action of one kind or another. However, these initiatives for school improvement have tended to originate from authorities who are outside and distal to the local building staff.

Educators continue to express concern and astonishment that the voice of teachers and administrators is not more audible in current discussions and debates about school. They are also surprised that this profession, undergoing such close scrutiny, would find descriptions of practice, analyses of practice, and prescriptions for improving practice coming only from outsiders (Barth & Deal, 1982; Cuban, 1986).

Rutherford and Murphy (1985) explained that most changes that do enter schools come not from teachers, but from other sources,
such as district office administrators, state officials, and federal officials. Rutherford and Murphy's conclusions present a clear picture of teachers as the primary recipients of change, rather than initiators of change. "In a typical change process, changes are 'handed down' to teachers from some 'outside' source, and the teachers are expected to 'make them work'" (Rutherford & Murphy, 1985, p. 4).

Based on research conducted by Fahy (1985), Griffin (1984), and Sarason (1971), no matter what professional development model a teacher becomes involved with, one finds little, if any, change. "The vast majority of research on school improvement ignores the specific dynamics of change" (Fullan, 1985, p. 392). It can be hypothesized, stated Griffin (1984), that attempts to change did not take into account two critical factors: Teachers' desire and/or need to change, and the existential phenomena of schools which must be manipulated in order for change to be seen as necessary and desirable from teachers' perspectives. Conducting research without the full cooperation and collaboration of the person responsible for maintaining life—namely the teacher—is impossible (Fine, 1980a).

The literature reviewed by the investigator for this study deals with change at the individual level, three professional development models, and the symptoms of burnout which block the enthusiasm and energy needed for change at the individual level.
Educational Change

The Complexity of School Change

Educational change through models of innovation is not a new phenomenon. Dissatisfaction with American education began in the 1950s and reached a national peak in 1957 when Sputnik was launched (Goodlad, 1975). The years which ensued were fraught with attempts at educational change.

While the motivating changes of the 1960s, 1970s, and 1980s were different, actual outcomes resulted in little consistent or stable improvement in student outcomes (Berman & McLaughlin, 1975). "Research needs to go beyond theories of change (what factors explain change) to theories of changing (how change occurs and how to use this new knowledge)" (Fullan, 1985, p. 392).

The basic assumption, as explained by Pine (1980a), was that while systems and organizational development theories may contribute to the achievement of some educational change, there are certain fundamental and significant problems in the theories that inhibit change. "An understanding and recognition of these problems suggest there are alternative assumptions and ideologies about change which have been closed out as theoretical options by the uncritical embrace of contemporary change theories and technologies" (Pine, p. 108).
Conceptual Foundations of Educational Change

Humans have no predisposition to favor the status quo over change. Almost everyone prefers excitement to monotony and is eager for some kind of change in their lives (Henson, 1987). Why then do people resist change? There appear to be three major reasons.

1. Habit. Alfonso, Firth, and Neville (1975) found that one of the main reasons people resist change is the force of habit.

2. Fear. No single force affects people's behavior more than feelings of insecurity and inadequacy brought on by fear of that which is different (Henson, 1987).

3. Hopelessness. Today's teachers are overwhelmed with innovations, lack of funds, and lack of support (Henson, 1987).

These are some of the basic contributing factors which make educational change a highly complex process. Only recently have educational researchers directly addressed the complex nature of school change.

One of the first to recognize the culture of the school and the individual as part of a larger system was Sarason (1971). Change was seen in terms of existing regularities evident in the school culture. Any attempt to introduce change into the school setting, requires, among other things, changing the existing regularities in some way. The intended outcomes involve changing an existing regularity, eliminating one or more of them, or producing new ones. . . . In practice, the regularities tend not to be changed, and the intended
outcomes, therefore, cannot occur; that is, the more things change, the more they remain the same. (Sarason, 1971, pp. 63 & 86)

This concept of school culture is promoted and supported by many researchers (Baldrige & Deal, 1975; Goodlad, 1975; Griffin, 1984; Kanter, 1983; Mann, 1976b; Miles, 1983). They believed that school reform must be accomplished through existing personnel. Emphasizing the importance of this concept, the Rand Study (Barnes, 1983) found, "Each classroom and school have their own environmental characteristics" (p. 31).

The people in each building are unique. They create unique human dynamics and a school culture that is concrete and specific to each situation. Hough and Urick (1981) supported the Rand Study findings (Barnes, 1983), by proposing that the building is the largest single unit in which sustained effort to change and improve curriculum and instruction should occur.

For educational change to occur, we must "change the value structure of our school organization so that beliefs, attitudes, and relationships are socialized into the organization" (Champlin, 1987, p. 12).

Educational change can be conceptualized as a "process within the school district considered as an organizational system. . . . The process of change consists of events and activities as the system moves from one state to another" (Berman, 1981, p. 266).

The individual teacher and administrator must be viewed within the social system of the school. In short, Olson (1985) stated the
current dominant conceptions of school change do not give proper attention to the role that teachers ought to play in school reform. In fact, "the teacher tends to be reduced to an element to be manipulated within the framework of social or environmental control. As a result, the consequence is that the important moral agency of the teacher is reduced to an instrument" (Olson, 1985, p. 295).

Synthesizing findings of a five-year research project involving 18 schools, Goodlad (1975) suggested the nature of successful change efforts was dependent upon an understanding of the impact which change efforts have on the interrelated whole within the natural system of each school, rather than only on isolated components of it.

Principles of Educational Change

Few theoretical formations have been proposed to account for the fate of educational innovations for change. Past theories stated change was primarily when management determined whether or not innovation of change would occur (Gross, 1979).

In 1983, Kanter explained that three choices of change still occurred in organizations: That of participative, authoritarian, or political change. "The innovations implemented by entrepreneurial managers by participative methods, or those designed and carried out by employee teams may reflect more constructive and
productive methods of change, but they do not exhaust the possibilities" (pp. 279-280).

Fullan (1985) explained, "Educational change depends on what teachers do and think. . . It's as simple and complex as that" (p. 401).

Current change literature offers basic similarities to change when applied to educational staff development models and teacher burnout. These similarities are:

1. The optimal unit for change is the single local unit, such as the individual school (Fahy, 1985; Goodlad, 1975; Kanter, 1983).

2. In order for an individual to change, an atmosphere that is receptive to trying new ideas, experimenting, and making mistakes with a supportive peer group is needed (Berman & McLaughlin, 1978; Champlin, 1987; Goodlad, 1975; Joyce & Showers, 1980; Kanter, 1983; Lortie, 1975; Peters & Waterman, 1982).

3. In order for change to occur, the presence of an explicit value system, commonly shared goals, and strong sense of commonality is essential (Cohen, 1983; Fullan, 1985; Winn, 1985).

4. Individuals involved in a change process develop an awareness of self and a responsiveness to itself (Barnes, 1983; Goodlad, 1975; Henson, 1987; Kanter, 1983; Rutherford & Murphy, 1985; Winn, 1985).

5. Those involved in initiating change need a sharing time with colleagues to develop their own process which creates a "grassroots" movement (Fullan, 1985; Goodlad, 1975; Griffin, 1984;
6. The use of an outside facilitator is needed in the change process to aid in developing the group dynamics process, securing relevant references, conducting evaluations and feedback, and constructing a communication network within the larger system (Barnes, 1983; Fullan, 1985; Goodlad, 1975; Goodlad, 1984; Huberman, 1981; Joyce & Showers, 1980).

7. It is necessary for leadership to understand the process of change in order for effective and sustained change to occur (Fullan, 1985; Peters & Waterman, 1982; Schon, 1983).

8. Change is a process requiring time, which should be viewed in terms of ongoing longevity (Barnes, 1983; Berman, 1981; Fullan, 1985; Goodlad, 1975; Hall & Loucks, 1977; Rutherford, Hord, Hall, & Huling, 1983).

After reviewing these basic similarities researchers have investigated regarding the change process, it was found that educational researchers generally agreed that more research within the individual school at the delivery level is necessary to understand what actually causes meaningful change.

The Individual Within the Change Process

The individual teacher has not been seriously studied within the research on educational change and innovation (Gross, Giacquinta, & Bernstein, 1971; McLaughlin, 1976; Sarason, 1971).
What research has begun to address is individual innovation adoption focusing on the innovation, how that use matures and changes, and what effect action or conditions outside the individual have on the use of the innovation (Berman & McLaughlin, 1975; Hall, 1979). "Change would occur as teachers became more aware of how they solve problems and at what cost as they begin to subject their practice to critical scrutiny" (Olson, 1985, p. 299).

"Because of their cultural conditions and practicality concerns, most teachers do not take the initiative to promote change beyond their own classroom (Fullan, 1982, p. 119). The focus of Kanter's (1983) research explains that "organizational change is stimulated not by pressures from the environment, but by the perceptions of that environment and those pressures held by the key actors" (p. 281).

Lortie (1975) gave reasons meaningful change does not occur within our educational system:

Change is impeded by mutual isolation, vague yet demanding goals, dilemmas of outcome assessment, restricted inservice training, rigidities in assignment, and working conditions which produce a "more-of-the-same" syndrome among classroom teachers. . . . Opportunities for mutual consultation are limited during the working day, and contacts between teachers are peripheral to their major obligations. These depressed feelings about nonaccomplishment will not produce readiness for change; constriction is the more probable result. (pp. 232-233)

Correcting this situation, Huberman (1981) and Lortie (1975) advocated the development of collegial responsibility and trust instead of the "sink-or-swim" situation that prevails in the
situation of physical isolation. The design for the development of new teaching behaviors should be for individual, rather than organizational, development (Showers, 1985). The Rand Study (Barnes, 1983) found that teachers change only when they adapt the project designs to their own particular situation.

Teachers are warned by Lortie (1975) that they will have to become aware of the confronting options in educational practice and alternative responses to public expectations in the years ahead.

The research by Cohen (1983) found that commonly shared goals and a strong sense of community are found in effective schools. The interactive character of successful change, Fullan (1985) explained, is the interactive relationship, such as between teachers, principals, and external support personnel, planning and sharing on a sustained basis. It is the constant communication and information sharing that produces the pressure and support that works to produce improvements in schools (Huberman & Crandall, 1983).

As Peters and Waterman (1982, p. 240) observed:

Nothing is more enticing than the feeling of being needed, which is the magic that produces high expectations. What's more, if it's your peers that have those high expectations of you, then there's all the more incentive to perform well.

Change as a process, not an event, was explained by Berman (1981), Fullan (1985), Goodlad (1975), and Hall (1979). They indicated that "changing" is very complex and occurs through time.

Teacher behavior reflects how they accommodate conflicting demands and resolve dilemmas inherent in their work. These dilemmas are manifold and complex, and their resolution is sophisticated. What teachers do cannot be
explained adequately by looking for causes in their envi­
ronment nor at the plans of the system. Teachers them­
selves make plans based on their assessments of their
working environments and the problems it poses. (Olson,
1985, p. 299).

From a two-year study, Rutherford (1977) consolidated changes
in teachers:

1. Changes in teachers seem to result from an
accumulation of interventions rather than specific or
immediate cause and effect relations.
2. When teachers do change, they usually perceive
it to be of their initiation rather than the result of an
intervention or series of interventions.
3. Change in teachers' feelings and attitudes seems
to precede any change in their actual use of an innova­
tion.
4. If the change process is to be maximally effec­
tive, most interventions must be directed at individuals,
not groups.
5. Teacher-to-teacher interventions and support can
be powerful positive factors in an implementation effort.
6. No matter what the innovation is, it is very
probable that some of the intended participants will not
actually use the innovation.
7. It requires much time and effort for teachers to
learn to use new programs effectively. (pp. 26-27)

Ownership

As cited in the previous research, ownership appears to be the
key component in the individual change process. The literature
shows that teacher participation in decisions about change process
plays an instrumental role (Champlin, 1987; Hall, 1979; Mann, 1976b;
McLaughlin & Marsh, 1978; Schiffer, 1978). Ownership is also an
integral part of any current study or report explaining successful
change at the individual level. The fact that the drive for change
must be internalized by the members is reflected in the studies by
Kanter (1983). The Rand Study (Barnes, 1983) noted successful change is a result in local determination that participants' input was valued with a sense of local ownership of the change. The importance of local ownership is reflected by Henson (1987):

All individuals and groups who may be affected by change should be directly and meaningfully involved in the change. . . . Only through such useful involvement can a lasting commitment be secured from everyone as members perceive the idea as their own. (p. 126)

Many factors of change were investigated by Rutherford and Murphy (1985), but,

the one that had the greatest influence on teacher reaction was the source of change--when change was initiated by teachers, their reaction was positive 85% of the time--when change came from other sources, teachers reacted positively only 38% of the time. (p. 27)

Summary

Changing an organization is a complex and exceedingly difficult undertaking. If only a few good things really happen, maybe that is enough (Corwin, 1979). The central theme is "to recognize change is a human process, to temper the ideology of virtue implicit in change, and to admit that conventional change theory and practice have barely scratched the surface in generating fundamental educational change" (Pine, 1980a, p. 124). Fullan (1985) defined change as "a process of developing new skills and, above all, of finding meaning and satisfaction in new ways of doing thing" (p. 396). Fullan best summarized this process of change upon which the research of the present study was based:
1. Change takes place over time;
2. The initial stages of any significant change always involve anxiety and uncertainty;
3. Ongoing technical assistance and psychological support assistance are crucial if the anxiety is to be coped with;
4. Change involves learning new skills through practice and feedback;
5. The most fundamental breakthrough occurs when people can cognitively understand the underlying conception and rationale with respect to why this way works better;
6. Organizational conditions within the school (peers, norms, administrative leadership) and in relation to the school (e.g., external administrative support and technical help) make it more or less likely that the process will succeed;
7. Successful change involves pressure, but it is pressure through interaction with peers and other technical and administrative leaders. (Fullan, 1985, p. 396)

As Fullan (1985) explained, "Change involves pressure, assistance and skill, but people must feel good about their relationships, sense of community, and sense progress that results from their efforts" (p. 412).

Teacher Burnout

When Freudenberger (1974) used the term "burnout" to describe the syndrome of physical, emotional, and attitudinal exhaustion he saw in the free clinic movement in 1974, he struck a responsive chord deep in the hearts of workers in the helping professions.

Since then, literature has been filled with opinions, suggestions, prevention, and coping with this job phenomenon. "A professional group that appears to be particularly susceptible to
burnout is that of school teachers employed by the public school systems in the United States" (Hock, 1985, p. 7).

Despite all the attention given to burnout, perceived teacher burnout has received limited empirical attention in education (Crane & Iwanicky, 1983; Hock, 1985). The expression "burnout" is used often and freely, thus developing different meanings for different people (Cherniss, 1980a). Burnout is a personal and subjective experience, which makes it even more difficult to define in objective terms (Foster, 1980). Further, burnout is usually perceived as a negative experience with negative consequences for the individual (Hock, 1985).

In the present study, "burnout" refers to a "syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that occurs frequently among individuals who do 'people work'' (Maslach & Jackson, 1986, p. 1). It is seen as a condition lying somewhere on a continuum ranging from low to high, rather than as a dichotomous "either/or" condition. Burnout is now seen as a "complicated issue with roots in intrapsychic, interpersonal, occupational, historical, and social phenomena" (Farber, 1983, p. 241).

**Effects of Burnout**

The effects of burnout vary with the individual. Some teachers leave the profession. Others stay on the job doing as little as possible in order to survive until retirement (Hendrickson,
Among the more important indicators of burnout are loss of concern for and detachment from the people with whom one works, and a cynical and dehumanized perception of students. This is accompanied by deterioration in the quality of students, accompanied by deterioration in the quality of schools, accompanied by deterioration in the quality of teaching, depression, increased use of sick leave, and efforts to leave the profession (Farber, 1983; Maslach, 1978; Mitzel, 1982; Pines, Aronson, & Kafry, 1981). Burned out teachers are exhausted (Foster, 1980; Gold, 1984a).

"Burnout destroys people, the very resource most vital to education, yet educators rarely address it as a problem for the staff as a whole" (Matthews et al., 1985, p. 4). Burnout prevents growth, hinders change, and lacks direction; it is the antithesis of the goals of education (Glasman & Binaminov, 1981; Weiskopf, 1980).

"Although one must be wary of posing cause-effect relationships between teacher burnout and student achievement, there is at least some preliminary evidence to suggest that a lack of teacher job satisfaction directly undermines student grade aspirations" (Farber, 1984b, p. 330).

An hypothesis made by Farber and Miller (1981) stated that "'teacher burnout' is attributed not only to overt structures that lend a lack of psychological sense of community--a lack that produces feelings on the part of teachers of both isolation and inconsequentiality" (pp. 242-243).
As cited, burnout is not self-contained; it extends beyond the teacher to affect students, school staff, parents, and the teacher's family. Teacher burnout has a negative effect upon the educational process and the delivery of services, as well as the teacher's personal milieu (Holland, 1982). Teachers are role models and teachers' psychological states affect the psychological states of their students (Doyal & Forsyth, 1973; Zimmerman, 1970).

Teachers who become burned out, as cited in Farber's studies (1983, 1984b), may be less sympathetic toward students, may have a lower tolerance for frustration in the classroom, may plan for their classes less often and less carefully, may feel frequently emotionally or physically exhausted, and in general may feel less committed and dedicated to their work.

Farber and Miller (1981) pointed out that "teacher burnout is attributable not only to overt sources of stress, but often to unexplained factors within school structures that lead to a lack of psychological sense of community" (p. 238).

Emotional exhaustion, depersonalization, and low personal accomplishment are described by Schwab (in Maslach & Jackson, 1986) as symptoms of the teacher burnout syndrome.

As in other helping professions, an initial aspect of educator burnout, Emotional Exhaustion, is the tired and fatigued feeling that develops as emotional energies are drained. When these feelings become chronic, teachers find they can no longer give of themselves as they once could.

Teachers who no longer have positive feelings about their students are experiencing the second component of teacher burnout, Depersonalization. Among the many ways teachers can display indifferent, negative attitudes...
toward their students are: using derogatory labels; exhibiting cold or distant attitudes; physically distancing themselves from students; and "tuning out" students through psychological withdrawal.

The third aspect, a feeling of low personal accomplishment from the mob, is particularly crucial for teachers. Most teachers enter the profession to help students learn and grow. When teachers no longer feel that they are accomplishing this, there are few other areas on which they can focus to receive rewards. (Maslach & Jackson, 1986, pp. 18-19)

The stages through which a teacher goes during burnout were described by Jones and Emanuel (1981) as heating up, boiling, and explosion. During the heating up stage, feelings of dissatisfaction and isolation begin to build. There is little pleasure in teaching, and staff camaraderie seems to fade. These bouts may be occasional or short-lived. In the last stage, the teacher begins to feel helpless, questioning his or her teaching ability, gradually increasing the distance between self and students (Weiskopf, 1980).

Other researchers also have defined burnout as a process developing through stages (Cherniss, 1980b; Edelwich & Brodsky, 1980; Farber, 1983; Maslach, 1981; Matthews et al., 1985).

Helping Strategies

Most researchers tend to place greater emphasis on work-related factors than on individual factors, though work-related factors may vary greatly across settings. Pines et al. (1981) supported a focus on work-related issues. They argued that the major cause of burnout lies within the situation. Their argument
parallels Herzberg's (1982) argument that job dissatisfaction is a response to hygiene organizational factors. Also supporting this paradigm that organizational issues are of great importance is Maslach (1981) who stated:

Although personality variables are not irrelevant in our overall analysis of burnout, I am forced by the weight of my research data to conclude that the problem is best understood in terms of social and situational sources of job-related stress. (p. 31)

In the broader systemic scope, both Farber (1983) and Cherniss (1980a) discussed the way in which a capitalistic society fosters the burnout condition. They both argued that the competition engendered within our society contributes significantly to worker alienation and a division between the worker and his or her work. Such a depersonalizing process can and often does lead one's work to become mechanistic and ripe for burnout. This position gives any effort at change a somewhat pessimistic context.

In addition to this depersonalization syndrome, the literature often confuses or equates stress with burnout. "Though these two concepts are similar, they are not identical. Burnout is most often the result, not of stress, but of unmediated stress--of being stressed and having no 'out,' no buffers, no support system, no adequate rewards" (Farber, 1984b, p. 326).

Research has been conducted to identify why some teachers become burned out and others remain enthusiastic. Lieberman's (1986a) research identified reasons teachers who were hard working and achieving results maintained positive attitudes. They had
(a) freedom to be creative and innovative; (b) the opportunity to influence students; (c) opportunities for feedback, recognition, and support from adults; and (d) the opportunity to share with peers. This was reinforced by the research done by Little (1981; Bird & Little, 1985) who found that teachers in schools known for high rates of innovation and teamwork distinguished carefully between end-of-the-year weariness and career burnout. These teachers had sustained their enthusiasm for teaching in large part by collective efforts to learn and apply new ideas with colleagues.

One of the main objectives in working with burned out teachers is to help individuals rediscover forgotten skills and to develop new ones (Tubesing & Tubesing, 1982). Teachers must have an environment that is supportive and encouraging (Cassel, 1984; Kirk & Walter, 1982; Kossack & Woods, 1980; Matthews et al., 1985; Raschke, Dedrick, Strathe, & Hawks, 1985).

The burnout literature continues to support the establishment of formal support groups in the workplace as prevention for burnout (Cherniss, 1980b; Christensen, 1981; Fibkins, 1983; Freudenberger, 1974; Walley & Stokes, 1981; Wangberg, 1982). Sarason (1977) also noted that it is possible to improve the work experience by engendering a sense of community among teachers.

When individuals realize they are not alone, they can reach out to their colleagues for solutions to their problems (Sakharov & Farber, 1983). In a 1981 study, Pines et al. noted that in stress-related situations "teachers may feel alone in their
struggle to maintain discipline and minimal standards of education without the support of parents or administrators" (p. 50).

A major source of burnout appears to stem from the teacher's sense of isolation--being cut off from the other adults, other professional colleagues, and virtually "trapped" in a room full of children all day (Dubrin, 1979). In response to perceived insensitivity and criticism of administrators and the general public, "teachers have retreated and isolated themselves; satisfaction occurs on a micro rather macro level" (Farber, 1984b, p. 330). The most sustaining aspect of teaching over time turned out to be the emotionally meaningful face-to-face contacts with colleagues.

In an attempt to understand causes of teacher burnout, Rathborne and Benedict (1980) interviewed junior high school educators. They differentiated among causes related to (a) staff, (b) administration, (c) the community, and (d) those related to the staff where negative teachers' talk, isolation, and creative efforts go unsupported. As a result of this lack of contact and communication between teachers, each feels that he or she is the only one experiencing the problem and sees everyone else as secure and confident. This component contributing to stress in teaching has been termed "pluralistic ignorance" (Maslach, 1978).

Burnout occurs when the expectations of the school are too high, unclear, or change frequently, and when teachers feel their role in the organization has little significance (Matthews et al.,
1985; Sparks, 1985). They suggested that staff have input in
goal-setting strategies and control over their destiny.

School-based administrators are probably in the best position
to help and support teachers (Ferren, 1980). Teachers are growing
increasingly sensitive to being excluded from the decision-making
process and are desiring more control over their own jobs (Hock,
1985). Teachers also feel that their associations with administra-
tors are characterized by a general feeling of unfriendliness and
distrust (Hock, 1985; Rothstein, 1980). Both bureaucratic inter-
ference and administrative annoyances are highly correlated with
burnout (Pines et al., 1981; Raquepaw & deHaas, 1984).

Lacking any semblance of a support system from the pub-
lic, the parents, the administration, or fellow profes-
sionals, it becomes an easy task for teachers to begin to
see themselves in the same dim light. ... One could
view teacher burnout as the extinction of unrewarded
behavior. (Hock, 1985, p. 15)

It has been shown that when teachers' need for self-actualiza-
tion and self-esteem are unfulfilled, there is a higher probability
of burnout (Anderson & Iwanicki, 1981). These findings corroborate
Cichon and Koff's (1978) findings that "management tension" is a
significant source of stress for teachers. It also lends support
to the idea that the critical deficit in the burnout process is a
lack of organizational support. Administrative support in the
daily work of teachers has significant influence in the reduction
of burnout (Farber, 1984a; Gold, 1984a; Pines et al., 1981; Raque-
paw & deHaas, 1984).
Summary

Attempts to clarify the nature of burnout as an ongoing process have led to descriptions of its stages of severity and the manifestations of each step. Burnout effects are alarming to those in the field of education because burnout extends beyond the teacher’s personal life and health to affect negatively students and the educational process itself. Though no uniform procedures for dealing with burnout symptoms have been empirically established, there are many studies in the literature promoting positive attitudes through support of colleagues and the building principal. Despite greater awareness of these problems, there still remains a paucity of empirically validated intervention programs. "In general, the most effective approach to the problems of burnout lies in the use of social support" (Farber, 1984b, p. 330). There is evidence to suggest that teacher centers (Fibkins, 1983; Sparks, 1979) and self-help support groups for teachers (Walley & Stokes, 1981) are successful in reducing isolation, promoting collegial support, renewing commitment, and increasing teachers’ sense of professionalism (Farber, 1984b).

Three Staff Development Models

Many staff development models have been implemented over the last five years in the state of Michigan. They have been designed to provide school staffs with the skills and process needed to improve classroom instruction. Three of these models were studied:
1. Collaborative Curriculum and Professional Development Process (CCPDP);

2. Instructional Theory Into Practice (ITIP); and,

3. Michigan School Improvement Program (M-SIP).

As mentioned, the purpose of this study was to investigate burnout during the change process with teachers who are actively involved in the professional staff development models.

**Collaborative Curriculum and Professional Development Process**

The Collaborative Curriculum and Professional Development Process (CCPDP) is a professional development project of the Center for Studies of Alternatives in Education (Snell & Snell, 1987). The center was formed in January 1984 as a cooperative research and development effort between the Michigan's Macomb Intermediate School District and Oakland University. The CCPDP development program evolved from the experience and documentation of the DeKeyser Project which began in 1981 (Snell & Snell, 1987).

The principal and teachers meet weekly to plan and discuss learning activities and the academic products of students. This sharing of personal teaching experiences with colleagues brings a sense of importance and value to teaching. One of the teachers interviewed said,

> I've always enjoyed teaching, but it has never been as exciting and alive as it has been for me now that we have this wonderful resource, this group. . . . It's been terribly stimulating and kept teaching fresh. . . . It's fun to come every day. (Snell & Snell, 1987, p. 2)
The philosophy behind the DeKeyser project was that "when the principal and teachers work together to improve the learning lives of students, the students' work will improve and the staff will grow professionally" (Snell, 1986, p. 1). The quantity of time, as well as the quality of time use and expectations about the rate of progress all are important for change to occur, according to Snell.

"School improvement should be viewed as a developmental strategy by which, as time passes, qualitative changes occur and the work progresses through various stages of increasing differentiation and maturation" (Snell, Snell, & Miller, 1987, p. 3). The basic premises of the CCPDP are:

1. The capacities (knowledge, talent, and skill) for strengthening and improving student learning opportunities and achievements reside in the instructional staff and the resources available to the staff; and,

2. The effectiveness with which the capacities of a staff can be exercised and operated over an extended period of time depend on the extent to which the staff and its efforts are encouraged and supported with the appropriate resources and facilitating conditions.

Five research-based principles guide the CCPDP:

1. A voluntary project team meets weekly and focuses on an instruction improvement project.
2. Instructional change is a process—it is developmental, based on staff interest and concerns, and is accomplished over time.

3. Teachers are resources to other teachers—collegiality.

4. Project progress is measured by documentation and evaluation based on students' work.

5. Leadership for instructional decisions is shared and facilitated by an outside consultant.

In the formulation of these principles, the aim was to focus on building-level teams, rather than inservice and principals experiencing full ownership in the school improvement work. The aim was also team commitment to sustain the work over a period of time, usually two to three years (Snell et al., 1987).

Voluntary Project Teams and Weekly Meetings Focused on Instructional Improvement Projects

The formation of a voluntary project team is necessary to initiate ownership. A study by Rutherford and Murphy (1985) found that to develop the greatest number of positive teacher reactions, the changes should be initiated by the teacher.

Without regular meetings, a team will fail to form and its members will lose interest or be unable to share common commitments. Researchers (Berman & Pauly, 1975; Goodlad, 1975; Hall, 1986; Little, 1982) concluded that successful projects needed a mutual adaptation strategy that involved frequent and regular staff
meetings, staff training held in conjunction with meetings, and project requirements placed on teachers to alter their behavior.

In extensive research done by Little (in press), it was found that teaming for the sake of teaming is predictably short-lived.

Teams are more likely to form when the work at hand is complex enough to make two heads better than one, and to make it probable that the reflected story of the team will outshine the success that each member could expect from working alone. (Little, in press)

Common planning periods, regularly scheduled team or subject area meetings, and the judicious use of release time all support cooperative work among teachers (Little & Bird, 1984; Weyand, 1983). Monthly or quarterly meetings, explained Bird and Little (in press), cannot achieve the same effect as regular meetings and planning periods that allow teachers to work on problems of curriculum and instruction with the persistence and regularity needed to achieve continuity and depth and to resolve disagreements.

**Instructional Change Is a Process**

Change is a process over time, not a momentary event. Time should be considered as a critical resource. Innovation and change, Kanter (1983) suggested, "are bound up with the meanings attached to events and the action possibilities that flow from those meanings . . . making it more difficult to see change as a mechanical process" (p. 281). The focus of educational research studies in the last five years or perhaps 10 years has shifted dramatically (Berman, 1981):
Research has changed emphasis from analysis of replicable products to studies of process; from fixed and constant treatments to broad evaluations; from primacy of adoption to consideration of the whole change process; from quest for superior technologies to an exploration of organizational and contextual explanations of change. (Berman, 1981, p. 260)

Change happens over a period of time to transform individuals and situations (Hall & Loucks, 1977).

In 1966, Fox described innovation and change:

To become increasingly open to a process of professional self-renewal . . . the self-renewing teacher has a vision of potentiality for improvement gained through knowledge of a wide variety of alternatives. . . . He is alert to the changing needs of his pupils and of society and seeks continuously improved ways of meeting these needs. (p. 5)

**Teachers As Resources to Other Teachers--Collegiality**

As teachers share their experiences with other teachers on a regular basis, a professional dimension is added to teaching. In research completed by the National Education Association and the National Association of Secondary School Principals (1986), regarding professional growth and staff development, it was reported that next to their own experiences in the classroom, sharing experiences with other teachers was the most significant condition and resource that affects a teacher's professional development. A study by the United States Department of Education (1986) found that "students benefit academically when their teachers share ideas, cooperate in activities, and assist one another's intellectual growth" (p. 51).

Lewin (1948) advocated action research into social problems in part because he believed that social change depended on the
commitment and understanding of those involved in the change process. The assumption based on Lewin's work is that if teachers work together on a common problem clarifying and negotiating ideas and concerns, they will be more likely to change their attitudes and behaviors (Elliott, 1977; Hall, 1975; Hodgkinson, 1957; Little, 1981).

The case for a team was voiced by Louis and Rosenblum (1981). "Teams facilitate the need for different types of expertise at different stages in the change process" (p. 189). The Rand Study (Barnes, 1983) also demonstrated that the highest degree of change occurred when teachers were systematically involved in problem identification and solution formation. The importance of professional dialogue cannot be overestimated. Without it, "teachers have no avenues for their limited time together to share ideas, discuss teaching problems and possible solutions and, in turn, better teaching skills. . . . Isolated teachers appear instead to enact a live-to-let-live professional protocol" (Rosenholtz, 1984, p. 12). Collaboration would also increase teachers' sense of professionalism and belonging to the enterprise of curriculum work. "Clearly, if we are to progress, teachers, administrators, and academics must learn to work collegially" (McCutcheon, 1985, p. 51).

Many research studies have found the growth producing potential when teachers become involved in collaborative activities (Goodlad, 1975; Hord, 1981; Little, 1981 & in press; Lortie, 1975;
One researcher (Little, 1981) has done extensive research in the field of teacher collaboration. Her in-depth research in six schools focused on the school norms and work conditions conducive to staff development and improvement.

School improvement is most surely and thoroughly achieved when teachers engage in frequent, continuous and increasingly concrete and precise talk about teaching practice (as distinct from social life of teachers and students). By such talk, teachers build up a shared language adequate to the complexity of teaching, capable of distinguishing one practice and its virtue from another. (Little, 1981, pp. 12-13)

The question of exactly what do teachers do in the process of collegiality is answered by Little (1981, & in press):

1. Teachers and administrators talk to one another about teaching at a level of detail that makes their exchange both theoretically rich and practically meaningful.

2. Teachers and administrators speak clearly, fully, and concretely about their work, thus taking the mystery out of teaching without diminishing its essential artistry, helping make clear the understanding that teachers hold about connections between their actions and student learning.

3. Teachers and administrators plan, prepare, and evaluate the topics, methods, and materials of teaching together. Working in concert, they reduce their individual planning time while increasing their pool of ideas and materials. By joint work on
materials, teachers and administrators share the considerable burden of development, and confirm their emerging understanding of work attainable by them and students.

4. Teachers and administrators frequently observe each other teaching and provide each other with useful evaluations of their teaching. Only such observation and feedback can provide the necessary referents for the shared language of teaching and the concreteness which makes the talk about teaching useful.

5. Teachers and administrators teach each other the practice of teaching.

This collaboration among teachers results in:

(a) Orchestrating the daily work of teaching across classrooms, with a (b) tendency to be organized and to examine and test new ideas, methods or materials. . . . They have the necessary organization to attempt school and classroom innovations that would exhaust the energy, skill or resources of an individual teacher. (c) Schools that foster collegiality are plausibly organized to ease the strain of staff turnover, both by providing systematic assistance to beginning teachers and by explicitly socializing all newcomers to staff values, traditions and resources. (Little, in press)

As Little suggested, there is something tremendously appealing about the images of cooperation, collaboration, and collegiality. "Such images seem to promise an environment in which persons enjoy one another's company and admire one another's work" (Little, in press). As a result of collegiality, Pine (1980a) explained teachers become more flexible in their thinking, more receptive to new ideas, and more able to solve problems as they arise.
Project Progress Is Measured by Documentation and Evaluation Based on Students' Work

A systematic collection of data and feedback is essential in providing a basis for understanding the status of an organization and guiding the efforts of problem-solving and organization planning (Walley & Stokes, 1981). The purpose of documentation is to develop an ongoing record, an ongoing process, and finally a continuous form of assessment. Documenting feelings, personal experiences, and perceptions helps to define action research as a vital process which captures "the pulse, the vitality, and the fibrous nature of life in the classroom" (Pine, 1980b, p. 41).

Documentation subsumes an entire gamit of activities concerned with information, including collecting, synthesizing, and explaining. The qualitative issues and values that are inherent in a program can only be described through adequate documentation (Ianni, 1978). Data collection is necessary to determine the degree and success of a change process (Barnes, 1983; Fullan, 1985; Ianni, 1978; Louis & Rosenblum, 1981).

The CCPDP project collects dated samples of students' original work, along with standardized test scores and the corresponding teacher plans, and then uses these materials to systematically evaluate the instructional program for students. "This ongoing evaluation of programs calls for teachers, administrators, and educational researchers to be equal partners in the process" (Snell & Snell, 1987, p. 6).
Leadership for Instructional Decisions Is Shared and Facilitated by an Outside Consultant

Within the project team, leadership of activity and project development is shared among members. It is through shared instructional leadership that a dialogue among team members makes it possible to discuss and change classroom practices. In the discussion of the dynamics of educational change, Goodlad (1975) stated, "Probably, more than anything else, it was the apparent willingness of peer principal to accept and grapple with these new demands that gave courage to one beginning to falter" (p. 122). Individuals attempting to implement change must be viewed within the system in which they operate. Generally, the building principal is the administrator who most directly impacts what happens at the classroom teacher's level. The building principal is described as "the crucial implementor of change" (Sarason, 1971, p. 148). He elaborated:

That is to say, any proposal for change that intends to alter the quality of life in the school depends primarily on the principal. One can realign forces of power, change administrative structures, and increase budgets for materials and new personnel, but the intended effects of all change will be drastically diluted by principals whose past experiences and training ... ill prepare them for the role of educational and intellectual leader. (pp. 148-149)

Within the Rand Change-Agent Project (McLaughlin & Marsh, 1978), the importance of the principal's role was directly related to continuing use of projects and methods positively affecting project implementation.
The building principal's role is critical to change efforts at the classroom level. Research suggests that teachers need an atmosphere in which they are free to identify problems for inquiry and experimentation, and to express ideas with administrators and colleagues (Corey, 1952; Pine, 1980a). Much of this freedom comes from an administration which recognizes collegial, rather than hierarchical, authority and allows teachers to make decisions which influence their practice and inquiry (Smulyan, 1984). In successful schools, teachers and administrators are more likely to talk together regularly and frequently about the business of instruction (Goodlad, 1984; Hord, 1981; Little, 1986; McLaughlin, 1976; Sizer, 1984; United States Department of Education, 1986). The single most important finding from Hall's (1986) study was that the degree of implementation varies from school to school because of the actions and concerns of the principal.

The building principal's role is critical to change efforts at the classroom level. The support of the principal is directly related to the long-term results of a project and can positively affect individual teachers within the change process (Goodlad, 1984; Hall, Hord, & Griffin, 1980; Keefe, 1986; Miles, 1983; Rutherford et al., 1983; Stallings, 1987).

The role of an outside consultant or change agent has important ramifications for local educational change. However, studies indicate that this has to be in the form of an ongoing support activity. Huberman (cited in McLaughlin & Marsh, 1978) noted that
the use of outside consultants had a long-term positive and direct
effect in the Rand Project. He also noted that the quality of
consultants is important. Studies show that consultants may block
growth under the guise of a helping expert (Baldridge & Deal, 1975;
Goodlad, 1975; Louis & Rosenblum, 1981). Recent research in educa-
tion has produced a number of studies which support the efficacy of
an external helping role in increasing local school use of informa-
tion (Louis & Rosenblum, 1981). While literature shows a variety
of potential pitfalls in the consultant relationships, positive
gains can occur.

Effective consultation is best summarized by Sarason (1971):

1. The consultants should be voluntary;
2. Systems should be clearly defined;
3. Consultation should be a two-way process;
4. There should be plans for transferring some of the
   resources of the consultant;
5. There should be a balance between the consultant's
   advice and his support;
6. Procedures to periodically review the working rela-
tionship should be introduced; and
7. The degree to which the consultant can help identify
   the steps to the desired goal should be defined. (pp. 259-260)

According to Little (in press), "Assistance in effective group
process and group leadership has helped teachers master the rou-
tines of scheduling, prioritizing issues, facilitating discussion,
and reaching closure on decisions and task." The ability to dis-
tinguish those issues that deserve group attention from those that
can be left to the individual's prerogative, can be done by an
outside facilitator (Cohen, 1981). Outsiders need to work with
teachers to identify and analyze dilemmas, evaluate the
consequences of their resolution, and work out ways to deal with other dilemmas (Olson, 1985). Recognizing the available and pertinent resources outside and inside of the school provide a broader picture of what can be accomplished in the classroom (Griffin, 1984).

Teachers need to be taught how to collaborate (Pine, 1980b):

It is imperative that all members of the team be brought together initially to learn how to collaborate. . . . Collaboration is a dialectical and dialogical process with a lot of give and take . . . [which] requires trust [and] communication to solve problems together from the beginning. (p. 47)

This "teaching" is delivered from the outside consultant. An outside consultant, lastly, can watch for the "participatory and ownership process which may contribute to group-think phenomenon" (Jarvis, 1972).

Summary

The Collaborative Curriculum and Professional Development Process developmental strategy has evolved since 1981 as a result of experiences with staff and developmental programs. Staff development is maintained through a group process that assists shared expectations and establishes professional dialogue. Teachers work as a team with their principal. A focus for building-level curriculum change will emerge as the building instructional team works together over time on increasing learning opportunities for students (Snell et al., 1987).
CCPDP is a grassroots, staff development process that is backed by the research on change and burnout reduction presented in Chapter II of this document.

1. Ownership is important in sustained change.
2. Change occurs within the social environment of an individual building.
3. Change is recognized as a long-term process.
4. CCPDP reduces teacher isolation.
5. CCPDP develops teacher support systems.
6. The principal is a team member in the CCPDP.
7. CCPDP produces an environment receptive to experimentation.
8. CCPDP provides opportunity for outside consultants.
9. Participation is voluntary.
10. The process is a continuum--never closing, always in motion.
11. Evaluation of the process is ongoing through student work.

As Olson (1985) stated, "This cooperative focus on meaning benefits the teacher because, given a greater awareness of their own construct system, teachers can begin to exercise autonomy over their work based on a better understanding of what the work is about" (p. 306).
Instructional Theory Into Practice

Instructional Theory Into Practice (ITIP) is a systematic organization of the principles of effective instruction, identified by research and organized originally by Hunter while she was principal at University Elementary School, University of California-Los Angeles. Throughout the United States, thousands of school districts are implementing professional development programs based on the work of Hunter (Robbins & Wolfe, 1987). The Macomb Intermediate School District (Michigan) has been training hundreds of teachers from the county using the ITIP model since the early 1980s. The training program consists of five full-day workshops. The sessions are separated to allow participants to practice the instructional skills in their own school settings.

The training uses the research of Joyce and Showers (1980), which suggests that four components--presentation of theory, demonstration or modeling, practice opportunities followed by feedback, and on-site coaching--are necessary for new skills to be internalized and transferred to classroom practice.

The content of ITIP workshops includes the following:

1. Selecting objectives
2. Task analysis and diagnosis
3. Bloom's Taxonomy
4. Teaching to objectives
5. Seven-point lesson planning
6. Monitoring and adjusting instruction
7. Effective questioning strategies
8. Learning styles
9. Active participation
10. Interactive teaching methods
11. Motivation
12. Retention of content material
13. Practice theory
14. Classroom management and discipline

After each inservice, the teachers take the new skills and strategies back to their classrooms. Joyce and Showers (1983) pointed out that because "conditions of the classroom are sufficiently different from training situations, one cannot simply walk from the training sessions into the classroom with the skill completely ready for use" (p. 11).

Although many models of training contain a maintenance and evaluation component (Robbins & Wolfe, 1987), the ITIP project design at the Macomb Intermediate School District does not provide these components.

ITIP staff development provides teachers with a way to think about teaching, rather than with a set of formulas. Contextual teaching decisions may diverge somewhat from the training program. If this staff development provides teachers with a way to think about teaching (Stallings, 1987), "rather than with a set of formulas, their contextual teaching decisions may diverge somewhat from the training program. One might interpret this as a laudable
result rather than as a rationale for more coaching" (p. 63). But the premise that teachers are left to practice independently with this model is presented by Robbins and Wolfe (1987).

In defense, Hunter (1985) stated, "Models are judged on their ability to guide behavior, predict outcomes, and stimulate research, not on their being the final answer. My model was developed to accomplish all three purposes" (p. 60).

My purpose is to tell teachers what to consider before deciding what to do and, as a result, to base their decisions on sound theory rather than on folklore and fantasy. . . . This model should provide the launching pad from which creativity can soar" (Hunter, cited in Brandt, 1985, pp. 62-63).

The Michigan School Improvement Program

The Michigan School Improvement Program (M-SIP) was designed as a catalyst for providing school staffs with the skills they need to identify and address their most pressing problems. The program is based on the premise that classroom teachers can address their needs best by identifying their own priorities and programming for resolution at the school building level or a department within a building (Hough, 1987).

In 1981, Wayne State University, College of Education, received a grant from the state of Michigan to initiate the Staff Development for School Improvement (SDSI) project in the metropolitan Detroit area. The purpose of SDSI was to combine the resources, funds, and expertise of the university with local school
districts to provide building-level staff development training, with the ultimate aim of school improvement (Sparks, 1985).

The program originated in and has been evolving in Michigan's Taylor School District since 1974. According to Titsworth & Bonner (1983, pp. 120-121):

The program began in 1974 with teachers from the seven Title I elementary schools attending one-week mini-workshops at Smith Elementary School. There they observed the classroom methods employed by the teaching staff of this demonstration school. The workshops addressed the most urgent needs expressed by teachers in a needs survey. They focused on concerns such as instructional management, behavior modification, classroom management, and the more efficient teaching of reading.

At the conclusion of the 1974-75 school year, the teachers involved in the workshops expressed a need for help in their classrooms. They maintained that they had lost too much ground when they returned to their individual buildings and had found no support for implementing the new programs. Hence, plans for the second and third years of the program included half of the teachers' one-week workshops being spent in the demonstration school and the other half in their individual schools. Back at their home schools, a newly hired staff Development/School Improvement (SD/SI) facilitator and the building Learning Resource Teacher (LRT) helped them implement the new ideas they had acquired in the workshops.

The program gained momentum as the needs of a rapidly changing educational system grew. The school district hired another full-time SD/SI facilitator the next summer and secured consultants from local universities, intermediate school districts, and the Michigan Department of Education to help district personnel design the Six-Step Process for School Improvement which was piloted during the 1977-78 school year.

Collaboration is a major dynamic of the M-SIP model. Such collaboration involves the cooperative endeavors of the school, its district, the intermediate school district, the Michigan Department of Education, and the university (Hough, 1987). Hough continued by stating:
Ownership of the inservice program by both administrators and teachers is essential, and is reinforced throughout the process. The success of the Staff Development for School Improvement Program (M-SIP) can be attributed to the use of a clearly defined six-step process. (p. 1)

As presented in Guidelines for Facilitators--M-SIP (Wayne State University, undated), the focal point of the M-SIP model is staff development for school improvement, not inservice education for individual professional personnel. Its primary emphasis is on developing better programs for students by supporting teachers and administrators in their work to improve curricula, develop more effective teaching strategies, and create better learning climates. "Improving the quality of schooling . . . the quality of experiences students have under the auspices of the school and the results of those experiences . . . is its first consideration (Hough, 1987, p. 5).

Summary

The Michigan School Improvement Program (M-SIP) was also designed to provide staffs with methods and skills to improve instructional methods. Collaboration was once again found to be a major dynamic. However, the difference with this model is that if the majority of the staff is supportive of the model, the entire staff is forced to participate. The objectives of the three staff development models presented in this study are the same--improving the quality of teaching and, in turn, the quality of student learning.
Conceptual Framework

Change, teacher burnout, and staff development models are presented as a microspect in the world of teaching. The research presented even then barely scratches the surface compared to the depth of the topics. Staff development models are designed for the purpose of moving teachers to change from their status quo. Simply stated, "All human planning is planning for change--requires judgments about proper balance between investments of energy and resources" (Bennis, Benne, & Chin, 1961, p. 529).

We know that no single type of assistance is sufficient to bring about educational change. As simply put as Lewin's Force Field analysis, "In any situation, driving and restraining forces influence any change that may occur" (Guest, Hersey, & Blanchard, 1977, p. 72). It illustrates the complexity of the issue presented in this review of literature.

Unfortunately, the power of the individual teacher is sharply constrained by the system. . . . My own view, implied in the principle, is that the single school falls nicely between the depersonalized, complex, amorphous school system and the somewhat intimidated, impotent, individual teacher. The schoolhouse is a physical entity; it is occupied by real people--not just "they"--who can be seen and talked about, face to face; it has an identity characterized by roles and people who occupy them, activities, ways of behaving, perceptions, and even elements of a special language. . . . Under certain conditions, schools can be changed, perhaps even becoming quite dynamic, responsive to their needs and problems and to resources available for dealing with them. (Goodlad, 1975, pp. 173-174)

As presented in this chapter, burnout hinders change and prevents growth. Researchers have suggested criteria for
meaningful change which appear to be elements of staff development models. Therefore, do certain staff development models presented to teachers for the purpose of change actually reduce perceived feelings of burnout instead of increasing these feelings? The present study investigated three principal hypotheses:

1. There is a difference as to the mean score between the perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) for teachers who have participated in a professional development process model.

2. There is a difference between the mean score of teachers' perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) among the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process professional development process models.

3. There is a relationship between individual teachers' perceived feelings of emotional exhaustion, depersonalization, and personal accomplishment, and the length of time involved in the professional development models of Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process.
CHAPTER III

RESEARCH DESIGN AND METHODS

Research Setting

The purpose of this study was to analyze the change process with teachers in professional staff development activities. The study focused upon three particular staff development models (the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process) being applied to various school settings at the elementary levels in Macomb and Wayne counties in Michigan. This chapter contains descriptions of the design, as well as the sampling, instrumentation, and analysis consideration that were associated with the study. The chapter is divided into the following sections:

1. Description of the sample.
2. Description of instrumentation and development.
3. Analysis procedures.

The study was designed to measure change based upon responses given on the Maslach Burnout Inventory (Maslach & Jackson, 1986).

Sample

As a result of reviewing the conceptual hypotheses proposed in Chapter II, information was obtained from elementary teachers who...
had at least one year of involvement in one of three professional development process models (the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, or Michigan School Improvement Process). Elementary schools in a tri-county area were investigated to find staffs which had at least 90% participation in only one of the three identified professional development models. Schools were dismissed if they had populations identified as having participated in more than one professional development model. Through Wayne County Intermediate School District and Macomb Intermediate School District, six elementary schools were identified as having large populations which had been involved in one of the three professional development models. These six schools were the basis for the analysis of this study.

The second condition for inclusion within the study was that teachers had to have two years of teaching experience prior to involvement in one of the three professional development process models. Ninety-one surveys were sent out, and 66 teachers with two or more years of teaching completed and returned the instrument. The samples for the study were from school districts within Macomb and Wayne counties.

The research population was divided into six elementary schools: Two schools with large populations which had participated in the Collaborative Curriculum and Professional Development Process (New Baltimore and Utica), two Roseville schools which had been involved with Instructional Theory Into Practice, and
two Taylor schools which had been involved in the Michigan School Improvement Process. All classroom teachers in each of the sample elementary buildings were given instructions by the investigator regarding completion of the instrument.

Instrument Description

Given the hypotheses which were the focus of this study, two types of instruments were combined to make one instrument. The first part of the survey provided demographic information: length of time teachers had been involved in one of the three identified staff development models, length of time teaching, model of staff development in which they were involved, graduate studies, and class size.

Information obtained from the demographic data was used to (a) qualify participants under the condition of at least two years of teaching, (b) determine the professional development model in which they were involved, and (c) determine length of involvement in the model. The remaining demographic information was asked each subject in order to give answers to questions which had been raised, to solve problems which had been posed, and/or to describe what existed.

The second part of the survey was based on the Maslach Burnout Inventory (Maslach & Jackson, 1986) and focused on perceptions of burnout. However, it used a dual scale so that respondents could provide input as to their self-perceptions of burnout both prior to
involvement in a program and currently. To allow for quantitative analysis, the instrument was close-ended, using a rating scale. The complete instrument used is included as Appendix A.

**Maslach Burnout Inventory**

In determining the instrumentation for this study, the present researcher reviewed existing literature for a suitable instrument. The literature reviewed revealed that the most appropriate instrument in the area of burnout was the Maslach Burnout Inventory (MBI). After examining the limited number of instruments available to measure teacher burnout, the MBI was selected because it was the most reliable and valid. The MBI was developed to assess degree and pattern of burnout among workers in the helping professions. In 1986, Maslach and Jackson adapted their instrument to the teaching profession. (The MBI, along with a letter granting permission to use it in the present study, are included as Appendix B.)

Recent studies (Anderson & Iwanicki, 1981; Farber, 1984b; Schwab, 1983; Schwab & Iwanicki, 1982) which have contributed to a foundation of research in the area of teacher burnout, have been built upon the exploratory work of Maslach and her colleagues' research in the helping professions. In the investigations, the self-reporting MBI was used to assess the perceived level of burnout among teachers involved in professional development models.
Developed by Maslach and Jackson (1986), the MBI consists of 22 items which provide a measure of perceived burnout in terms of the following three subscales:

1. Emotional exhaustion, which measures nine items through question numbers 1, 2, 3, 6, 8, 13, 14, 16, and 20.
2. Depersonalization, which measures five items through question numbers 5, 10, 11, 15, and 22; and,
3. Personal accomplishment, which measures eight items through question numbers 4, 7, 9, 12, 17, 19, and 21.

The score for each of the subject's responses was calculated to indicate weighted mean averages to each question. Each item was rated for perceived frequency of occurrence on a 7-point scale, ranging from "never" (zero) to "every day" (6). According to Maslach and Jackson (1986), persons with high scores on the emotional exhaustion and depersonalization subscales, and low scores on the personal accomplishments subscale are considered to perceive themselves as becoming or being burned out. This instrument has been widely used in teacher burnout research (Farber, 1984a; Gold, 1984b, 1985b; Hock, 1985; Iwanicki & Schwab, 1980; Matthews et al., 1985; Murphy, 1986; Panzer, 1984; Raquepaw & deHaas, 1984).

Each subscale measured separate aspects of burnout. The emotional exhaustion subscale assessed feelings of being emotionally drained. When teachers perceive that they can no longer give of themselves as they have been able to give in the past, they are displaying feelings of emotional exhaustion.
The depersonalization subscale assessed the development of negative, cynical attitudes and feelings toward co-workers and students.

The personal accomplishment subscale measured feelings of competence and success in working with people. Personal accomplishment, or its lack, reflects the loss of perception of satisfying levels of achievement and fulfillment in the job. In short, teachers perceive themselves as no longer making a valuable contribution through their work, and evaluate themselves negatively (Gold, 1984b, p. 1010).

The current version of the MBI was developed over a period of approximately eight years. The preliminary form was administered to a sample of 605 people from a variety of health and service occupations. The occupations represented in both the preliminary and subsequent samples were ones with a high potential for burnout according to previous research (Maslach, 1978, 1982). The data from the first sample were subjected to a factor analysis which determined that 10 factors accounted for over three-fourths of the variance. A set of selection criteria was then applied to the items, yielding a reduction in the number of items from 47 to 25. Items were retained that met all of the following criteria: A factor loading greater than .40 on only one of the factors; a large range of subject responses; a relatively low percentage of subjects checking the "never" response; and a high item-total correlation.
The revised 25-item form was then administered to a new sample of 420 people in the helping occupations. It was found that the factor analysis results on this second set of data were very similar to those on the first. The two samples were combined for the factor analysis from which emerged the three subscales of the MBI: Emotional exhaustion, depersonalization, and personal achievement. This three-factor structure has been replicated in numerous studies, replicating samples of 3,014 (Maslach & Jackson, 1986, p. 7). The factors that emerged were similar to the authors' analysis.

The authors of the MBI found the following reliability coefficients for the subscales: .90 for emotional exhaustion, .79 for depersonalization, and .70 for personal accomplishment. Reliability coefficients reported were based on samples that were not used in the item selections to avoid any improper inflation of the reliability estimates. Internal consistency was estimated by Cronbach's coefficient alpha (N = 1,316). Data on test-retest reliability of the MBI have been reported as .82 for emotional exhaustion, .60 for depersonalization, and .80 for personal accomplishment. Data on test-retest reliability of the MBI have been reported for two samples. For a sample of graduate students in social welfare and administrators in a health agency (N = 53), the two test sessions were separated by an interval of four weeks. The test-retest reliability coefficients for the subscales were the following: .82 for emotional exhaustion, .60 for depersonalization, and .80 for personal accomplishment. These coefficients
range from low to moderately high. In a sample of 248 teachers, the two test sessions were separated by an interval of one year. The test-retest reliabilities for the three subscales were: .60 for emotional exhaustion, .54 for depersonalization, and .57 for personal accomplishment (Maslach & Jackson, 1986).

In terms of validity, the developers determined first convergent validity by correlated behavioral ratings made independently by a person who knew the individual well; by correlated presence of certain job characteristics that were expected to contribute to experienced burnout; and MBI scores were correlated with measures of various outcomes that had been hypothesized to be related to burnout. All three sets of correlations provided substantial evidence for the validity of the MBI and are presented in Appendix C.

The only modification to the MBI used by this researcher was the use of a dual scale measuring the same questions prior to involvement and currently, as mentioned previously.

Data Collection Procedures

Initially, contact was made with administrators of the professional development programs being investigated to explain the study and to obtain their support and cooperation. A faculty meeting was set up in each of the six identified elementary schools to distribute surveys.

To minimize the reactive effect of personal beliefs or expectations about burnout, it was important that teachers given the
survey were unaware that it was measuring burnout. For this reason, the instrument was labeled "Educators' Survey." The subjects were instructed to complete the self-administered instrument. The investigator attended individual staff meetings in each of the schools to give identical instructions to each staff. The subjects who were not attending the staff meetings were given the instrument by the principal. Each instrument included a blank envelope to enclose the completed instrument. Absentees were given self-addressed return envelopes so they could mail their individual instruments back to the investigator. The present researcher allowed one week for completed questionnaires to be returned by mail. The surveys remained confidential.

Once data were collected, they were entered in a computer using the Statistical Package for the Social Sciences PC+ statistical program (Nie, 1975). Data were translated into numerical codes to meet computer input requirements.

Operational Hypotheses

The following paragraphs summarize the statistical procedure used to investigate the study's hypotheses. Included for each hypothesis is the specific parameter investigated, the statistic which was used to test the hypothesis, and the decision's rules used.

The research focused on three different hypotheses which were formulated from combinations of dependent and independent variables
in accordance with the objectives of the study. The following are the operational versions of the research hypotheses listed in this study:

Hypothesis 1

There is a difference in the mean score between the perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) for teachers who have participated in a professional development process model.

Hypothesis 2

There is a difference between the mean score of a teacher's perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) among the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process professional development models.

Hypothesis 3

There is a relationship between individual teachers' perceived feelings of burnout (emotional exhaustion, depersonalization, and personal accomplishment) and the length of time involved in the professional development process (Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process).
Differences were thought to exist between the teachers' perceived feelings of burnout prior to involvement in a professional development model and after this involvement. In addition to responding directly to the questions on the MBI, this researcher obtained other demographic information, including (a) total years of teaching, (b) grade level presently taught, (c) current involvement in graduate classes, (d) highest level of education, and (e) number of students in the classroom. These data assisted in presenting a more complete profile of the elementary teacher that had participated in a professional development process.

Data Collection

Questionnaire instruments were given to elementary teachers in schools already identified as having at least 90% of the staff participating in one of the three identified professional development models. These instruments were distributed by the investigator at faculty meetings in each building. Absent teachers were given the same instrument by their principal, along with a stamped return envelope. A cover letter was included with each inventory. (See Appendix D.) The one page cover letter included: (a) a clear, brief statement of the purpose of the inventory; (b) an explanation of why the respondent was included in the sample and an appeal for the respondent's cooperation; (c) clear and simple directions for completion; (d) assurance that the responses would
be held in the strictest confidence; and (e) an expression of appreciation for assistance and cooperation with the study.

Data obtained from the group administered and returning the inventories were processed and analyzed through the use of the Statistical Package for the Social Sciences PC+ computer program (Nie, 1975).

Null Hypotheses

The null hypotheses for this investigation were the following:

Null Hypothesis 1

There is no difference in the mean score between the perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) for teachers who have participated in a professional development process model.

Null Hypothesis 2

There is no difference between the mean score of a teacher’s perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) among the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process professional development models.
Null Hypothesis 3

There is no relationship between individual teachers' perceived feelings of burnout (emotional exhaustion, depersonalization, and personal accomplishment) and the length of time involved in the professional development process (CCPDP, ITIP, and M-SIP).

Data Analysis

In this investigation, a t test for nonindependent samples was used for Null Hypothesis 1 with an alpha level of .05. The investigator compared the means obtained by the same sample group under two different experimental conditions.

For Hypothesis 2, an ANOVA analysis of variance was used to compare the means between three means, using an alpha level of .05 for each test. The independent variable was the particular professional development process involved, namely, the Collaborative Curriculum and Professional Development Process (CCPDP), Instructional Theory Into Practice (ITIP), or the Michigan School Improvement Process (M-SIP). The three dependent measures were the change scores obtained by subtracting the weighted averages of respondents' stated feelings from the two time periods (i.e., before and current) for each of the three areas being considered (i.e., emotional exhaustion, depersonalization, and personal accomplishments).

A Pearson Product-Moment Correlation was used to test Null Hypothesis 3, and an alpha level of .05 was used for each test. An
analysis was used to determine the relationship between the length of time involved in a professional development process and the difference between individual teachers' perceived feelings of burnout prior to involvement and current perceived feelings of burnout.

Chapter Summary

This chapter related the methodology used in the investigation of teachers' perceived feelings of burnout prior to and currently when involved in a professional development process. The sample was selected from all elementary schools in Wayne, Oakland and Macomb counties with 90% or more of their staff involved in only one identified staff development process (CCFDP, ITIP, or M-SIP).

The study was based upon data collected through a group self-directed inventory and mailed inventory. A demographic inventory and the Maslach Burnout Inventory were administered.

A t test for nonindependent samples was used for Null Hypothesis 1. An analysis of variance was used for Null Hypothesis 2, and a Pearson Product-Moment Correlation was used to test Null Hypothesis 3.

Chapter IV presents the results of the statistical tests, giving insight to the teachers who were involved in a professional development process and their perceived feelings of burnout. The results of the statistical tests contributed to the conclusions and recommendations in Chapter V.
CHAPTER IV

FINDINGS OF THE STUDY

The purpose of this chapter is to report the findings of the analyses which were conducted in order to test the three hypotheses of the present study. The objective of the study was to investigate the relationships between burnout, three professional development models, and the amount of time participants had been involved in the professional development model.

Demographic characteristics of the respondents are described in the first section of this chapter. These characteristics include number of years the participant had been teaching, grade level presently taught, educational degree, number of students in the classroom, and the staff development model(s) in which the participant was involved.

Also included in this chapter are analyses of the data with reference to the research questions, and tests of the hypotheses, including description and interpretation.

Characteristics of the Sample

The research population for this investigation consisted of teachers from schools within two of the state’s largest intermediate school districts, who were identified as having been involved for two years or longer in one of three professional development models.
process models (the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, or the Michigan School Improvement Process). The teachers from six elementary schools met the criteria for selection. In fact, over 90% of the teachers from each of the schools could and were surveyed as part of the present study. This included 91 potential respondents.

After initial contact with building administrators to explain the study and to obtain their support and cooperation, faculty meetings were established to explain and distribute the surveys. Each teacher received a letter of introduction and the instrument. They also received a pre-addressed, stamped envelope in which to return the completed questionnaire. Additional survey packets were given to principals for distribution to absent teachers. The survey was designed to be self-administered and returned by mail.

Response rates to the survey are summarized in Table 1. A total of 66 teachers out of a possible 91 teachers (73%) responded to the survey. Of these, 28 teachers or 90% of the CCPDP universe responded; 16 teachers or 64% of the ITIP universe responded; and 22 or 63% of the potential M-SIP respondents completed and returned the survey. The higher response rate of CCPDP participants may have been due to the fact that attendance at the voluntary staff meetings was higher at the schools with CCPDP.
Table 1
Type of Professional Development Model and Response Rates

<table>
<thead>
<tr>
<th></th>
<th>Potential Respondents</th>
<th>No. of Completed Surveys</th>
<th>% of Total Population</th>
<th>Response Rate of Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCPDP</td>
<td>31</td>
<td>28</td>
<td>42.4</td>
<td>90%</td>
</tr>
<tr>
<td>ITIP</td>
<td>25</td>
<td>16</td>
<td>24.2</td>
<td>64%</td>
</tr>
<tr>
<td>M-SIP</td>
<td>35</td>
<td>22</td>
<td>33.3</td>
<td>63%</td>
</tr>
<tr>
<td>Totals:</td>
<td>91</td>
<td>66</td>
<td>99.9</td>
<td>73%</td>
</tr>
</tbody>
</table>

Total Years of Teaching

Teachers were asked to state the total number of years they had been teaching. They responded simply by filling the blank space on the questionnaire next to "Total Years of Teaching." One respondent did not answer this question. The mean number of years was 16.23, with a range of 34.0. These data are shown in Table 2.
Table 2

Distribution of Responses by Number of Years in Teaching

<table>
<thead>
<tr>
<th>Number of years in teaching</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>3.0</td>
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<tr>
<td>5</td>
<td>1</td>
<td>1.5</td>
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<tr>
<td>7</td>
<td>1</td>
<td>1.5</td>
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<tr>
<td>8</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>4.6</td>
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<td>12</td>
<td>6</td>
<td>9.1</td>
</tr>
<tr>
<td>13</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>7.6</td>
</tr>
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<td>16</td>
<td>7</td>
<td>10.6</td>
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<tr>
<td>17</td>
<td>6</td>
<td>9.1</td>
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<tr>
<td>18</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>4.6</td>
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<td>21</td>
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<td>4.6</td>
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<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>34</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>36</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>66</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Grade Level

Respondents were asked to fill in the blank, indicating the grade level they were presently teaching. The range was from
preschool through grade six, with a mean of 4.7 and mode of 3. These data are shown in Table 3.

The uneven distribution was due to the fact that the largest building included in the study contained only the first through third grades.

Table 3
Distribution of Responses by Grade Level Presently Taught

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>5</td>
<td>7.6</td>
</tr>
<tr>
<td>First grade</td>
<td>7</td>
<td>10.6</td>
</tr>
<tr>
<td>Second grade</td>
<td>10</td>
<td>15.2</td>
</tr>
<tr>
<td>Third grade</td>
<td>14</td>
<td>21.2</td>
</tr>
<tr>
<td>Fourth grade</td>
<td>6</td>
<td>9.1</td>
</tr>
<tr>
<td>Fifth grade</td>
<td>5</td>
<td>7.6</td>
</tr>
<tr>
<td>Sixth grade</td>
<td>5</td>
<td>7.6</td>
</tr>
<tr>
<td>Miscellaneous*</td>
<td>13</td>
<td>19.7</td>
</tr>
</tbody>
</table>

**TOTALS:** 66 100.1

Mean: 4.72 Mode: 3.00

*Miscellaneous includes special education classrooms, splits, and physical education, art, and music.

Present Involvement in Graduate Classes

Information about respondents presently taking graduate classes also was obtained. Teachers indicated their involvement in
graduate study by circling either "yes" or "no." Six respondents did not answer the question. Thus, only 60 surveys were analyzed.

Of the teachers who answered this question, as can be seen in Table 4, over 16% indicated that they were taking graduate classes, and 74% were not. This is consistent with Table 5 which indicates that 65% of the teachers who answered the survey have already obtained a Master's degree or higher.

Table 4
Distribution of Responses by Involvement in Graduate Study

<table>
<thead>
<tr>
<th>Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>11</td>
<td>16.7</td>
</tr>
<tr>
<td>No</td>
<td>49</td>
<td>74.2</td>
</tr>
<tr>
<td>Missing</td>
<td>6</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>TOTALS:</strong></td>
<td><strong>66</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Highest Level of Education

Teachers were asked to indicate the highest level of education they had completed by filling in the blank with the possible responses, "Bachelor," "M.A.," "M.A. + 15," "Ed.S.," or "Doctorate." Sixty-five respondents completed this question, with one opting not to answer. Fifty-three percent of the respondents had a Master's degree as their highest level of education. Table 5 reflects these data.
Table 5

Highest Level of Education

<table>
<thead>
<tr>
<th>Degree</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors</td>
<td>22</td>
<td>33.3</td>
</tr>
<tr>
<td>Masters</td>
<td>35</td>
<td>53.0</td>
</tr>
<tr>
<td>Masters, plus 15 hours</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>Educational Specialist</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>Doctorate</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1.5</td>
</tr>
</tbody>
</table>

TOTALS: 66 100.0

Years of Involvement in Staff Development Projects

Teachers were asked to indicate the number of years of participation they had in each of four staff development models: CCPDP, ITIP, M-SIP, or "other." Therefore, it was possible for teachers to mark more than one in the category of "other." The years of involvement in each model of professional development was the independent variable of Hypothesis 3. The dependent variables for Hypothesis 3 were the scores reflecting change over time regarding emotional exhaustion, depersonalization, and personal accomplishment. The frequency of years of participation is summarized in Table 6. It should be noted that the CCPDP professional development model was initiated in one elementary school seven years ago and has only been adapted in Macomb County schools over the last
five years. On the other hand, the M-SIP model was developed in Wayne County in the 1970s and has not been initiated in other counties to date.

Table 6

<table>
<thead>
<tr>
<th>Years of Involvement</th>
<th>CCPDP</th>
<th>ITIP</th>
<th>M-SIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTALS:</strong></td>
<td><strong>28</strong></td>
<td><strong>16</strong></td>
<td><strong>22</strong></td>
</tr>
<tr>
<td><strong>Mean Years:</strong></td>
<td><strong>2.54</strong></td>
<td><strong>2.19</strong></td>
<td><strong>4.77</strong></td>
</tr>
</tbody>
</table>

Number of Students in the Classroom

Finally, participants were asked to indicate the number of students in their elementary classroom. Four respondents did not complete this question. The range of 91 included special education teachers with only 8 students, to physical education teachers who taught up to 99 students each day. The mean number of students was
29.5, the mode was 25, and the median 28. These data are included in Table 7.

Table 7

Number of Students in the Classroom

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>15</td>
<td>.2</td>
<td>3.0</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>24</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>25</td>
<td>10</td>
<td>15.2</td>
</tr>
<tr>
<td>26</td>
<td>8</td>
<td>12.1</td>
</tr>
<tr>
<td>27</td>
<td>7</td>
<td>10.6</td>
</tr>
<tr>
<td>28</td>
<td>8</td>
<td>12.1</td>
</tr>
<tr>
<td>29</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>30</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>31</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>32</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>33</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>34</td>
<td>2</td>
<td>3.0</td>
</tr>
<tr>
<td>35</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>36</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>43</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>51</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>57</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>65</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>99</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>6.1</td>
</tr>
</tbody>
</table>

TOTALS: 66 99.8
Test of Hypotheses

The research focused on three different hypotheses which were formulated from combinations of dependent and independent variables in accordance with the objectives of this study. The following section reports the results of the statistical tests of these hypotheses.

Hypothesis 1

The first hypothesis states that there is a difference in the mean score between the perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) for teachers who have participated in a professional development process model. The .05 alpha level was used as a basis for rejecting or failing to reject the null hypothesis.

In order to determine whether any differences existed between the respondents' feelings before and during involvement, a t test for nonindependent measures was used. The stated feelings for both time periods were analyzed as averages, weighted to account for missing responses, for each of the three dependent measures being investigated (i.e., emotional exhaustion, depersonalization, and personal accomplishment). Each item was rated for perceived frequency of occurrence on a 7-point scale, ranging from "never" to "every day."
The results of the data analysis depicted in Table 8 did not find the mean levels of 5.22 and 5.06 to be significantly different. Since the probability associated with t was greater than alpha (.05), the null hypothesis of no significant difference between means was not rejected. Therefore, the alternative hypothesis was not supported.

Null Hypothesis 1 states, "There is no difference between the mean score of a teacher's perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) among the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process professional development models.

Table 8

<table>
<thead>
<tr>
<th>Test for Difference between Mean Scores Regarding Personal Accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>Before</td>
</tr>
<tr>
<td>During</td>
</tr>
</tbody>
</table>

NOTE: An alpha level of .05 was used for all analyses.

The data analysis results depicted in Table 9 did not find the mean levels of 1.979 and 2.068 to be different. Since the probability associated with t (.471) was greater than alpha (.05), the null hypothesis of no significant difference between means was not rejected. Therefore, the alternative hypothesis was not supported.
null hypothesis of no significant difference between means was not rejected. Therefore, the alternative hypothesis was not supported.

Table 9

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t Value</th>
<th>df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>59</td>
<td>1.979</td>
<td>1.246</td>
<td>1.62</td>
<td>-.72</td>
<td>58</td>
</tr>
<tr>
<td>During</td>
<td>59</td>
<td>2.068</td>
<td>1.286</td>
<td>1.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: An alpha level of .05 was used for all analyses.

The data analysis results depicted in Table 10 did not find the mean levels of .858 and .949 to be different. Since the probability associated with t (.204) was greater than alpha (.05), the null hypothesis of no significant difference between means was not rejected. Therefore, the alternative hypothesis was not supported.

Table 10

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t Value</th>
<th>df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>59</td>
<td>.858</td>
<td>.927</td>
<td>.121</td>
<td>-1.28</td>
<td>58</td>
</tr>
<tr>
<td>During</td>
<td>59</td>
<td>.949</td>
<td>.949</td>
<td>.124</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: An alpha level of .05 was used for all analyses.
Hypothesis 2

The second hypothesis states that there is a difference between the mean score of a teacher's perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) among the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process development models. An .05 alpha level was used as a basis for rejecting or failing to reject the null hypothesis.

In order to determine whether any differences did exist between the respondents from the different professional development processes regarding changes in their stated feelings before and during involvement, a one-way analysis of variance process was used. The independent variable was the particular professional development process involved, namely the Collaborative Curriculum and Professional Development Process (CCPDP), Instructional Theory Into Practice (ITIP), or the Michigan School Improvement Process (M-SIP). The three dependent measures were the change scores obtained by subtracting the weighted averages of respondents' stated feelings from the two time periods (i.e., before and during involvement in the process) for each of the three areas considered (i.e., emotional exhaustion, depersonalization, and personal accomplishment).

Null Hypothesis 2 states there is no difference between the mean score of a teacher's perceived feelings of prior and current...
levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) among the Collaborative Curriculum and Professional Development Process, Instructional Theory Into Practice, and the Michigan School Improvement Process professional development models.

Table 11 displays the summary statistics of the change mean scores among the professional development models on the personal accomplishment portion of the MBI instrument. The greatest difference between the perceived feelings of prior and current feelings were among the CCPDP participants. This was not supported, however, as a result of testing the hypothesis for significant differences.

Table 11
Mean Scores, Standard Deviations, and Cell Sizes of the Professional Development Process and Personal Accomplishment

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCPDP</td>
<td>28</td>
<td>-.214</td>
<td>.151</td>
</tr>
<tr>
<td>ITIP</td>
<td>10</td>
<td>-.013</td>
<td>.013</td>
</tr>
<tr>
<td>M-SIP</td>
<td>21</td>
<td>-.149</td>
<td>.108</td>
</tr>
<tr>
<td>TOTALS:</td>
<td>59</td>
<td>-.157</td>
<td>.081</td>
</tr>
</tbody>
</table>

A one-way analysis of variance was used to test the hypothesis regarding differences in the professional development processes regarding changes in stated feelings of personal accomplishment before and during involvement in the process.
The data analysis results depicted in Table 12 did not show the difference between the mean squares of .150 and .396 to be different. Since the probability associated with $F (0.686)$ was greater than alpha ($0.05$), the null hypothesis of no significant difference between means was not rejected. Therefore, the research hypothesis stating that a difference would be found between the professional development processes and personal accomplishment cannot be supported by this study.

Table 12
One-Way Analysis of Variance for Professional Development Process and Personal Accomplishment

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>.150</td>
<td>.380</td>
<td>.686</td>
</tr>
<tr>
<td>Within groups</td>
<td>56</td>
<td>.396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13 displays the summary statistics of the mean change score, standard deviations, and cell sizes of the professional development processes and emotional exhaustion. The greatest difference between the teacher's perceived feelings of prior and current feelings were among the CCPDP participants. This was not supported, however, as a result of testing the hypothesis for significant differences.
Table 13
Mean Change Scores, Standard Deviations, and Cell Sizes of the Professional Development Processes and Emotional Exhaustion

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCPDP</td>
<td>28</td>
<td>.228</td>
<td>1.318</td>
</tr>
<tr>
<td>ITIP</td>
<td>10</td>
<td>.056</td>
<td>.120</td>
</tr>
<tr>
<td>M-SIP</td>
<td>21</td>
<td>-.079</td>
<td>.443</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A one-way analysis of variance was used to test the hypotheses regarding differences in the professional development processes regarding change in teachers' perceived feelings of emotional exhaustion before and during involvement in the process.

Null Hypothesis 2 states there is no difference between the mean score of a teacher's perceived feelings of prior and current levels of burnout (emotional exhaustion) among the CCPDP, ITIP, and M-SIP professional development models.

The data analysis, depicted in Table 14, did not find the mean squares of .574 and .910 to be significantly different. Thus no support was found for the alternate hypothesis. Since the probability associated with $F (.536)$ was greater than alpha (.05), the null hypothesis of no significant difference between means was not rejected. Therefore, the research hypothesis stating that a difference would be found between professional development processes and emotional exhaustion cannot be supported by this study.
Table 14
One-Way Analysis of Variance for Professional Development Process and Emotional Exhaustion

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>.574</td>
<td>.631</td>
<td>.536</td>
</tr>
<tr>
<td>Within groups</td>
<td>56</td>
<td>.910</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Maslach and Jackson (1986), persons with high scores on depersonalization perceive themselves as becoming burned out (.136 for CCPDP, M-SIP is .076, and ITIP is .000). (See Table 15.) This was not supported, however, as a result of testing the hypotheses.

Table 15 displays the summary statistics of the mean change scores among the professional development models on the depersonalization portion of the MBI. The greatest difference between the perceived feelings of prior and current feelings were among the CCPDP participants. This was not supported, however, as a result of testing the hypothesis for significant differences. Further examination of individual survey instruments showed that all the individuals from the ITIP model indicated that they perceived no difference in their feelings prior and current involvement.
Table 15
Mean Change Scores, Standard Deviations, and Cell Sizes of the Professional Development Processes and Depersonalization

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCPDP</td>
<td>28</td>
<td>.136</td>
<td>.778</td>
</tr>
<tr>
<td>ITIP</td>
<td>10</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>M-SIP</td>
<td>21</td>
<td>.076</td>
<td>.214</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis 2 states there is no difference between the mean score of a teacher's perceived feelings of prior and current levels of burnout (depersonalization) and the CCPDP, ITIP, and M-SIP professional development models.

A one-way analysis of variance was used to test the hypotheses regarding differences in the professional development process regarding changes in perceived feelings of depersonalization before and during involvement in the process.

The data analysis results depicted in Table 16 did not find the mean squares of .072 and .308 to be significantly different. Thus, no support was found for the alternate hypothesis. Since the probability associated with F (.793) was greater than alpha (.05), the null hypotheses of no significant difference between means was not rejected. Therefore, the research hypothesis that a difference would be found between professional development processes and depersonalization cannot be supported by this study.
### Table 16

**One-Way Analysis of Variance for Professional Development Process and Depersonalization**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2</td>
<td>.072</td>
<td>.233</td>
<td>.793</td>
</tr>
<tr>
<td>Within groups</td>
<td>56</td>
<td>.308</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As indicated, the results of this study for Hypothesis 2 do not reject any of the null hypotheses. No support was found to suggest that a teacher’s perceived feelings of burnout changed as a result of a particular staff development model.

**Hypothesis 3**

Null Hypothesis 3 states, "There is zero correlation between the length of time in which teachers have been involved in the professional development models and the change score obtained from the two time periods (i.e., before and current involvement) for each of the three areas of burnout. The .05 alpha level was used as a basis for rejecting or failing to reject the null hypothesis.

In order to test the above hypothesis, a Pearson Product Moment Correlation was used. It must be remembered that ANOVAs are based on the assumptions of normally and independently distributed scores and homogenous variance. Since the subjects in this
investigation were self-selected to each group and the present study was not experimental in nature, no controls were imposed. The change scores were individual perceptions rather than group comparisons. Missing data from subjects who did not respond to either the posttest or pretest, were thus excluded from the analysis of change score. Subjects in the ITIP group had precisely the same weighted average on the depersonalization scale. However, since the purpose of the study was descriptive in nature, the researcher used the ANOVA to assist the description. They should be viewed as such.

The change score was obtained by subtracting the weighted average of respondents' stated feelings from the two time periods (i.e., before and during involvement in the process) for each of the three areas considered (i.e., emotional exhaustion, depersonalization, and personal accomplishment) correlated to the length of time in which teachers had been involved in professional development models.

A Pearson Correlation coefficient was calculated to test the null hypothesis. The corresponding probability of obtaining a larger absolute value for $r$ at random is presented in Table 17 (personal accomplishment $r = -.130$, emotional exhaustion $r = .009$, and depersonalization $r = .143$). Since $r$ is negligible, using an alpha of .05, it was possible to not reject the null hypothesis that the parameter $\rho$ is equal to zero, against the alternate hypothesis that it is greater than zero.
The third hypothesis states there is a relationship between the length of time teachers have been involved in the professional development models and the change score obtained from the two time periods (i.e., prior and current involvement) from each of the three areas of burnout. The rho scores suggested that there was no presence of a direct relationship between length of time in a particular professional development process and degree of change in feelings of burnout before and during involvement in the process. Therefore, the data did not support acceptance of the hypothesis.

Table 17

Pearson Product Moment Correlation for Change in Burnout Scores Before and During Involvement in Professional Development with the Length of Time Involved in the Process

<table>
<thead>
<tr>
<th>Burnout Category</th>
<th>Pearson r</th>
<th>Critical Value of r</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal accomplishment</td>
<td>-.130</td>
<td>.22</td>
<td>Null not rejected</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>.009</td>
<td>.22</td>
<td>Null not rejected</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>.143</td>
<td>.22</td>
<td>Null not rejected</td>
</tr>
</tbody>
</table>

N = 59

NOTE: Results are based upon .05 probability for committing a Type I error - one-tailed.

* If r's are less than critical values, they are considered to be not significant (Kerlinger, 1976, p. 200). The resource for the critical value of .22 was found in Kerlinger.
Chapter Summary

This chapter presented the demographic characteristics of the respondents. It indicated the level of education, types of professional development, years of involvement, and grade level presently taught by participants.

The null hypotheses of this study state that there are no differences in the mean scores between the perceived feelings of prior and current levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment) for teachers who have participated in a professional development process model, and no difference in individually identified models. They also state there is no difference between individual teachers' perceived feelings of burnout and the length of time involved in the professional development process. These hypotheses were not rejected based upon the data of the study. The researcher was not able to find support to suggest that differences do exist in participation in a professional development model and a change in an individual teacher's perceived feelings regarding burnout after involvement.

It was also stated that there is a zero correlation between the length of (time) participation and a change in teachers' perceived feelings of burnout. None of the null hypotheses were rejected. The researcher was not able to find support in the results of this study to suggest that there is such a relationship.

Chapter V discusses these results in the context of the literature, and suggests implications of this study.
CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents a summary of the investigation of elementary teachers' self-perception of burnout while participating in professional development change processes. It includes a discussion of the findings of the study relative to the literature, and the possible implications of such results. Recommendations are made for future research.

Conclusions and Implications

Conclusions and implications can be drawn from the results of this study relative to the review of literature in Chapter II. These conclusions which were attained as a result of the investigation of data are given in the major categories expressed through the research hypotheses.

Burnout and Professional Development

The first purpose of this study was to answer the question, "Is the process of burnout (emotional exhaustion, depersonalization, personal accomplishment) modified by participation in a professional development change process?" Data were measured through the Maslach Burnout Inventory (Maslach & Jackson, 1986) with scales for teachers' perceived feelings both prior and current involvement in a professional development model (CCPDP, ITIP, and
M-SIP). The results were analyzed with a computer using the Statistical Package for the Social Sciences PC+ statistical program (Nie, 1975).

Analysis of the data was not able to find support to indicate there were differences related to any change with teachers' perceived feelings of burnout after involvement in a professional development model. Thus, it was concluded that teachers involved in a professional development model perceive no difference in their feelings of burnout during their involvement.

This study was not able to find support for the work of Lieberman (1986a) and Little (1981) who found that teachers in schools known for high rates of innovation and teamwork sustained their enthusiasm for teaching in large part by collective efforts to learn and apply new ideas with colleagues.

In working with teachers who are identified as being burned out, Tubesing and Tubesing (1982) found that burnout was reduced when these individual teachers were helped to rediscover forgotten skills and to develop new ones. The burnout literature continues to support the establishment of formal support groups in the workplace as prevention for burnout (Cherniss, 1980b, Fibkins, 1983, & Sarason, 1977). When individuals realize they are not alone, they can reach out to their colleagues for solutions (Sakharov & Farber, 1983). Also, administrative support in the daily work of teachers has significant influence in the reduction of burnout (Farber, 1984a; Gold, 1984a; Pines et al., 1981;
Raquepaw & deHaas, 1984). The implication is that the professional development models are designed around these factors.

This implies that the elements of professional development should reduce teachers' perceived feelings of burnout after or during involvement with a professional development model.

The second purpose of the study was to answer the question, "Is there a difference in the degree of prior and current levels of emotional exhaustion, depersonalization, and personal accomplishment among the three different professional development models (CCPDP, ITIP, and M-SIP)?"

In examining the five research-based principles that guide the CCPDP process, the elements of teachers' emotional exhaustion and depersonalization should be reduced, while personal accomplishment should increase. These principles, according to Snell et al. (1987) are:

1. A voluntary project team meets weekly and focuses on instructional improvement projects.
2. Instructional change is a process that is accomplished over time.
3. Teachers are resources to each other.
4. Project progress and evaluation is measured by students' work.
5. Leadership for instructional decisions is shared and facilitated by outside consultants and the building principal.
Analysis of the data was not able to find support to indicate there were differences between any of the professional development models and participants' perceived feelings of burnout after this involvement.

The third purpose of this study was to answer the question, "Is there a relationship between the length of time teachers have been involved in professional development models and their perceived feelings of burnout before and during involvement in a professional development process?"

Analysis of the data indicated there was no direct relationship. The Pearson r value of the three categories of burnout (emotional exhaustion, depersonalization, and personal accomplishment) ranged from .009 to .143, indicating a very scattered diagram or no indication of any type of relationship.

The Population Under Study

In discussing the implications of the results, it is important to note the unique aspects of the population from which the sample was drawn.

First, all participants were from buildings which had over 90% of the staff involved in a professional development model. The collegiate atmosphere, although not researched or documented in this study, may provide an environment different from other organizations, particularly with respect to initiating change. The teachers may choose to work in the environment because they enjoy
it more than other settings. It seems reasonable that a nurturing role may have already been established prior to introduction of a professional development process. Perhaps teachers who stay in an environment of change approach their work with a more enthusiastic attitude prior to involvement in a professional development model.

Second, teachers who have taught for more than two years in an elementary school were included in this study. The largest group ranged from 12 years to 21 years in teaching. In schools where the process of professional development has been established, teachers had a background of trial and error from which to draw.

Third, the population under study was a highly educated one, with 65% holding a Master's degree or higher. It is possible that educated teachers tend to be more open to change and aware of the necessity to support one another.

Finally, the data of the study support the possibility that the population did not feel "burned out" prior to involvement. The CCPDP and M-SIP models required participants to volunteer which might indicate the population was already eager and receptive for change.

The major finding of this study was that there was no evidence that teachers involved in a professional development model perceive themselves any more or less burned out than before involvement.

Based on the assumptions presented in the research in Chapter II of this study, it would appear that teachers involved in change through the identified professional development models would create
a certain amount of added stress, resulting in higher degrees of burnout. The literature also suggested that professional development models, including one with a built-in support and ownership system (such as that offered by the CCPDP) would result in a lesser degree of burnout. It should be noted that survey response rates were higher among the CCPDP collaboration group (90%), as compared to ITIP (64%), and M-SIP (63%). The collaboration group (CCPDP) was the only group of respondents which wrote additional comments on their survey sheets. These comments were positive in nature and expressed frustration at being unable to explain what they had gained from involvement in the collaborative process.

Therefore, findings imply that an in-depth examination of both the research methods presented in this study and the complexity of teachers' perceived feelings regarding their profession should be pursued. Recommendations can be discussed in two areas: Research methods and the complexities of teachers' perceived feelings during change.

With these points made, it is appropriate to add caution about extending these results to other populations. They may not apply to other school environments and other types of professional development models.

Sensitivity of the Instrument

If it is possible that the population under study was different from other groups of helping educational professionals,
then the instrument used in this study might not be an appropriate one. Also, teachers involved in a professional development process may not have been able to accurately perceive how they felt prior to involvement. Feelings may fade as time of involvement increases.

Recommendations

The measure of burnout used in this study was that of a short-term, self-reporting instrument. Therefore, the first recommendation is that data collection be of a longitudinal nature by means of observation and interviews. Because both change and burnout are viewed as a dynamic, continuous variable, rather than as a static condition, further research into how to recognize and measure these feelings during change in the field of education must also remain dynamic and continuous. It should not be assumed that a single set of answers will be found that can be applied to this process. Instead, this research should be ongoing, specific, and individualized to measure teachers' attitudes and feelings during a continuous change process. It would be useful to replicate and refine this study as a longitudinal study, using trained interviewers and observers.

A second recommendation would be to identify a larger sample of teachers who have been involved in identified professional development processes. In using the three professional development models in this study, a longer period of time would be needed to
increase membership. An increase in the number of participants would provide a statistically larger N.

This study suggested the importance of a clear process of communication. Therefore, a third recommendation would be the need to research and redefine burnout, change, and collaboration in the specific field of the educational classroom. A more definite and narrow definition of the burnout syndrome may reveal that what is now termed burnout is actually two or more phenomena that happen in the job arena of the classroom.

A final recommendation is that further research into the diagnostic process of educational change may provide more clarity and effective vehicles for determining sequential implementation strategies. More research is needed in order to know what actually happens at the classroom level as individual teachers attempt change. Once again, research carried out on a longitudinal basis is needed. As Sarason (1977) noted, "Work is not a here and now phenomenon--unrooted in a perceived past and future" (p. 21). A comprehensive understanding of the teacher burnout phenomenon must await the results of studies that investigate teachers' perceptions of their work over time.

Summary of the Study

As with any research, knowledge gained from the present study identified additional questions which should be investigated. Further study may be helpful as to the far-reaching impact teachers'
feelings and attitudes have on quality education while they are involved in the continual change process.

The study used one method of data collection through the MBI burnout survey. Investigations using trained observers and interviewers over several years should be conducted to examine the impact of professional development models on teachers' attitudes.

Research regarding the pressures placed on teachers to make changes and improvements should be continued. Does grassroots staff development improve teachers' attitudes regarding these pressures? Do teachers within the isolation of their classroom really feel the need to change? Which staff development models, if any, are suited to help teachers cope with change? Further research is recommended to include all the facets of the classroom teachers' feelings and attitudes while attempting improvements.

The quality of education lies in the competency of teachers. By the nature of the profession, teachers have little time or assistance in coping with the pressures placed on them. These pressures make teachers susceptible to cynicism, disappointment, depersonalization, and emotional exhaustion—all symptoms of the burnout syndrome.

Increasing research suggests efforts should be directed toward identifying a process for change that will reduce the negative impact of the burnout syndrome which blocks the energy and enthusiasm needed for change. Many of the professional development models have addressed these concerns.
This study investigated the relationships between burnout symptoms (emotional exhaustion, depersonalization, personal accomplishment) and three established models of the professional development process (CCPDP, ITIP, and M-SIP). The sample in this study included the total population of six elementary schools which had been identified as having involvement in one of the three professional development processes. From this population, data were gathered through the use of a self-administered survey. Of the 91 potential respondents, 66 returned surveys.

The results of the data were unable to find support indicating a relationship between the professional development models and individual teachers' perceived feelings of change as indicated by the MBI burnout portion of the survey. The variable of time involved with the professional development models consistently indicated no relationship. The results of this study suggest that teachers within the professional development groups examined have not experienced any change in their own perceived feelings of burnout.

Even though the data analysis supported all null hypotheses, further investigation is recommended. It is difficult to maintain the momentum of improvement efforts and make steady progress toward educational goals without making pressures on the teaching profession.
APPENDICES
APPENDIX A

The Survey Instrument Used in the Present Study
EDUCATORS' SURVEY

Part A

DEMOGRAPHICS

1. "Total" years of teaching.

2. Grade level presently teaching.

Yes/No 3. Are you presently taking graduate classes.


5. Participation in the following Staff Development Projects. (Please circle letter(s) that apply.)
   A. Michigan School Improvement Model (M-SIP & Taylor)
      Years of Involvement:_______________________
   B. Instructional Theory In Practice (I.T.I.P./M. Hunter)
      Years of Involvement:_______________________
   C. Grassroots - Building Collaboration Team
      Years of Involvement:_______________________
   D. None [Please only answer section "1."]
      Present" on Educators'. Survey. Do not respond to "2.) Pre-involvement".
   E. Other ________________________________
      Years of Involvement:_______________________

6. (Approximate) Number of students in your classroom.
EDUCATORS' SURVEY

Part B

Educators Survey

Please answer each question: 1) The way you presently feel
2) The way you felt prior to involvement with the "project".

How Often:

0

Never

1

A few times a year or less

2

Once or twice a month

3

A few times a month

4

Once a week

5

A few times a week

6

Every day

1.) Present Statements:

1. I feel emotionally drained from my work.
   1. ___

2. I feel emotionally drained from my work.
   2. ___

3. I feel emotionally drained from my work.
   3. ___

4. I feel emotionally drained from my work.
   4. ___

5. I feel emotionally drained from my work.
   5. ___

6. I feel emotionally drained from my work.
   6. ___

7. I feel emotionally drained from my work.
   7. ___

8. I feel emotionally drained from my work.
   8. ___

9. I feel emotionally drained from my work.
   9. ___

10. I feel emotionally drained from my work.
    10. ___

11. I feel emotionally drained from my work.
    11. ___

12. I feel emotionally drained from my work.
    12. ___

13. I feel emotionally drained from my work.
    13. ___

14. I feel emotionally drained from my work.
    14. ___

15. I feel emotionally drained from my work.
    15. ___

16. I feel emotionally drained from my work.
    16. ___

17. I feel emotionally drained from my work.
    17. ___

18. I feel emotionally drained from my work.
    18. ___

19. I feel emotionally drained from my work.
    19. ___

20. I feel emotionally drained from my work.
    20. ___

21. I feel emotionally drained from my work.
    21. ___

22. I feel emotionally drained from my work.
    22. ___

2.) Pre-Involvement Statements:

1. I feel emotionally drained from my work.
   1. ___

2. I feel emotionally drained from my work.
   2. ___

3. I feel emotionally drained from my work.
   3. ___

4. I feel emotionally drained from my work.
   4. ___

5. I feel emotionally drained from my work.
   5. ___

6. I feel emotionally drained from my work.
   6. ___

7. I feel emotionally drained from my work.
   7. ___

8. I feel emotionally drained from my work.
   8. ___

9. I feel emotionally drained from my work.
   9. ___

10. I feel emotionally drained from my work.
    10. ___

11. I feel emotionally drained from my work.
    11. ___

12. I feel emotionally drained from my work.
    12. ___

13. I feel emotionally drained from my work.
    13. ___

14. I feel emotionally drained from my work.
    14. ___

15. I feel emotionally drained from my work.
    15. ___

16. I feel emotionally drained from my work.
    16. ___

17. I feel emotionally drained from my work.
    17. ___

18. I feel emotionally drained from my work.
    18. ___

19. I feel emotionally drained from my work.
    19. ___

20. I feel emotionally drained from my work.
    20. ___

21. I feel emotionally drained from my work.
    21. ___

22. I feel emotionally drained from my work.
    22. ___

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APPENDIX B

Maslach and Jackson's MBI Instrument
The purpose of this survey is to discover how educators view their job and the people with whom they work closely.

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have *never* had this feeling, write a "0" (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

**Example:**

<table>
<thead>
<tr>
<th>HOW OFTEN:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few times a year or less</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a month or less</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few times a month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few times a week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Statement:**

I feel depressed at work.

If you *never* feel depressed at work, you would write the number "0" (zero) under the heading "HOW OFTEN." If you *rarely* feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week, but not daily) you would write a "5."
Educators' Survey

Statements:

1. I feel emotionally drained from my work.
2. I feel used up at the end of the workday.
3. I feel fatigued when I get up in the morning and have to face another day on the job.
4. I can easily understand how my students feel about things.
5. I feel I treat some students as if they were impersonal objects.
6. Working with people all day is really a strain for me.
7. I deal very effectively with the problems of my students.
8. I feel burned out from my work.
9. I feel I'm positively influencing other people's lives through my work.
10. I've become more callous toward people since I took this job.
11. I worry that this job is hardening me emotionally.
12. I feel very energetic.
13. I feel frustrated by my job.
14. I feel I'm working too hard on my job.
15. I don't really care what happens to some students.
16. Working with people directly puts too much stress on me.
17. I can easily create a relaxed atmosphere with my students.
18. I feel exhilarated after working closely with my students.
19. I have accomplished many worthwhile things in this job.
20. I feel like I'm at the end of my rope.
21. In my work, I deal with emotional problems calmly.
22. I feel students blame me for some of their problems.
Lana Callihan
Assistant Principal
Anchor Bay High School
48650 Sugarbush Road
New Baltimore, MI 48047

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APPENDIX C

Correlational Data for Convergent Validity of the MBI
Correlational Data for Convergent Validity of the MBI

External validation of personal experience (peer ratings)

Mental health workers ($n = 40$)
- **Higher Emotional Exhaustion**
  - emotionally drained by job
  - physically fatigued
- **Higher Depersonalization**
  - emotionally drained by job
  - physically fatigued
  - complaints about clients
- Police and spouses ($n = 142$)
  - **Higher Emotional Exhaustion**
    - upset and angry
    - tense or anxious
    - physically exhausted
    - complaining about problems
  - **Higher Personal Accomplishment**
    - cheerful or happy
    - work brings pride and prestige

Dimensions of the job experience

Physicians ($n = 43$)
- **Higher Emotional Exhaustion**
  - more direct contact
  - less teaching
  - less administration

Social service and mental health workers ($n = 91$)
- **Higher Emotional Exhaustion**
  - less feedback from job
  - more dealing with others
- **Higher Depersonalization**
  - less feedback from job
- **Higher Personal Accomplishment**
  - more feedback from job
  - more task significance

Personal outcomes

Nurses, social service, mental health workers ($n = 180$)
- **Higher Emotional Exhaustion**
  - less growth satisfaction
- **Higher Depersonalization**
  - less growth satisfaction
- **Higher Personal Accomplishment**
  - more growth satisfaction

---

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External validation of personal experience (peer ratings)

Social service and mental health workers (n = 91)
- higher Emotional Exhaustion
  - less knowledge of results
  - higher Depersonalization
  - less meaningfulness of work
  - less knowledge of results
- higher Personal Accomplishment
  - more meaningfulness of work
  - more knowledge of results

Physicians (n = 43)
- higher Emotional Exhaustion
  - want to get away from people

Nurses, social service, mental health workers (n = 180)
- higher Emotional Exhaustion
  - less co-worker satisfaction
- higher Depersonalization
  - less co-worker satisfaction
- higher Personal Accomplishment
  - more co-worker satisfaction

Police officers and spouses (n = 142)
- higher Emotional Exhaustion
  - gets angry at family
  - wants to be alone, not with family
  - more insomnia
  - takes a drink
  - uses medications
- higher Depersonalization
  - gets angry at family
  - sees children as emotionally distant
  - absent from family celebrations
  - fewer friends
  - officer and wife have different friends
- higher Personal Accomplishment
  - sees children as emotionally close
  - fewer tranquilizers
  - fewer medications

Note: All p values are two-tailed.

*p < .05, **p < .01, ***p < .001, † p < .10
APPENDIX D

Letter of Instruction to Study Participants
Dear Educator,

Thank you for taking the time to complete this short survey. My dissertation focuses on the Professional Development program and teachers' feelings regarding this process. Your school has been identified as having elementary teachers involved in a Staff Development program.

The information received from these surveys will be used solely for the purpose of statistics for my doctoral dissertation. The data will be used as "average group" scores by professional development associations and not identified individually. It is very important that all members of your professional teaching staff answer this survey. If you wish the results of my research, please feel free to contact me -- I will eagerly share them with you.

Please answer as honestly as possible - no name is to be used on any survey sheets.

Part A - Demographical Information

Part B - Educators' Survey

Please be sure to answer each question ON PART "B" twice.

1st: How you feel NOW.

2nd: How you remember feeling prior to your involvement with any staff development project.

Please enclose your survey in the self-addressed envelope provided and mail it directly to me.

Thanks for your help.

Lena Callihan, Principal
Anchor Bay Upper Elementary

c:Survey B


Barnes, S. (1983). *Observer training manual for the changing teacher practice study*. Austin, TX: University of Texas at Austin, Research and Development Center for Teacher Education.


George, A. A., & Rutherford, W. L. (1980). Changes in concern about the innovation related to adopter characteristics, training workshops and the use of innovation. Austin, TX: The University of Texas at Austin, Research and Development Center for Teacher Education.


Good, T. (1981). Classroom research: What we know and what we need to know. Austin, TX: The University of Texas at Austin, Research and Development Center for Teacher Education.


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Hord, S. M. (1985, January). *Collaboration or cooperation: Comparison and contrasts, dilemmas and decisions*. Paper for the Meadow Brook Symposium of Collaborative Action Research in Education, Oakland University, Rochester, MI. Austin, TX: University of Texas at Austin, Research and Development Center for Teacher Education.


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Sikorski, L. An analytical summary of knowledge about curricula implementation in U.S. schools. San Francisco: Far West Laboratory.


