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PUBLIC SCHOOL TEACHERS' DISCRETIONARY PARTICIPATION
IN CONTINUING PROFESSIONAL DEVELOPMENT:
PERCEPTIONS, INFLUENCES, AND ACTION

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Thomas W. O'Connor, Jr.

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We approve the thesis of Thomas W. O'Connor, Jr.

Donna S. Queeney
Associate Professor of Education
Thesis Advisor
Chair of Committee

William A. Henk
Professor of Education and Reading

James T. Ziegenfuss, Jr.
Professor of Management and Health Care Systems

Dennis R. Lott
Affiliate Assistant Professor of Education

Eunice N. Askov
Professor of Education
In Charge of Graduate Programs in Adult Education
ABSTRACT

The prevailing perception of teachers’ participation in continuing professional development activities fails to reflect the full scope and substance of their actual discretionary involvement in profession-related learning or the rationale underlying their discretionary participation. Teachers’ informal self-directed and collaborative continuing professional growth experiences can best be legitimized through more accurate depiction of the nature and extent of their actual discretionary participation in these professional development activities. Four research questions guided this study: (1) In what kinds of continuing professional development activities do teachers engage on a discretionary basis? (2) To what extent do teachers engage in continuing professional development activities on a discretionary basis? (3) What reasons do teachers express for choosing to participate, or not participate, in continuing professional development activities? (4) What demographic and professional characteristics are associated with teachers’ discretionary participation in professional development activities? From the membership of the Pennsylvania State Education Association (PSEA) (N=147,000), a sample of 2,450 subjects (stratified on gender, level of teaching assignment, school district size, and school district geographical location), was randomly selected to receive a self-administered questionnaire by mail. Of 942 respondents, a total of 888 met the criteria for inclusion in the research sample (i.e., possession of the Instructional II Certificate and employment as a full-time teacher in one of Pennsylvania’s public school districts during the 1998-99 school year), generating the bulk of the data for statistical analysis. For
triangulation purposes, telephone interviews also were conducted with 15 school district
and 2 PSEA officials (n=17) having responsibilities related to the provision, supervision,
or promotion of continuing professional development. Virtually all teacher respondents
reported discretionary participation in professional development activities during the
previous year. Paired-samples t-testing revealed that discretionary participation in
informal activities was significantly greater than for formal types. Over 90% of
respondents reported weekly participation in informal activities, with the highest
frequencies attributed to collaborative interactions and discussions with colleagues, and
learning how to use and apply technologies in the context of respondents’ professional
responsibilities. Teachers expressed reasons for participation more often associated with
intrinsic motivation than with extrinsic rewards. The most prevalent reasons cited by
teachers included: the opportunity to learn new skills, teaching methods, and
professionally related knowledge; the opportunity to increase their proficiency in the
application of acquired knowledge, skills, and techniques; and personal interest in the
topic of the learning opportunity. Teachers attached less importance to their reasons for
nonparticipation, which most often were associated with issues related to time,
convenience, and perceptions of program relevance. Others’ influence on teachers’
participation decisions was minimal, with only their professional peers wielding even
moderate influence. No significant differences in teachers’ discretionary participation
were attributable to gender or level of teaching assignment, but mixed results emerged for
experience, age, and formal education attainment. One-way ANOVA results revealed that
the effects of age and years of experience were significant with respect to teachers’
decreased discretionary participation in formal professional development activities and total discretionary participation, but not for their discretionary participation in informal professional development activities. The effect of formal education attainment was significant with respect to teachers’ increased discretionary participation in both informal professional development activities and total discretionary participation, but not for their discretionary participation in formal professional development activities. Interviews with school district and professional association representatives revealed that the perceptions of these officials coincided fairly well with teachers’ actual discretionary participation behaviors. The greatest discrepancies emerged with respect to officials’ moderate underestimation of teachers’ actual discretionary participation in formal, noncredit professional development activities, and severe overestimation of teachers’ utilization of distance education. In general, interviewees attributed greater importance to extrinsic rewards and financial incentives than did teachers themselves. Interviewees also overestimated the deterrent influence imposed by lack of access to learning resources, technologies, and financial incentives; they also underestimated the impact of time and inconvenience constraints and perceived program irrelevance as deterrents to discretionary participation. While recognizing the impact of teachers’ immediate supervisors as somewhat influential in the realm of teachers’ participation decisions, the interviewees overestimated the influence of high-ranking administrators, and underestimated the influence of teachers’ professional peers.
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Chapter 1

INTRODUCTION

Introduction of the Problem

Today more than ever before, public school teachers find themselves in the spotlight of an arena in which many social and political forces converge. One aspect of teachers’ professional lives on which more attention is being focused as a result of society’s unabated scrutiny of public education is their own ongoing learning and professional growth. In fact, teachers’ continuing professional development activities have become a central issue in national efforts to reform and improve public education. Although learning throughout one’s career has been a fact of life for practitioners in virtually all professions, and although much research has been devoted to various aspects of continuing professional development in some fields, not enough is known about how teachers heed the call to lifelong professional learning.

Much of the existing body of research relating to the professional development activities of teachers has focused on staff development administered as inservice programs by schools for the purpose of advancing institutional training goals (Butler, 1992; Gall & Renchler, 1985; Sparks & Loucks-Horsely, 1990), and on the participation of teachers in graduate education and formal, other-directed didactic programs (Kolk, 1990; Maley, 1996; Middlemiss, 1990; Rier, 1990; Rivera, 1991; Ropp-Jackson, 1991).
More recently, however, researchers have turned their attention to the broader spectrum of professional development activities that incorporate informal learning methods, including teachers’ collaborative and self-directed activities (Little, 1993; Renyi, 1996; Sparks, 1995; Sykes, 1996).

Progress is being made in recognizing more of the activities by which professional development may be accomplished, but much remains to be learned about the extent to which teachers participate in this expanding array of potential professional development activities. Even more important is an understanding of teachers’ participation along the full spectrum of continuing professional learning experiences in which they choose to engage on a discretionary basis. Just as important as what teachers are doing is an understanding of why they choose the participation options they do.

Individual teachers may more highly value and therefore more readily participate in professional development when it is pursued at their discretion rather than as the result of obligation or mandate. Thus, a better understanding of the nature of teachers’ discretionary participation in continuing professional development activities is needed so that these efforts may be optimally encouraged, supported, and facilitated. Such an understanding of the discretionary context of participation must include some knowledge of the reasons behind teachers’ participation or nonparticipation decisions, and of the factors that may enhance or inhibit their discretionary participation. The purpose of this research is to contribute to greater understanding of both the nature of, and reasons behind, teachers’ discretionary participation in continuing professional development activities.
The continuing professional development of public school teachers has been a central issue in school improvement and educational reform initiatives since the June 16, 1980, cover of *Time* magazine proclaimed “Help! Teacher Can’t Teach!” (Cornett, 1995). Following the publication of *A Nation at Risk* (National Commission on Excellence in Education, 1983), the concerns of an already aroused public further intensified, substantially boosting the momentum of reform initiatives in American education. Smylie and Conyers (1991) noted many social issues and public concerns are fueling current school improvement and educational reform efforts, including:

- worry over the ever-increasing amount and variety of information and skills that students are expected to master
- the lack of consensus on how to ensure that all students will attain the higher standards of knowledge acquisition and performance emerging in all subject areas
- unprecedented racial, ethnic, and linguistic diversity within public school populations
- a plethora of issues that extend beyond increased academic expectations to the social conditions students face in their communities, such as crime, violence, substance abuse, poverty, homelessness, and child abuse

These issues already have had a substantial impact on the evolution of preservice teacher training and they increasingly challenge veteran teachers to keep pace with unabating change through continuing professional development (Smylie & Conyers, 1991).
Further heightening a sense of urgency about teacher continuing professional development is the explosive growth of technology that simultaneously is expanding, enhancing, and even threatening current practices and teacher roles. Appropriate training in the utilization of new and emerging technologies, and ongoing support in their applications to learning situations are critical to teachers’ abilities to perform successfully as they strive to meet students’ needs and society’s expectations (Cordts & Lee, 1997; McLaughlin & Kenney, 1997; Quinn, 1997).

Continuing Professional Development for Teachers: Current Practices and Trends

Butler (1992) acknowledged that professional development activities for teachers take many forms, but formal staff development programs that occur in the workplace and require teachers’ participation dominate the research landscape. In the context of the present study, staff development is construed to include activities conducted within the context of teachers’ contractual obligations. Staff development activities represent a subset of the larger context of teachers’ continuing professional development activities which, irrespective of contractual obligations, may be carried out in a variety of formats, settings, and learning modes, and are intended to maintain, enhance, or expand teachers’ practical knowledge, skills, problem-solving abilities, repertoire of techniques, and/or other aspects of their professional practice.

According to Sparks and Loucks-Horsley (1990), most of the research focus historically has been on staff development involving teachers’ inservice training,
specifically on individual and group instruction that has as its goal participants’
acquisition of knowledge or skills. In most instances, the goals of such formal didactic
staff development are formulated by the school or school district and reflect institutional
needs identified by administrators or professional development committees whose
membership is drawn from the pool of local administrators and teachers. In addition to
inservice training, institutionally oriented staff development initiatives include
curriculum development activities, and direct observation and assessment of individuals’
classroom performance.

Illustrating the prevailing perspective in the literature of the field, Gall and
Renchler (1985) contend that “the most effective staff development programs are
designed for school improvement rather than for staff personal professional improvement
(p. vii).” However, if staff development for school improvement is presented as
remediation for presumed deficiencies on the part of teachers, resistance from the
participants is a common reaction, according to Purkey and Smith (1983). Concurring
with Purkey’s and Smith’s assessment, Little (1986) advocates collaborative planning
that takes advantage of collegial relationships in order to ascertain teachers’ expressed
needs for continuing professional development.

Individually guided staff development and inquiry (Sparks & Loucks-Horsley,
1990) occupy the middle ground between institutional needs and individual teachers’
needs. These forms of staff development incorporate individual and collaborative needs
assessment as well as the subsequent planning and implementation of activities or
individualized research designed to achieve goals agreed upon by both teachers and the
school entity. The introduction of individual discretion through collaborative planning presents a more palatable alternative to the “we choose, you learn” scenario that can undermine the ultimate success and effectiveness of professional staff development opportunities. It also represents an important shift toward a more internal locus of control for individual teachers.

**Teachers’ Continuing Professional Development: A Focus of Current Study and Reform Efforts**

The National Foundation for the Improvement of Education (NFIE) recently issued an exhaustive report on the status of, and trends in, teachers’ professional development (Renyi, 1996). NFIE concluded that, in addition to its own efforts, many agencies and organizations are actively engaged in pursuing research, reform, and policy initiatives directly related to the continuing professional development of public school teachers. Included among these agencies and organizations are: the National Education Association (NEA), the American Federation of Teachers (AFT), the National Association of Secondary School Principals (NASSP), the National Commission on Teaching and America’s Future (NCTAF), the U.S. Department of Education’s Office of Educational Research and Improvement (OERI), the National Board for Professional Teaching Standards (NBPTS), the National Council for Accreditation of Teacher Education (NCATE), the National Staff Development Council (NSDC), and teachers' specialized professional associations, such as the National Council of Teachers of Mathematics (NCTM) (Renyi, 1996).

Underscoring the national prominence of this issue, the Department of Education
included teachers’ career-long continuing professional development needs in its Goals 2000 legislation. While not mandating teachers’ participation in continuing professional development, the Department issued guidelines intended to ensure that the continuing professional development provided for practicing teachers would be of the highest quality. Yet despite the alarms sounded in 1980 and attention to teacher continuing professional development through the contemporary efforts of the aforementioned groups, resulting reforms in teacher professional development to date have fallen short of expectations (Cornett, 1995). Fundamental reforms to teaching promoted through a variety of forms of professional development have produced only incremental changes in teaching practices and school structures (Newman, 1998), and initiatives with the potential to drive teacher professional development, such as the formulation of national standards for student achievement, have been hampered by political and ideological disagreements (Brandt, 1995; Costa & Liebmann, 1995; Gandal, 1995; Howe, 1995). Even the national certification process developed and promoted by the NBPTS (Shapiro, 1995) has failed to generate the level of expected response from individuals and states (Rotberg, Futrell, & Lieberman, 1998).

**Teachers’ Continuing Professional Development: Promotion and Regulation**

The formal promotion of teachers’ participation in continuing professional development activities generally has taken two forms that may be likened to the proverbial “carrot and stick” approach. The “carrot” in this context is in the form of financial incentives, especially those that result in advancement within a contractual
salary schedule. Other financial supports for participation in continuing professional development activities include the direct reimbursement of costs incurred by participants and remuneration for time spent in participation.

The “stick” in this analogy represents compulsory participation in continuing professional development activities, usually formal credit-bearing courses and workshops, to assure compliance with state mandates regarding professional credentials and licensing, or to comply with local contract provisions. Both types of incentives wield considerable clout in achieving the institutional goal of participation compliance.

In Pennsylvania, financial incentives originate mainly at the local level, usually negotiated as part of the contract between the school district and the bargaining unit representing the school district’s teachers. Defraying the costs of participation addresses one of the most frequently cited deterrents to all forms of adult learning. Both remuneration for time spent in participation and reimbursement of costs incurred through participation reduce the impact of financial deterrents, but even more powerful a participation incentive is the opportunity to increase one’s earnings potential through salary advancement. The advantage of salary advancement is rooted in the resultant financial gain that compounded over time, thereby presenting the beneficiary far more than a one-time trade-off of dollars for participation.

Regulatory policies that are intended to encourage teachers’ participation in continuing professional development activities represent a politically charged “stick” within the carrot-and-stick analogy, and they may address the issue by indirect or direct means. In Pennsylvania, for example, Act 178 of 1986, and the recently enacted Act 48
of 1999, directly affected school districts, intermediate units, and vocational-technical schools by requiring that these entities include teachers in the planning, implementation, and evaluation of local continuing professional development programs (PDE, 1993; PSBA, 2000a, 2000b; PSEA, 1998a, 2000). This direct requirement affecting school entities indirectly promoted teacher participation in locally developed programs for several reasons. Because of their greater opportunity for input and influence in local needs assessment, teachers as local bargaining unit members became invested as stakeholders in their districts’ educational processes and products. Enhanced opportunities for involvement in programming decisions and shared responsibility for generating improvement in the nature and scope of local continuing professional development activities translated into a greater stake for teachers in the success of these local efforts. Teachers’ participation in locally developed and implemented continuing professional development activities therefore plays a pivotal role in the success or failure of efforts in which they are major stakeholders.

Regulatory policies also may be enacted by legislation or executive order to directly influence teachers’ participation in continuing professional development activities. A case in point involves recent efforts in the Pennsylvania legislature to codify regulations that already had been adopted by the State Board of Education. Several proposals brought to the Education Committees of both the Pennsylvania House and Senate would have mandated the completion of courses bearing college or approved provider credits, a specific number of clock hours of professional activities or learning experiences (presumably according to guidelines set by local Act 178 Committees), or
some combination thereof (PSEA, 1997a; 1997b; 1997c; 1997d; 1998b; 1998c; 1998d; 1998e; 1998f; 1999a; 1999b; 1999c). In some, but not all, of the proposals, the continuing education requirements were mandatory and binding only for those teachers certificated on June 1, 1987 or later. However, House Bill 8 of 1999, which was signed into law as Act 48 of 1999 by Governor Ridge on November 23, 1999, mandated the completion of continuing professional development every five years for all school district professional employees (PSBA, 2000a; 2000b).

Another initiative that has the potential of effectively mandating continuing education for many professionals, including experienced teachers, is competency-based certification and licensing standards. Competence generally is defined to include aptitudes, knowledge, job-related skills, interpersonal skills, professional judgement, and motivation, among other traits (Cervero et al., 1990; Nowlen, 1988). Queeney (1997) describes the traditional view of competence as “is individual-specific, comprised of three components that each practitioner of a given profession is expected to master” (p. 4). The three components include the body of knowledge specific to the profession, skills that are embodied in the application of professional knowledge in the performance of specific tasks, and performance abilities that represent the practitioner’s ability to apply both knowledge and skills in the practice setting.

The task of elaborating the specific components of professional expertise and competence across professions has been a difficult one (Stross & Harlan, 1987), but several professional associations have developed and implemented systems of certification intended to recognize competent practitioners (Queeney & English, 1994).
Defining competence in teaching includes the difficult and potentially controversial dissection of professional performance into discrete tasks, skills, and traits, a particularly difficult task when the higher order intangible characteristics of effective teachers, such as reflective practice and professional judgment, are considered. Nevertheless, the National Board for Professional Teaching Standards (NBPTS), the National Staff Development Council (NSDC), and the National Council for Accreditation of Teacher Education (NCATE) are among the national groups working with state regulatory agencies in their efforts to devise appropriate competency standards for teaching professionals (Dilworth & Imig, 1995). To date nationally, nearly 2,000 teachers have completed the rigorous National Board Certification process and efforts to develop discipline-specific and competency-based national certifications continue (NBPTS, 1999).

Taking a different approach, the National Association of Secondary School Principals, in *Breaking Ranks: Changing an American Institution* (1996), advanced an ideal vision of schools as learning communities not just for students but for teachers, administrators, educational specialists, and other school employees. If contemporary educational practices are to be valid, relevant to current and future needs, and guided by competent and caring teachers, Lammel (1997) contends that such idealized learning communities must support and foster the intellectual and professional development of practicing teachers. Dilworth and Imig (1995) advocate the adoption by society of a more holistic view of lifelong teacher education in this pursuit.
Continuing Professional Development: Perspectives and Implications from Participation Research

Any understanding of teachers’ participation in continuing professional development must begin with an awareness of the broader context of participation in adult learning and continuing education. Although a more detailed examination of participation research appears in the next chapter, several points merit initial consideration here.

As a phenomenon, few topics in adult and continuing education have received more attention than participation (Courtney, 1992). For years, adult educators, program planners, and policy makers have sought answers to questions about who engages in adult learning activities and who does not (Aslanian & Brickell, 1980; Boshier, 1973; Carp, Peterson, & Roelfs, 1974; Houle, 1961; Johnstone & Rivera, 1965;), reasons adults do or do not participate (Boshier, 1971; Cross, 1981), and the ways in which adults participate in learning experiences (Penland, 1977; Tough, 1979). Theoretical models have been proposed to describe and explain adults’ participation behaviors, particularly those of professionals engaged in career-related learning (Cookson, 1986; Cross, 1981; Darkenwald & Merriam, 1982; Grotelueschen & Caulley, 1977; Henry & Basile, 1994; Rubenson, 1978; Thompson, 1992; Yang, Blunt, & Butler, 1994). Participation models continue to be tested and refined in the search for effective and parsimonious methods of predicting and explaining this complex phenomenon (Becker & Gibson, 1998).

There is a general assumption that people fare better in learning endeavors when they are intrinsically motivated to learn rather than extrinsically compelled to do so. However, intrinsic motivation does not necessarily mean that participation in learning
endeavors is voluntary, according to Stalker (1993). Despite the concept’s appeal and enduring popularity, Stalker argues that voluntary participation is, in fact, a myth and suggests that the learning opportunities for many adults actually may be under the control and authority of others.

Courtney (1992) also questioned the traditional view of voluntary participation, noting that much of adult education, while free from legal compulsion, is occupational in nature and carries the subtle compulsion of conformance to job demands or staying competitive with working peers. Courtney (1992) noted that strong but subtle pressure to participate in continuing education is widespread for most workers, not just teachers, and can be traced to their occupational demands. He suggested that only those learning efforts undertaken at one’s discretion in his or her own leisure hours may be voluntary in the truest sense, maintaining that, “...the decision to participate, to learn or not to learn...ought to be seen...more as a choice among competing activities (Courtney, 1992; p. 119).”

Fifer (1989) documented additional influences on teachers’ perceptions of barriers to their participation in continuing professional education. Physiological needs, personal and family obligations, and occupational demands compete for any available leisure time (Szalai, 1972; Courtney, 1992), leaving little room in many teachers’ lives for Courtney’s conceptualization of voluntary participation. The dearth of leisure time is compounded for many teachers by their additional commitment of time to leading, supervising, or coaching co-curricular and extra-curricular activities. While these activities may be neither directly nor indirectly related to their professional assignments, they nonetheless
affect the time teachers have available to participate in continuing professional
development activities.

Singiser (1989) noted that as teachers’ length of service increases, their
participation in formal continuing professional development activities appears to
decrease. In Pennsylvania, almost three-quarters of public school teachers have accrued
ten or more years of teaching experience according to the most recent (1993-94) National
Center for Education Statistics (NCES) Schools and Staffing Survey (NCES, 1995). It
may be that these older and more experienced teachers are participants in forms of
professional development that differ from those of their younger and less experienced
colleagues for whom credits earned in formal continuing education are needed to secure
permanent teaching certification. However, the apparent lack of data that might describe
various forms of teachers’ professional development activities across differing experience
levels renders such a conclusion speculative at best.

There is a risk that teachers who do not appear to participate in ongoing
profession-related learning may find their professional reputations in jeopardy. Rockhill
(1983) observed that evolving cultural values have cast a moralistic pall over adults who
do not appear to be actively and visibly involved in formal adult education programs, to
the extent that nonparticipants are judged to be non-learners. For teachers, whose
professional ranks are subject to the scrutiny of critics seeking to identify and remove
inadequate practitioners (Cervero, 1988), the risk in being labeled non-learners due to
infrequent participation in continuing professional development activities is both real and
professionally hazardous.
The decision to engage in professional development activities, particularly formal continuing education, appears not to be truly voluntary (Courtney, 1992; Stalker, 1993). Even soft forms of compulsion, such as the previously mentioned financial incentives that are contingent on the completion of continuing education or in-service programs, are common and widely accepted. The truly voluntary quality of participation is further eroded when the sway of significant others is considered. According to Babchuk and Courtney (1995), such personal influence operates at two levels, with primary influentials (family members, friends, and co-workers) posited to influence participation decisions more than secondary influentials (which include employers, educators, community figures, and others).

The Concept of Discretionary Participation in Teachers’ Continuing Professional Development

The concept of discretionary participation is employed in this research, recognizing an individual’s internal locus of control in decision-making, but conceding that elements of the decision or learning context may make participation something less than truly voluntary. For teachers engaging in continuing professional development, participation may occur in response to legislative or administrative mandate, subtle external compulsions to do so, or it may be voluntary. The term discretionary describes participation that results from: an individual’s consideration of participation options and potential consequences of participation; the individual’s perceived expectations of others and their own self-expectations; and a valuing of potential consequences, including implications of conformance to the desires or expectations of self and others.
This conceptualization of discretionary participation contains elements of constructs introduced by Fishbein and Ajzen (1975) and further elaborated by Triandis (1975, 1977, 1980) and Fishbein (1980) in the development of a Behavioral Intention Model of participation behavior described more fully in chapter two as the Theory of Reasoned Action (TRA). The TRA constructs subjective personal norm (SPN), subjective social norm (SSN), and Social Role (SR) represent a person’s valuing of his/her own and others’ opinions and beliefs, and as well as elements of the person’s perceptions about his/her social role. Even though implicit or explicit pressures, however subtle, may figure in the individual’s decision process, discretionary participation is fundamentally a matter of personal choice (Singiser, 1989) and in the case of teachers’ participation, not mandated by legislation, policy, or other regulation.

Discretionary participation can be exercised throughout the continuum of adult learning formats and modalities, engaging the participant in formal, sponsored programs that culminate in the awarding of graduate credit, or in nonsponsored, informal learning experiences accomplished through other-directed, self-directed, or collaborative methods and techniques. Regardless of the form and format of the learning activity, if the participant’s involvement is freely chosen and not mandatory or compelled, the participation is discretionary. Teachers’ participation in professional development activities that are part of their contractual obligations (e.g., regularly scheduled inservice programs and other staff development activities at which their attendance or participation is required, or activities that meet state or local mandates for obtaining Pennsylvania Instructional Level II [permanent] Certification), cannot be considered discretionary
participation. For all practical purposes, participation under these and similar circumstances is not discretionary but compulsory, since failure to participate could place the teacher’s professional employment or career in jeopardy. A discussion of the theoretical underpinnings of this conceptualization of discretionary participation is included in Chapter Two.

The Predominant Research Focus in Continuing Professional Development Participation

A common thread running through most descriptive and explanatory research on adult education participation has been the focus on subjects’ engagement (or lack thereof) in formal adult education programs (Aslanian & Brickell, 1980; Becker & Gibson, 1998; Boshier, 1971, 1973; Carp, Peterson, & Roelfs, 1974; Cookson, 1986; Cross, 1981; Darkenwald & Merriam, 1982; Grotelueschen & Caulley, 1977; Henry & Basile, 1994; Houle, 1961; Johnstone & Rivera, 1965; Rubenson, 1978; Thompson, 1992; Yang, Blunt, & Butler, 1994;).

Participation research has largely overlooked informal adult learning experiences. The greater relative ease and expediency of measuring formal education participation by counting credits, hours, or episodes of engagement is evident, as is the difficulty inherent in discerning, quantifying, or evaluating other personal, informal, independent, and self-directed learning endeavors. This writer contends that the exclusion of all but formal educational activities yields an incomplete depiction of teachers’ participation in profession-related learning endeavors.
Comprehensive statistics on participation in continuing professional development appear not to have been collected on a national basis, and extrapolation from existing multiple sources cannot yield specific details about the learning activities of practitioners in most professions (Hunt, 1992). Of those studies that have dealt specifically with participation in continuing professional development, as opposed to other forms of adult education, the focus has almost always been restricted to formal, sponsored continuing professional education programs (Becker & Gibson, 1998; Grotelueschen & Caulley, 1977; Henry & Basile, 1994; Thompson, 1992; Yang, Blunt, & Butler, 1994;).

Although participation studies sometimes acknowledge practitioners’ potential to engage in continuing professional development activities that utilize informal, nondidactic learning formats or rely on self-directed or collaborative learning modalities, the actual investigative focus seldom is on participation in anything but formal learning activities. Singiser’s (1989) attempt to validate a model of participation provides a case in point of an opportunity missed. Attempting to test the ISSTAL model proposed by Smith (1980) to explain and describe social participation and applied by Cookson (1986) to adult education participation, Singiser focused on teachers’ discretionary participation in continuing professional development activities. This research did yield results interpreted as lending support to some aspects of the ISSTAL model, but the conclusions are diminished by the same shortcoming that plagues most studies of participation in continuing professional development. By limiting the research focus to only formal sponsored programs and other-directed continuing professional development activities, Singiser followed the tendency of many researchers to exclude other modes of learning,
reflecting Cropley’s (1989; p. 146) observation in society of “...a strong tendency for formal, school-like learning to be regarded as the only really worthwhile form of learning.”

On the other hand, Houle (1980) noted that practitioners in virtually all professional occupations develop highly individualized strategies that enable them to fulfill the learning needs that arise in their unique practice contexts. He further observed that only a portion of those strategies include formal educational programs, and that time and resource constraints, among other conditions, impose limitations on professional practitioners that make informal, self-monitored, and self-directed modes of learning critically important to their continuing development.

For almost three decades, starting with Tough’s (1971) study of adult learning projects, research has revealed a growing frequency of continuing professional development accomplished through individual self-directed learning that rarely culminates in the awarding of formal credit. Among others, Cropley (1989) noted that organized adult education accounts for only approximately 20% of all adult learning. Cervero & Yang (1994) also discerned that there is considerably more to participation in continuing professional development than has been reflected in research to date, and called for more research that examines participation through modes of learning that extend beyond formal sponsored continuing professional development programs.

Regardless of the model cited to describe participation, the methods utilized by subjects in their learning endeavors, or the format of activities scrutinized in participation studies, continuing professional education is assumed to include an unspecified variety of
learning modes and educational content that contribute to the development of increased knowledge, competence, and performance in individual practitioners and across professional groups (Hunt, 1992), even though the preponderance of research designs is limited in focus to formal, sponsored, didactic educational activities. Ascertaining the reasons for this predominant research focus is not the intended purpose of the current research. Instead, this study is intended to shift from the prevailing focus to explore and describe the extent of public school teachers’ discretionary participation in the full range of continuing professional development activities

**Participation Formats and Learning Modalities in Continuing Professional Development**

As noted earlier, the parameters of Singiser’s (1989) research limited continuing professional development activities of his subjects to formal activities planned and directed by others, reflecting a research orientation common in studies of continuing professional development participation. Yet as Houle (1980) and others have noted, practitioners’ informal, self-monitored, and self-directed modes of learning are critically important to their continuing development. In fact, self-directed learning is a natural result for professionals when opportunities, incentives, and the right conditions coincide (Rockhill, 1983).

Cropley (1989) observed that organized adult education accounts for approximately 20% of the adult learning that includes continuing professional development, and Tough’s (1971) study of adult learning projects revealed a growing frequency of continuing professional development endeavors accomplished through
individual self-directed learning that rarely culminates in the awarding of formal credit.

Reflecting the emerging view that there is considerably more to continuing professional development than has been reflected in research to date, Cervero & Yang (1994) called for more research to examine participation in continuing professional development through modes of learning that extend beyond formal sponsored programs. If participation research is to achieve a more accurate and complete understanding of the factors that influence practitioners’ discretionary participation in continuing professional development, and specifically, teachers’ participation in continuing professional development, the full range of their learning activities and modalities must be considered.

Recent research involving teachers’ continuing professional development has addressed a broad range of issues but has not provided a clear view of the big picture. A dearth of information on the nature and extent of teachers’ actual discretionary participation continuing professional development continues. Several qualitative studies of informal and collegial professional development, for example, utilized small numbers of research subjects, thereby preventing the generalization of research findings to the larger population of public school teachers (Ellefson, 1994; Hoover, 1996; Potter, 1991; Stipp, 1997). Other studies have revealed teachers’ ambivalence about involvement in continuing professional development opportunities, and yielded inconclusive results on why some proactively engage in professional development and others resist involvement (Howser, 1989; Kennedy, 1996; Potter, 1991; Sipe, 1995).

Some qualitative studies confirm that teachers engage in, and frequently prefer, informal, self-directed, and collaborative learning experiences in their pursuit of
continuing professional development, but these studies provide limited information about if, how, or to what extent teachers actually implement those preferences (Corabi, 1995; Ellefson, 1994; Shafer, 1994; Sipe, 1995). Other research suggests that teachers, especially veteran teachers, prefer professional growth experiences grounded in collegial interactions and mentoring, but these studies do not address the extent to which teachers in general engage in such collaborative professional development experiences (Doran, 1994; Howser, 1989; Hoyo, 1996; Kennedy, 1996; Kovalcik, 1992; Potts, 1996). The present study is intended to address these information deficits.

Challenging and Clarifying Professional Development Conceptualizations for Educational Reform

Teachers’ continuing professional development is a central issue in current education reform initiatives. All professions are obligated to both their member practitioners and the clientele served to strive to ensure that members are highly qualified and effective throughout their active service; public school teachers are no less subject to this societal expectation than members of any other profession. Therefore, the promotion and facilitation of learning that ensures professional competence and proficiency is surely in the public interest.

Ironically, there are no assurances that the worthy goals of competence, proficiency, and expertise can be attained by forcing teachers to participate in continuing professional development, particularly when the participation that counts is limited to engagement in formal, sponsored, graduate education and staff development programs.
Such a narrow conceptualization of continuing professional development provides an incomplete and potentially inaccurate basis on which to understand what works, and what does not work, for teachers committed to the pursuit of professional knowledge and expertise. By avoiding, ignoring, or denying the value and utility of other forms of professional learning, educational leaders and policy makers risk adopting a distorted perspective that may impede the formulation of fair and effective policies.

In the quest to fully understand participation behavior within this context, adult education faces three important research challenges:

1. more complete elaboration of the kinds of learning activities through which practitioners accomplish continuing professional development

2. accurate depiction of the extent to which continuing professional development is undertaken by practitioners on a truly discretionary basis

3. the factors that contribute to discretionary participation as well as to choices resulting in nonparticipation.

What is needed is a better theoretical understanding of professionals’ discretionary participation in continuing professional development, and of the factors that contribute to it.

As is the case for any profession, efforts to explain, predict, and facilitate teachers’ participation in continuing professional development are best served by pursuing a multidimensional approach (Blais, Duquette, & Painchaud, 1989). Singiser’s (1989) attempt to test the ISSTAL model’s validity with teachers’ discretionary participation in continuing professional development activities represents an important
first step toward understanding and prediction, but expanded conceptualization of teachers’ discretionary participation in continuing professional development should add to that understanding. A more complete and accurate depiction of teachers’ discretionary participation in continuing professional development activities requires inclusion of the breadth of formats and learning modalities through which teachers pursue enhancement of their knowledge, skills, abilities, techniques, and critical understanding of their profession, and do so under conditions that are free from external mandates or inducements.

In order to achieve a more complete and accurate understanding of the factors that influence practitioners’ discretionary participation in continuing professional development, the full range of practitioners’ learning activities and learning modalities must be considered, with attention given as well to the reasons practitioners choose these learning activities and methods. The current study focuses on one group of professional practitioners: public school teachers. Its purpose is to determine the nature and extent of their actual discretionary participation in nonmandatory continuing professional development activities. Specific emphasis is given to the time subjects devote to discretionary participation in both formal and informal continuing professional development activities. It includes those efforts that utilize self-directed, other-directed, and collaborative learning modalities, and also includes reasons expressed by teachers for participation or nonparticipation.

It should be noted that teachers’ participation in staff development programs was not intended to be part of this research. Teachers’ participation in these continuing
professional development activities is compulsory when the activities are conducted as staff development programs; there is only one factor influencing the decision to participate in staff development as defined in this research, and that is contractual obligation. Since nonparticipation in staff development programs is not an option, consideration of the influence of various factors on participation or nonparticipation intentions, decisions, or actual behaviors would yield little insight about professional growth that is truly discretionary.

In addition, the quality of staff development programs as they currently are conducted was not the focus of this research, nor does this research call into question the effectiveness of past, current, or suggested staff development practices. Staff development literature will be addressed in the next chapter in terms of its importance to the larger context of continuing professional development, but teachers’ participation in staff development was not addressed by the research methodology because it lacks the needed discretionary quality that gives meaning to teachers’ preferences, decisions, and actual behaviors related to lifelong professional learning.

**Statement of the Problem**

In order to better understand public school teachers’ continuing professional development needs and practices, more comprehensive empirical information is needed about the professional growth and learning activities in which teachers engage on a discretionary basis. To this end, consideration must be given to a broader conceptualization of the kinds of learning activities through which teachers pursue
professional knowledge, competence, and proficiency. In addition, a more accurate picture is needed of the extent to which teachers actually participate, on a discretionary basis, in continuing professional development activities spanning all activity formats and learning modalities. Finally, a better understanding is needed of the reasons teachers choose to participate, or choose not to participate, in continuing professional development activities.

Problem: The prevailing perception of teachers’ participation in continuing professional development activity fails to reflect the full scope and substance of their actual discretionary involvement in profession-related learning or the rationale underlying their discretionary participation.

Purpose of the Study

The purpose of this research was to determine the nature of, extent of, and reasons for public school teachers’ actual engagement in discretionary participation in nonmandatory self-directed, other-directed, and collaborative continuing professional development activities in order to better understand their motivations, and provide a basis for developing structures to support, facilitate, and promote their learning endeavors.

Four research questions guided the study:

1. In what kinds of continuing professional development activities do teachers engage on a discretionary basis?
2. To what extent do teachers engage in continuing professional development activities on a discretionary basis?
3. What reasons do teachers express for choosing to participate, or for choosing not to participate, in continuing professional development activities?

4. What demographic and professional characteristics are associated with teachers’ discretionary participation in continuing professional development?

**Significance of the Study**

The National Commission on Teaching and America's Future (NCTAF), after a two-year study, cited several widespread problems plaguing efforts to improve teaching and learning in the nation's public schools. In its report, *What Matters Most: Teaching for America's Future* (NCTAF, 1997), the commission, noting a dearth of meaningful continuing professional development for teachers and a lack of recognition of teacher knowledge and skills. The commission also advocated sweeping systemic changes for the profession and education, embodied in five major recommendations with continuing professional development implications that will first require an accurate assessment and understanding of what teachers currently do in their pursuit of professional growth and learning. This research is intended to contribute to such an assessment and understanding by focusing on teachers’ discretionary continuing professional development participation from the teachers’ perspective.

This study’s specific importance lies in its examination of and attempt to better understand teachers’ discretionary participation in continuing professional development, i.e., participation that is free from contractual obligation or compulsion by statute or
regulation, and that is entirely at the discretion of the participants. Clarification of the nature and extent of teachers’ discretionary participation in continuing professional development activities has practical and pragmatic implications for educational reform initiatives being conducted in the public interest, and would be useful to policy makers and continuing education program planners, promoters, and facilitators. From this research, program planners, promoters, and facilitators also should gain insights regarding teachers’ self-perceived needs through the research subjects’ expressed reasons for participation (or nonparticipation) in professional growth activities, and insights into the practices and structures that facilitate teachers’ discretionary participation in continuing professional development. Insights gained from this study should contribute to more effective promotion of discretionary participation in continuing professional development activities, and contribute to the development of a model for consultation among schools, professional organizations, government and regulatory agencies, and continuing professional development program providers aimed at supporting, facilitating, and promoting teachers’ ongoing learning for competence and proficiency.

This research also has important implications for theoretical models of adult education participation. Numerous theorists have devised models incorporating complex conditions, characteristics, and forces in an attempt to describe, explain, predict, and understand the participation of adults in learning endeavors (Cookson, 1986; Cross, 1981; Darkenwald & Merriam, 1982; Grotelueschen & Caulley, 1977; Miller, 1967; Rubenson, 1978), but no single model of participation has earned broad acceptance and support within the field of adult education, although there is consensus on the multivariate
complexity and interactiveness of factors that influence participation intention and behavior. The first and most basic problem with each of the models is that the conceptualization of participation has been limited to participation in formal sponsored offerings. By more accurately elucidating the true nature and extent of teachers’ discretionary participation in continuing professional development activities, this research should advance the prospects for further empirical testing of participation models heretofore proposed, and is intended to lead to a better understanding of participation in adult education in general.

More complete information about, and understanding of, the dynamic factors, conditions, and forces affecting participation are important if adult educators are to serve their clientele effectively and appropriately. Through enlightened understanding of those factors and conditions that can facilitate participation, adult and continuing educators should be able to plan, package, and deliver programs that better accommodate the lifestyles and learning needs of adults, and to develop and enhance access to resources that facilitate informal professional development for this specific population, public school teachers.

In addition to this study’s contribution to the body of knowledge and theory in adult education, it has important and immediate practical implications. Legitimation of teachers’ self-directed and collaborative continuing professional development practices can be best supported through a more accurate depiction of the nature and extent of their current discretionary continuing professional development activities. Donald Cameron, Executive Director of the National Education Association, has called for a redefinition of
the concept of continuing professional development for teachers (Cameron, 1996), noting that the prevailing approach to centrally planned formal staff development workshops and training sessions seldom offers teachers experiences relevant to their actual classroom work. Cameron advocates a less prescriptive system that supports acceptance of teachers as professionals who possess a valuable body of knowledge, skills, and abilities, and that offers them individual and building-level access to resources that can facilitate their efforts to meet their ongoing professional development needs.

The recent national survey conducted by NFIE (Renyi, 1996) clearly shows that teachers view their own professional growth needs as being driven by their students’ needs, and they also believe that their personal investment in continuing professional development activities will pay dividends in terms of benefits to students (Hirsch, 1997). The current study represents an effort to capture what teachers actually do as individuals and as collaborating professionals in their pursuit of student success, and to ascertain the extent to which formal, prescribed, continuing professional development activities are their vehicles of choice.

This research is especially timely for Pennsylvania’s public school teachers in a political sense because of recent actions by the State Board of Education, the state Legislature, and the Independent Regulatory Review Commission (IRRC). The Pennsylvania State Board of Education, on September 11, 1997, gave final approval to Chapter 49 certification regulations, the continuing education provisions of which were enacted by both the House and Senate through Act 48 of 1999, and signed into law on November 23, 1999, by Governor Ridge. While the details for implementing this new
law continue to be resolved, it effectively eliminates so-called permanent certification after July 1, 2000 (PSBA, 2000a, 2000b; PSEA, 2000).

The regulations specify the following options, or some combination thereof, to meet the requirements: six semester credits of college course work; six credits of Pennsylvania Department of Education-approved course work, such as Intermediate Unit inservice credits; or 180 clock hours of PDE-approved activities and experiences (PSEA, 2000). Local Professional Development Committees (whose existence was mandated on January 1, 1989, with the implementation of Act 178 and continues under Act 48) will have responsibility to determine the professional development activity and experience alternatives in their districts (Detwiler, 1997; PSBA, 2000a, 2000b; PSEA, 1998a, 1998b, 2000). By elucidating the current discretionary continuing professional development practices in which teachers are actively engaged, this research will challenge local Professional Development Committees to recognize the breadth of teachers’ professional development experiences.

Pennsylvania lawmakers considering legislation to regulate the continuing professional development of teachers should find the results of this study both informative and useful. In the past three years alone, the House Education Committee considered legislation and amendments such as House Bill 159 (HB 159) in 1997 (PSEA, 1997b; 1997c; 1997d), House Bill 2100 (HB 2100) in 1998 (PSEA, 1998c; 1998d), and House Bill 8 (HB 8) in 1999 (PSEA, 1999a; 1999b; 1999c). During the same three year period, Senate Bill 1388 (SB1388) in 1998 (PSEA, 1998f) and amendments proposed to House Bill 601 (HB 601) of 1998 (PSEA, 1998e; 1998f) also received consideration, but
failed to pass a Senate vote (PSEA, 1998f).

As originally proposed, HB 159 would have required that educators take twelve hours of college credit, twelve PDE-approved credits, such as IU inservice credits, 360 clock hours of PDE-approved activities and experiences, or a combination of these requirements every five years (PSEA, 1997b). According to the Pennsylvania State Education Association, these requirements would have imposed twice the continuing education requirements for Pennsylvania’s public school teacher compared to teachers in any other state in the nation, and far more than any other profession requiring a bachelor’s degree for entry (PSEA, 1997b; 1997c). HB 159 also would have required that the hours be in the teacher’s assignment and certification area, effectively limiting the scope of growth that could count toward the continuing professional education requirement. HB 8, ultimately passed both the Pennsylvania House and Senate and signed into law as Act 48 of 1999, imposes less stringent continuing professional education requirements than those proposed under HB 159 of 1997.

For those charged with local implementation of Act 48, insight into the actual discretionary continuing professional development activities of teachers could be useful and instructive, and may be useful as well to those who would craft future legislative proposals intended to promote positive educational reforms and improve professional accountability.
**Definition of Terms**

Several concepts and terms require specific definition regarding their use in this study, as set forth below.

1. **Adult education**: “a process whereby persons whose major social roles are characteristic of adult status undertake systematic and sustained learning activities for the purpose of bringing about changes in knowledge, attitudes, values, or skills,” (Darkenwald & Merriam, 1982, p. 9).

2. **Collaborative learning**: learning that involves two or more people whose expertise and abilities are shared in a mutually supportive relationship characterized by the free expression and testing of ideas, skills, and behaviors.

3. **Continuing professional development**: activities carried out in a variety of formats, settings, and learning modes, and intended to maintain, enhance, or expand practitioners’ practical knowledge, skills, problem-solving abilities, repertoire of techniques, or other aspects of professional practice. For the purposes of this study, continuing professional development represents the larger context that includes continuing professional education but is distinguished from staff development, which is conducted in the context of teachers’ contractual obligations.

4. **Continuing professional education**: the career-long education of professional practitioners that commences following their completion of the field’s preservice preparatory curriculum and focuses on individual practitioners’ ongoing acquisition of knowledge, skills, performance abilities, and their assimilation of
information and concepts on which high quality daily performance is contingent (Queeney, 1996; Stern & Queeney, 1992).

5. **Discretionary participation**: the act of personal involvement throughout the duration of a continuing professional development program, activity, project, or initiative that is the result of individual choice.

6. **Distance learning**: formal and informal approaches to learning in which a majority of instruction or self-instruction occurs while the learner and the learning resources or educator/facilitator are at a distance from one another (Verduin & Clark, 1991).

7. **Educational Specialist**: in Pennsylvania, the form of state certification of professional persons whose primary responsibility is to render educational services other than classroom teaching (e.g., school counselors, school nurses, school psychologists, etc.) (PDE, 1999a; 1999b).

8. **Locally developed programs**: programs offered through the auspices of a local school, school district, consortium of schools or districts, or Intermediate Unit(s) intended to address the professional development needs of teachers.

9. **Locus of control**: a personality construct pertaining to an individual’s perception of the amount of personal control he/she has (internal locus of control) or does not have (external locus of control) over the events in his/her life.

10. **Other-directed learning**: a didactic process in which planning, development, and implementation of learning activities or projects is directed and/or conducted by a third-party or outside facilitator.
11. **Permanent certification**: in Pennsylvania, the credential (Instructional II Certificate) issued to teachers contingent upon the completion of three years of satisfactory service in Pennsylvania on the Provisional (Instructional I) certificate, completion of a teacher induction program, and the accumulation of at least 24 credit hours of post-baccalaureate education earned at a state approved baccalaureate degree granting institution and/or through in-service programs approved by the Secretary of Education (PDE, 1999a; 1999c; 1999d).

12. **Profession**: for the purposes of this research, the term used broadly in reference to a variety of fields of practice (including teaching) that are systematic disciplines defined by a discrete body of knowledge and specific competencies acquired through specialized education or training, which is required for entry into practice (Queeney, 1996; Queeney & English, 1994).

13. **Provisional certification**: in Pennsylvania, the credential (Instructional I Certificate) issued to persons who have completed an approved teacher education program with at least a baccalaureate degree, endorsement of the preparing institution, and satisfactory performance on the Pennsylvania Teacher Certification test (PDE, 1999a; 1999c).

14. **Public School**: a school entity comprised of grades K - 12 or any combination thereof and recognized by the Commonwealth of Pennsylvania as belonging to a public school system.

15. **Self-directed learning**: “an approach where learners are motivated to assume personal responsibility and collaborative control of the cognitive (self-monitoring)
and contextual (self-management) processes in constructing and confirming meaningful and worthwhile learning outcomes” (Garrison, 1997, p. 18).

16. **Staff development**: activities conducted in the context of teachers’ contractual obligations utilizing a variety of formats, settings, and learning modes, and intended to maintain, enhance, or expand the teacher’s practical knowledge, skills, problem-solving abilities, repertoire of techniques, or other aspects of professional practice; for the purposes of this study, staff development activities are distinguished from continuing professional development activities, which are not part of teachers’ contractual obligations.

17. **Subjective personal normative factor**: (SPN) represents a person’s own beliefs about whether or not she/he should participate [in continuing learning] as well as her/his motivation for complying with this belief.

18. **Subjective social normative factor**: (SSN) represents what a person thinks others important to her/him think about her/his participation [in continuing learning].

**Assumptions of the Study**

The proposed research is predicated upon several assumptions:

1. The sample will be comprised of a sufficient number and diversity of subjects to warrant generalization of results to the population of public school teachers in Pennsylvania.

2. Valid continuing professional development for teachers may be accomplished
through activities that utilize a variety of formal and informal formats utilizing other-directed, self-directed, and collaborative learning modalities.

3. Teachers are capable of accurately identifying activities among their own learning experiences that constitute continuing professional development activities.

4. Teachers are capable of accurately reporting their participation in continuing professional development activities regardless of the activity format or learning modality principally utilized in its accomplishment.

**Limitations of the Study**

1. The potential exists for inaccuracy in self-reporting instrumentation used in data collection.

2. Possible sampling bias is an inherent risk in survey research.

3. The tendency of survey respondents to answer questions through a filter of social desirability necessitates the use of caution in the interpretation of research findings.

4. Differences may exist between survey respondents and nonrespondents with respect to their participation behaviors, their participation reasons and influences, and their demographic and professional characteristics.

**Summary**

The purpose of this research is to determine the nature of, extent of, and reasons
for public school teachers’ actual engagement in discretionary participation in nonmandatory self-directed, other-directed, and collaborative continuing professional development activities. Specific emphasis is devoted to ascertaining the kinds of continuing professional development activities in which teachers engage on a discretionary basis, the extent to which teachers engage in continuing professional development activities on a discretionary basis, the reasons teachers express for choosing to participate or not to participate in continuing professional development activities, and any demographic or professional characteristics that are associated with teachers’ discretionary participation in continuing professional development.

The literature reviewed in Chapter 2 will address: professions and their role in society; the purpose, rationale, growth, and institutionalization of continuing professional development including credentialing and mandated continuing professional education; the learning modes of professionals and their participation in continuing professional development; participation research in adult education, including characteristics of participants; and theoretical models of participation in adult education.

Chapter 3 focuses on research procedures, including the population studied, sampling methods used to select subjects, and data collection and analysis. Chapter 4 presents the research findings, with Chapter 5 devoted to an overview and discussion of this research effort.
Chapter 2

REVIEW OF LITERATURE

Introduction

This chapter begins with an overview of the prevailing views of professions, models of continuing professional education, and the conceptualization of continuing professional development. The learning modes and modalities utilized by professionals are considered next, leading to an examination of the continuing professional development of teachers. A summary of adult education participation research and theoretical models proposed to describe and predict participation concludes the chapter, culminating with a discussion of the discretionary nature of participation as it underlies the current examination of teachers’ discretionary participation in continuing professional development activities.

An Overview of Professions and Professionals: Taxonomy and Classification

Professions and professionals fulfill significant roles in modern society, but the status of professions and the privileges accorded to their members are rooted in history. Over time, society granted members of professions significant autonomy, remuneration, elevated social status, special privileges, and powers of self-regulation in recognition of
the esoteric body of knowledge, technical skills, and special abilities that form the foundation on which professionals practice (Cervero, 1988; Houle, 1980). Through nearly three-quarters of a century, differing views of professional occupations have evolved (Barber, 1963; Cervero, 1988; Flexner, 1915; Friedson, 1986; Houle, 1980; Parsons, 1949; Vollmer & Mills, 1966), with Cervero (1988, 1989) recently estimating that approximately 27% of the American work force is comprised of individuals regarded as professionals.

Debate continues, however, over the taxonomic classification of professions, including whether teaching should be classified as a profession (Abdal-Haqq, 1992; Burbules & Densmore, 1991; Goodlad (1990); Pratte & Rury, 1991). Teaching differs from generally accepted professions such as law and medicine in its lack of autonomy, self-governance, self-regulation, and control of member licensing and training (Burbules & Densmore, 1991; Pratte & Rury, 1991), and some question whether or not teaching is characterized by a well-defined, specialized, and highly developed theoretical knowledge base (Goodlad, 1990). Others argue that the nature of the teaching-learning transaction, its context in schools, and the regulatory influence reserved by governmental and quasi-governmental agencies, all combine to make comparisons of teaching to other traditionally-defined professional occupations impractical and unrealistic (Burbules & Densmore, 1991; Pratte & Rury, 1991).

The rhetoric surrounding the definition of professions appears not to be subsiding. Livneh’s (1986) operational definition of a professional practitioner as one possessing a license or certification, specialized training, and a graduate or baccalaureate degree
specific to a professional field arguably is a sufficient basis for the acceptance of teachers as professionals, but the oversimplification inherent in the United States Department of Commerce general classification of professional occupations as those for which entry is contingent upon the possession postsecondary academic degree (Hunt, 1992) begs the question of what purpose is served by debating definitions. In an effort to move beyond definitions to more substantive issues relevant to the continuing education of professionals, Queeney and English (1994) referred to professions broadly, describing them as fields of practice that are systematic disciplines, each defined by a discrete body of knowledge and specific competencies acquired through specialized education or training, which is required for entry into practice.

**Continuing Professional Development: Philosophical Views and Associated Models**

Concomitant with the evolution of elevated social status, economic position, and self-regulatory autonomy for professions has been the general expectation that professionals will maintain high standards of performance in their practice (Cervero, 1988; 1989; Knox & McLeish, 1989). The lifelong study expected of professionals by society (Houle, 1980, p. 7) as a means of achieving and maintaining the highest character and competence has taken on new meaning, reflected in the prevailing view that continuing education of professionals is essential for maintaining competence and optimizing performance, as well as for assuring consumer protection and professional accountability (Brockett & LeGrand, 1992; Hunt, 1992; Kerka, 1994; Little, 1993; Queeney & English, 1994; Queeney, Smutz, & Shuman, 1990).
Interpretations of the nature of professional work and the issues of professional competence, proficiency, and accountability have given rise to three main philosophical lenses through which the continuing development of professionals is viewed, and models for its implementation are loosely associated with these philosophies. The functionalist view of professions portrays practitioners’ work as clear-cut, unambiguous, and oriented toward well-defined desired outcomes that are achievable through the application of scientific knowledge. In the functionalist perspective, the primary role of continuing professional education is reflected in the Update Model (Nowlen, 1988). The Update Model is rooted in the provision of the latest information to practitioners so they can stay abreast of developments in their field. The model’s rationale is that improvements in practitioners’ knowledge, competence, and performance, will enable them to correct deficiencies in their practice, and as a consequence, provide their clientele with the highest quality service possible (Cervero, 1988; 1989; Schon, 1983). Consensus on both the goals of professional practice and continuing education is presumed in the update model, which prevails as the predominant arrangement through which continuing education occurs in many professions, including teaching (Butler, 1992). Although innovative practices may be found, the prevailing format is the information update in which research-generated knowledge is delivered to consuming practitioners through formal, structured, didactic short courses, seminars, and workshops intended to remediate deficits in knowledge, skills, or performance.

In the critical view of professions, practice situations are seen as dialectical or transactional in nature. Problems and goals are seldom well-defined, and desired
outcomes and the means to achieve them are less definite than in the functionalist view (Cervero, 1989). Unlike the functionalist perspective, which is served well by the update model’s reactive problem-solving emphasis, the critical viewpoint assumes a more proactive problem-setting orientation necessitated by the nature of what Schon (1987) described as indeterminate zones due to the spontaneity comprising the daily practice contexts of many professional occupations. Constantly confronted with new and different situations for which there are no standard operating procedures, professional practitioners must first construct meaning and frames of reference before considering any strategies through which to address the problems themselves. According to Nowlen (1988), the purpose of continuing professional development in the critical view is to help practitioners understand for themselves the technical, ethical, and political aspects of their practice, regardless of any disagreements about the goals of practice, the means to achieve them, the content of continuing professional education, who should determine program content, and how continuing education should be used.

The critical viewpoint tolerates a lack of clearly defined and articulated goals of professional practice as well as a lack of consensus on a codified system through which knowledge is applied in daily practice contexts, a distinct departure from the static or traditional taxonomic approach to the identification of professional occupations underlying the contention that teaching is not a profession (Abdal-Haqq, 1992). Consistent with Schon’s depiction of indeterminate zones of practice, teachers perform daily in settings characterized by spontaneity. Their practice context demands more problem-posing than problem-solving, and calls for reflective practice that integrates a
constant awareness of their assumptions, feelings, knowledge, and expertise (knowing-in-action) with ongoing reflection about situations at hand and how they may be addressed or reshaped (reflection-in-action) (Kottkamp, 1990; Peters, 1991; Schon, 1987). Reflection-on-action, or off-line reflection (Kottkamp, 1990), occurs following practice situations and calls into play a professional’s capacity for self-evaluation and self-improvement. Reflection-in-action, or online reflection (Kottkamp, 1990), knowing-in-action, reflection-on-action, and the individual practitioner’s repertoire of images, understandings, and actions acquired through practice all combine to produce the artistry of professionals’ performance in daily contexts (Schon, 1987), performance that is characteristic of reflective practitioners (Imel, 1992; Rose, 1992).

The third philosophical orientation is termed the conflict view (Cervero, 1988). The key concept underlying the conflict viewpoint is the socioeconomic power of professional groups and practitioners that creates an adversarial environment dedicated to the dismantling of economic and social differences. The conflict view is characterized by a liberatory activism through which adherents oppose what they believe to be an elitist status of professions and professional practitioners. By acknowledging their elite status, proponents of the conflict view, like functionalists, recognize that professionals possess technical expertise and theoretical knowledge. Unlike the functional view, however, the goal of adherents to the conflict view is to work to wrest power, expertise, and knowledge away from the control of professional practitioners in pursuit of a more egalitarian society, or at least to achieve a state in which power, knowledge, and resources are shared with clients. This is not a predominant viewpoint that currently
influences the nature and direction of continuing education of professional practitioners (Cervero, 1988).

Models of continuing professional development that have been proposed may fall strictly within one philosophical orientation, e.g., update programs in the functionalist tradition, or they may span these orientations. The *Competence Model* of continuing professional education attempts to assess, create, maintain, enhance, and assure the professional competencies upon which reflective practice is contingent, and while the ubiquitous update model can address a portion of the needs of professionals, its functions are subsumed by the competence model. According to Scanlan (1985), the acquisition, maintenance, and assurance of competence has evolved as a dominant theme of continuing professional education, and the growing utilization of the competence model can be attributed to its broader focus on the additional aspects of professional role, human relations, and intellectual development needs of practitioners.

The national school reform agenda currently driving the development of teaching and learning standards, performance evaluations, certification and relicensure programs reflects the competence model orientation to continuing professional development (Dilworth & Imig, 1995), and the resulting proliferation of competency-based certification and licensing standards has the potential to effectively mandate continuing education for many professionals, including experienced teachers. Central to the reform agenda is the difficult and controversial task of specifying what constitutes expertise and competence required not only in a teacher, but in any professional practitioner. Competence in this sense is defined to include aptitudes, knowledge, job-related skills,
interpersonal skills, professional judgment, attitudes, and motivation, among other traits (Cervero et al., 1990; Nelson, 1988; Nowlen, 1988). The National Board for Professional Teaching Standards (NBPTS), the National Staff Development Council (NSDC), and the National Council for Accreditation of Teacher Education (NCATE), are among the national boards and organizations working with state regulatory agencies in their efforts to devise appropriate competency standards for teaching professionals (Dilworth & Imig, 1995).

It is worth noting that remedies proposed to address concerns about professional competence increasingly incorporate formal continuing education, which is expected to develop and aid in monitoring professional competence. The assumption underlying this trend is that the relative quality of practitioners’ performance is a direct consequence of the knowledge they possess, and that the knowledge requisite for competence and acceptable performance can be delivered through continuing education. Knox and McLeish (1989), distinguishing between proficiency and performance, noted that while improvement of professional performance is an aim of continuing professional education, the link between education and performance has not been firmly established, and participation in continuing professional education by itself cannot assure competence.

The Performance Model of continuing professional education subsumes both the update and competence approaches described above, utilizing a triage approach to the assessment of individual and organizational development needs and focusing not only on job functions and competencies, but on anything in the interaction of social and personal influences that may influence practitioners’ individual or ensemble performance
(Nowlen, 1988). Evaluations, assessments, and other diagnostic activities first are utilized to identify and prioritize learning needs, and based upon this important information, collaborative goal-setting and corresponding learning agendas are developed. A multitude of structures and processes, both formal and informal, as well as individual and group contexts, are utilized in the pursuit of triage-derived agendas, depending on the patterns that emerge within organizations, affected individuals, and available resources. The performance model requires the commitment of significant organizational resources, and its potential for discerning unique professional development needs inevitably requires more innovative and individualized strategies for goal achievement than either the update or competence frameworks.

Despite its complicated nature and the perception that competence and update model programs may be implemented and administered more expediently, successful examples of performance models exist. The *Practice-Audit Model* (Lindsay, Queeney, & Smutz, 1981), produced through the Continuing Professional Development Project of the Pennsylvania State University with funding support from the W.K. Kellogg Foundation between 1980 and 1985, is a seven-stage model for formal collaboration among representatives of professional organizations, higher education institutions, and employer organizations. The goal of the model is the development and implementation of systematic practice-oriented continuing professional education programs that are developed in response to practitioner needs identified through comprehensive practice-based assessments, and it illustrates the concrete application of Nowlen’s (1988) performance model conceptualization of the triage approach to continuing professional
while the model represents a very complex but workable collaboration among participating organizations that permits the translation of knowledge, traits, skills, abilities, and competency standards into programs designed to produce proficiency within performance, it is both time-consuming and very labor-intensive. Its adoption and implementation is best suited to fields in which practitioners are represented by strongly autonomous, self-regulating professional organizations that can effectively elaborate the knowledge, skills, abilities, competencies, and performance standards upon which members’ practice audits are based.

Smutz and Queeney (1990) proposed a seven-step Self-Managed Development Process utilizing collaborative relationships among higher education, professional organizations, and employers and set within an organizational support infrastructure that brings together learning resources and individuals for optimum career-long development. In the self-managed professional development program, individual practitioners gain access to critical external expertise to support knowledgeable decision-making about their optimum utilization of the full range of available learning and evaluation resources. Chosen learning activities may range from informal and independent to formal and other-dependent, but the locus of control resides with the individual practitioner and preserves an independent, self-directed learning orientation to professional development. In addition, this approach addresses growing concerns about the need for current and future practitioners to have greater access to professional development counseling (Hunt, 1992). Most professional practitioners are neither reluctant nor unmotivated to engage in group or individual self-assessment, but they frequently are not equipped to conduct insightful,
objective, and accurate self-assessments of their learning needs and may lack consultative support that incorporates an audit of their professional practice (Smutz & Queeney, 1990).

The Ways That Professionals Learn

Extensive social and economic changes have pushed the concept of lifelong learning into the spotlight of popular culture in recent years, but lifelong learning has always been a fact of life for professionals. Ultimately, all adult learning is rooted in individual interest and initiative (Courtney, 1992), and individual professionals are expected to assume responsibility for maintaining and enhancing their proficiencies, and for adopting and integrating new skills and methods into their practice (Nowlen, 1987). The ongoing challenge for continuing educators has been, and will continue to be, gaining a better understanding of the dynamics of professional learning and how best to facilitate practitioners’ participation in learning experiences (Cervero & Yang, 1994).

Professionals as Learners

Professionals, as a group, represent a select population of adult learners who exhibit significant initiative and take responsibility for creative and relevant learning on a voluntary basis. Professionals learn through a variety of self-directed, collaborative, and other-directed experiences, including distance learning methods (Cervero, 1998; 1989). Their professional development encompasses learning through such diverse activities as
reading books and journals, engaging in discussions with professional colleagues, taking part in both formal and nonformal educational programs, and experiencing the problems posed by the context of daily practice (Apps, 1989; Cervero, 1988; Courtney, 1992; Knox & McLeish, 1989; McLaughlin, 1991). However, not all practitioners share the same perspective on their professional responsibilities, nor do they pursue their perceived continuing education needs in the same way. Studying teachers as learners, Fullan, Bennett, and Rolheiser-Bennett (1990) concluded that teachers, along with other professional educators, are distinguished by four specific characteristics: possession of a technical repertoire of practices and skills that lend confidence to their own learning, reflective practices that enhance the clarity and meaning of the learning they apply to practice, a disposition to research that encourages exploration and investigation in their pursuit of improved practice, and openness to collaboration with professional colleagues.

Jarvis (1987) maintains that learning occurs not just through formal education but also can be accomplished through a broad range of nonformal and informal formats, incorporating a variety of learning modalities, including self-directed learning activities and distance learning. Self-directed learning, other-directed learning, and collaborative learning are discussed in the next section, with distance learning and distance education addressed later in the chapter, followed by an overview of emerging perspectives on alternative ways of knowing and learning, including special issues related to women’s ways of learning and knowing.
Learning Modalities in Continuing Professional Development

The learning modalities preferred by practitioners as they engage in continuing professional development activities are distinguished by the structural aspects of learning situations, and encompass the formats, methods, and techniques of instruction preferred and chosen by practitioners in their ongoing pursuit of professional growth. McLaughlin (1991) identified the three chief learning modalities prominent in the literature on professional learning as self-directed learning, other-directed learning, and collaborative learning.

Self-directed learning

Self-directed learning is among the most researched topics in adult education (Brockett & Hiemstra, 1991; Brookfield, 1984, 1986, 1993; Caffarella, 1993; Caffarella & O’Donnell, 1991; Candy, 1991; Confessore & Long, 1992; Garrison, 1992, 1997; Long, 1989; Long & Confessore, 1992; Long, and others, 1992; 1993, 1994). Candy (1991) observed that the adult education field’s preoccupation with self-directed learning had effectively elevated to cult status this concept that nonetheless continues to be dogged by ambiguity, partly because of the many definitions and terms used to describe it (Oddi, 1987). Tough’s (1979) classic definition of an adult learning project, a sustained (at least seven cumulative hours), deliberate effort intended by the learner to result in the acquisition of certain knowledge, skills, or attitudes, provides one example of learning that is self-directed. Another frequently used example of self-directed learning is
independent study, through which an individual learner utilizes preplanned resources and activities (Wiley, 1983) while exercising a great deal of personal control over the choice of learning objectives, pacing and other time elements, and assessment of learning outcomes (Candy, 1991). Considered by many to be largely a process of self-instruction, Oddi (1987) contends that a more accurate conception of self-directed learning must apply to those whose efforts at planning and obtaining resources for their own learning endeavors are less skilled, and also should emphasize persistence over time rather than isolated episodes of such learning efforts.

Self-directed learning is characterized by the learner’s choices in controlling the direction, structure, and physical context of the experience. Garrison (1992) noted that self-directed learning hinges on self-determination exerted through the learner’s decision-making and presumes that the learner possesses both the ability and the opportunity to make appropriate choices that permit the learner to retain control and responsibility for learning while relying on others for support and information. Such abilities, opportunities, and capacity for sound judgement are presumed to be present in professionals.

Human resource developers in business and industry have recognized advantages of self-directed learning to workplace teams as they grapple with unprecedented technological change. The advantages of employee self-directed learning to organizations, including organizations that employ professionals, are significant. First, learners manage the learning process, including what is to be learned, when it is to be learned, and how it is to be learned. Second, the timing of learning can coincide with the
need to learn. Third, as a rule self-directed learners are relatively more motivated. Fourth, learning costs to employing organizations frequently are much lower than other approaches. And fifth, learning that ultimately is accomplished is more relevant, efficient, and effective (Guglielmino & Guglielmino, 1994, p 45).

Throughout the history of professions, practitioners’ own self-directed learning has been at the core of their ongoing development (Knox & McLeish, 1989). Among adults capable of planning, implementing, and evaluating their own learning initiatives independent of others’ assistance, professionals in particular are prepared to do so. However, they may choose to consult with and directly involve others at any point, for any purpose or duration (Caffarella & Caffarella, 1986). Fox (1991) reported that most physicians trace the bulk of their professional growth to self-directed learning activities, most frequently citing reading. Confessore and Confessore (1994) reported similar findings for Canadian physicians and American architects, noting that practitioners in both professions reported engaging in self-directed learning initiatives unrelated to formal continuing professional development programs and in direct response to their own perceptions of personal professional growth needs. Comparable results for members of the teaching profession are not available, judging from a lack of published empirical research along this line of inquiry. Qualitative studies do confirm teachers’ utilization of and preferences for self-directed learning in their professional development efforts (Corabi, 1995; Ellefson, 1994; Shaffer, 1994; Sipe, 1995).

As a group, professionals fare favorably among the cohort of adult learners with respect to the important dimensions of self-directed learning noted by Caffarella (1993)
and Candy (1991), such as personal autonomy, internal locus of control in formal learning settings, and self-initiative and self-management in informal learning environments. According to McLaughlin’s (1991) analysis of professionals’ learning activities, while they may readily utilize other learning modalities, their primary and preferred learning modality is through self-directed initiatives, due primarily to the desired level of control they are able to exert over their own learning processes. Together, these findings suggest that a desire to retain control over the decisions about, and directions of, their individual professional development is important to professionals in general. Since learner control issues lie at the heart of much of what has been written about self-directed learning, it should not come as a surprise that self-directed learning is the modality preferred by professional practitioners, for whom control of their own learning and development is so important.

Most writers and researchers addressing the topic of self-directed learning have emphasized its management by the learners themselves. While acknowledging the potential for assistance from others at any point in the learning experience, these conceptualizations imply that self-directed learning largely is a matter of learning in isolation, a notion inconsistent with reality. Kerka (1994) disputed the perception that self-direction in learning means learning in isolation, noting that despite greater-than-ever access to learning resources through new technologies, self-directed individuals continue to utilize informal social networks to accomplish personal learning goals. Garrison (1997) also noted that self-directed learning increasingly demands collaboration with facilitators who are competent in
bringing learners and appropriate resources together, a strategy formalized in the self-managed professional development model (Smutz & Queeney, 1989) described earlier in this chapter.

Pilling-Cormick (1997) described a model of self-directed learning applied within formal higher education settings that is based on varying degrees of control in the interaction between an educator and students, and is characterized by three components: the control factor (i.e., extent to which students are able to direct their own learning), interaction between the educator and student, and influences on the interaction between the educator and student (i.e., four factors, including social constraints, environmental characteristics, student characteristics, and educator characteristics).

Attesting to the diversity in conceptualizations of self-directed learning, Bonham (1989) identified three variations: other-directed self-directed learning, marked by the learner’s choice to involve a facilitator who assists determining the content and processes to be used and in providing the structure desired by the learner; self-directed learning in the instructional mode, in which the learner desires a degree of externally applied structure but participates fully in all other aspects of planning and implementing the learning experience; and self-directed in the inquiry mode, described by McLaughlin (1991) as learning pursued “in a holistic manner (p. 36).”

Kerka (1994) addressed several other issues central to ongoing debates within the field’s discourse about self-directed learning. One commonly held assumption she challenged, the belief that all adults are naturally self-directed, can be traced to Malcolm Knowles’ (1983) influential ideas about andragogy. Despite some researchers’
presumption that adults increasingly prefer self-direction as they mature, there is evidence that such tendencies in fact differ considerably across the population of adult learners, including those in corporate learning settings (Richey, 1991), in which it was the method least preferred by more mature subjects. Usher and Johnston (1988) found that professional educators undertaking formal courses tended to prefer direction by others, at least initially. Brookfield (1986; 1993) noted that self-direction varies not only among adults but also within adults, affected at least to some degree by their access to learning resources as well as the relative autonomy they may maintain in different aspects of their lives. Self-direction is best represented as a continuum with respect to personal responsibility for learning (Brockett & Hiemstra, 1991), control of the learning process, and preferences for learning setting characteristics (Candy, 1991).

Garrison (1997) recently proposed a model of self-directed learning that integrates the contextual, cognitive, and motivational dimensions of the learner’s experience. Defining self-directed learning as “an approach where learners are motivated to assume personal responsibility and collaborative control of the cognitive (self-monitoring) and contextual (self-management) processes in constructing and confirming meaningful and worthwhile learning outcomes (p. 18),” Garrison adopts a collaborative constructionist perspective applicable to the full spectrum of settings in which self-directed learning occurs, and addresses concerns about the quality and value of learning that is self-directed (Caffarella & O’Donnell, 1991). In a collaborative constructionist view, the individual accepts responsibility for constructing personal meaning for the learning experience while including the participation of others to confirm that the knowledge
gained is worthwhile and of value.

Garrison’s model highlights three overlapping dimensions. The first dimension, self-management, addresses issues of task control typically associated with most definitions of self-directed learning: the establishment of learning goals, choice of learning activities, management of learning resources, and securing support for the learning effort. Self-management is practiced in formal educational contexts (in which students are neither independent nor isolated and collaborate with a teacher to construct meaningful knowledge) as well as in informal environments. In the context of the informal self-directed learning endeavors of professionals, the self-management dimension presents the learner with the task of reconciling social norms, professional obligations, regulatory and licensing issues, and responsibilities to the clientele as goal-directed actions are undertaken.

Garrison’s second dimension of self-directed learning, self-monitoring, addresses “the process whereby the learner takes responsibility for the construction of personal meaning (i.e., integrating new ideas and concepts with previous knowledge)(1997, p. 24).” Proper self-monitoring requires both external and internal feedback. Internal cues may lack validity and accuracy, so external sources (e.g., mentors, professional colleagues) are essential to self-monitoring. Garrison links effective self-monitoring with external structural and management aspects of learning tasks and activities, further evidence that self-directed learning does not occur in isolation and complete independence, although “…it is very difficult for learners to assume responsibility for their own learning without feeling they have some control over the educational
transaction (1997, p. 25).”

Motivation, the third dimension in Garrison’s model, influences self-directed learning in two phases. “Entering motivation establishes commitment to a particular goal and the intent to act. Task motivation is the tendency to focus on and persist in learning activities and goals (1997, p 26-27).” The concepts of expectancy and valence, addressed later in this chapter in relation to Rubenson’s (1978) participation model, play a critical role in the self-directed learner’s entering motivation. Situational contingencies and personal commitment (Thompson, 1992) propel decisions that are less than truly voluntary (Stalker, 1993) but reflect the learner’s perceived value of learning goals and estimated prospects for eventual success judged at the time learning is initiated. Task motivation, on the other hand, invokes volition (diligence) and persistence, each influenced by the broader context of educational and social responsibilities in which the learning takes place.

Garrison’s model is singularly significant because in its comprehensive explanation of the self-directed learning experience (as personal as that may be for individual learners), it is still descriptive of and applicable to a full range of formal educational contexts and informal learning experiences. The model’s constructivist perspective also lends itself well to emerging technologies and resources available to self-directed learners. For example, the World Wide Web’s multimedia/hypermedia environment facilitates self-directed learning in the constructivist perspective by providing ample access to knowledge and the opportunity to reflect on the experiences involved in acquiring that knowledge in a context where the learner maintains a high
degree of autonomy while carrying the burden of personal responsibility, motivation, and self-discipline (Kerka, 1996).

Other-directed learning

The second learning modality, other-directed learning, is the most familiar to adults in general. The didactic nature of other-directed learning is its most recognizable characteristic. Most often sponsored and conducted by an institution, organization, or formal group, other-directed learning is characterized by planning, development, and implementation by a third-party or outside facilitator (Scanlan, 1982). McLaughlin & Donaldson (1991), in their analysis of continuing medical education offerings over a four-year period, found that the bulk of continuing education programs cited were other-directed. Other-directed programs are the easiest to design, sponsor, implement, and evaluate, but practitioner participants often view them unfavorably and resist them, further reducing their perceived debatable effectiveness (Abrahamson, 1984; Fox, Mazmanian, & Putnam, 1989; Smedley, 1987). An exception noted by McLaughlin (1991) involved younger professionals. Their preference for other-directed learning activities may be reminiscent of the more pedagogical nature of pre-professional education and training, and appears consistent with Knowles (1980) suggestion that as adults mature, they tend to prefer informal, self-directed learning experiences over other-directed or more structured formats. The current study focuses on teachers whose length of service and experience might be expected to predispose them to prefer learning
activities less similar to those preferred by their younger counterparts.

Wislock & Flannery (1994), in contrasting the philosophical differences between pedagogical and andragogical learning transactions in adult education literature, identified in pedagogical transactions the characteristic frequently associated with other-directed learning: an instructor is assumed to be the knowledge and process expert charged with the responsibility to direct learning of students. In contrast, andragogical transactions are founded on the assumption that adult students bring significant levels of prior experience and practical expertise to learning situations. While pedagogical transactions may acknowledge learners’ experiences for their cognitive worth (i.e., their impact on the way learners process, organize, store, and retrieve information), andragogical transactions are valued in a humanistic sense, emphasizing learners’ interactions with their environment, resonating themes more familiar in self-directed learning and in the third learning modality of professionals to be considered next, collaborative learning.

**Collaborative learning**

Collaborative learning involves two or more people whose expertise and abilities are shared in a mutually supportive relationship characterized by the free expression and testing of ideas, skills, and behaviors (McLaughlin, 1991). Cranton (1996) distinguishes collaborative learning from two other forms of learning undertaken by individuals within group contexts, cooperative learning and transformative learning. Each form of group learning is characterized by specific characteristics, learning goals, and educator roles, as
well as by the kind of knowledge sought, but it is often difficult to draw clear distinctions between the forms.

Cooperative group learning is a structured process requiring that participants work together on a task, sharing information and expertise while encouraging and supporting group members. Fairly structured in its format, the content and process of cooperative learning usually is controlled by an educator/facilitator who functions as the group’s leader, planning the exercises, activities, experiences, or problems in which group members engage, as well as monitoring and managing time and resources for the group (Cranton, 1996; Parma City School District, 1993). Progress of the group and evaluation of its learning outcomes are controlled by the leader, and the emphasis ultimately is on cooperation for task completion.

According to Cranton, cooperative learning is “appropriate for group acquisition of instrumental knowledge (i.e., objective, rational, definitive, and scientific) where issues are clear cut or black and white; the focus of the learning is on the subject matter rather than on the interpersonal process (Cranton, 1996, p. 26).” Given professionals’ preference for retaining control over their own learning, cooperative learning is more characteristic of formal preservice and inservice professional education than the discretionary continuing professional development of individual practitioners.

Transformative group learning occurs when participants, prompted by life experiences, stimulated by new perspectives encountered through interpersonal experiences, professional practice contexts, or through reading, revise their expectations, assumptions, or perspectives (Cranton, 1996). Transformative group learning promotes
empowerment and leads to emancipatory knowledge, with individual group members taking responsibility for their own learning, engaging in critical reflection, and seeking new perspectives that challenge previously or commonly held views. Questioning themselves and each other, participants often work for change outside of the group or program (Cranton, 1996). Personal empowerment may be a goal of transformative group learning, but the term also describes situations where group members are seeking to change aspects of their professional practice or careers, and may occur in both informal and formal contexts, including counseling groups and professional development workshops.

Collaborative learning is participatory, based on the premise that all individuals can offer something to the group (Parma City School District, 1993). The essence of collaborative learning proceeds from the idea that learning is a naturally social act in which the participants talk among themselves, and through talking, learn (Gerlach, 1994). Cranton (1996) described collaborative learning as shared inquiry, noting that group members work together to construct knowledge rather than to discover objective truths, and that they do so in an environment that encourages and facilitates the free exchange of ideas, feelings, experiences, information, and insights.

Collaborative group learning requires a “democratic environment in which people respect and listen to each other (Cranton, 1996, p. 29)” . All members participate in constructivist dialogue, shaping and testing ideas, and working together to construct their own understanding of each other and their social world. Interpersonal process and subject matter content are inseparable in collaborative learning, which is most appropriate
for group acquisition of communicative knowledge (i.e., social norms, traditions, and values underlying our culture, and a mutual understanding among individuals) (Cranton, 1996, p. 28).

According to Brooks (1993), collaborative group learning follows a general process characterized by the following stages: problem-posing, sharing knowledge within the group, gathering knowledge from outside the group, combining and recombining available knowledge into meaningful new knowledge, and sharing new knowledge outside the group. Interpersonal relationships and communication form the foundation for collaborative learning, which is well-suited to professional development in the social sciences (including psychology, sociology, and politics) as well as to the area of administrative studies, such as leadership, organizational behavior, and management (Cranton, 1996). In organizational contexts, collaborative group learning processes often are constrained by authority structures and policies that must be overcome or neutralized in order for the process to move forward (Brooks, 1993).

The key to collaborative group learning’s effectiveness in continuing professional development is an atmosphere of mutual respect and valuing of members contributions (Brooks, 1993), and in the potential for reflective practitioners to learn from one another through the many things that can go on at once--exploration, clarification, shared interpretation, insight into differences of opinion, expression of doubt, illustration and anecdote, and explanation by gesture (Gerlach, 1994).

Typical venues for collaborative learning include counseling groups, discussion groups or study circles (Cranton, 1996, p. 28). Study circles, in particular, encourage
collaborative learning because of their generally small membership and reliance on participant-led, sequential sessions. Learning that takes place in study circles, both from the content and the process, is readily applied in individual and collective ways in participants’ workplaces, community life, and political affairs (Oliver, 1992). Critical to the effectiveness of collaborative learning through study circles is the element of time sufficient for the group to work through the full depth and scope of issues it is confronting. Somewhat surprising is the finding by Oliver that collaborative learning within small groups works well with dependent learners, but less well with highly independent learners (Oliver, 1992, p. 93), who might otherwise be expected to contribute considerably more to group members’ learning.

Collaborative learning relationships may be formal or informal (Mayberry & Gilligan, 1985), may develop between peers or faculty of unequal status (Groundwater-Smith, 1986), and may persist for a short time or evolve into career-long relationships. Discussions among colleagues are mentioned often as examples of informal collaborative learning (Cervero, Lebold, & Dimmock, 1988). Collaborative relationships also are important in the ongoing socialization that binds practitioners in a profession together in a strong sense of community (Houle, Cyphert, & Boggs (1985). With respect to teachers’ professional development, collaborative learning may be formalized, such as teacher induction and mentoring programs (Doran, 1994; Hoover, 1996; Kovalcik, 1992; Potter, 1991; Potts, 1996; Renyi, 1996), or informal and rooted within their collegial relationships (Howser, 1989; Kennedy, 1996; Little, 1989; 1993; Shafer, 1994).

The utilization of various forms of collective or group learning in human resource
development is increasing on a broad scale in the United States, but Brooks (1993) found mixed results in its effectiveness. Based on her qualitative case study of work teams engaged in group learning, Brooks concluded that American culture and ideology may be profoundly antagonistic to the success and productivity of group learning, due in large part to an historically dominant orientation toward individual achievement and personal gain in a context of competition that runs counter to collaboration in group learning. This observation is particularly significant in the context of emerging theories about ways of learning and knowing addressed later in this chapter and argued by some to be unique to certain groups within the larger society.

Distance education and distance learning

Distance education refers to formal and informal approaches to learning in which a majority of instruction or self-instruction occurs while the learner and the learning resources or educator/facilitator are at a distance from one another (Verduin & Clark, 1991). In its initial use the term distance education referred to correspondence study through mail service (Kerka, 1996), but emerging and evolving technologies continue to change and shape the way distance learning may be accomplished, so new definitions of distance education and distance learning evolve as well. Eastmond (1995), placing distance learning in the context of education and training, defined distance education in terms of instructional delivery through print or electronic communications media when teachers and learners are separated in time and/or place. Filipczak (1995), reflecting a more learner-centered perspective, opted for use of the term distance learning, defining it
as depicting both a process and structure for connecting distributed resources with learners in electronic space.

The evolution of learning through distance education can be traced through four generations (Wulf, 1996). The first generation of distance education, print-based correspondence instruction, continues to be widely and effectively used. A second generation of distance education supplemented print-based materials in correspondence instruction by relying heavily on open radio or television broadcasts. Audioconferencing ushered in a third generation of distance education marked by synchronous communication, enhanced even more by the development of videoconferencing. Computer-based multimedia teleconferencing and asynchronous communication have introduced a fourth generation of distance learning that has greatly increased the potential for the development of effective, unique, user-driven distance learning opportunities (Kerka, 1996; Romiszowski, 1993).

Recently, the Internet and World Wide Web have contributed more than any other distance media to surmounting time and space impediments to teaching and learning (Kerka, 1996). The Internet is a distributed network of many computers interconnected through a variety of media that permit users to access textual, graphical, audio, and other materials. An abundance of distance learning opportunities are available through the World Wide Web, an integrated hypermedia environment that allows Internet users to move quickly and easily from one website to another. The continuous availability of the Internet and World Wide Web, together with recently developed tools called plug-ins and helpers, have combined to permit users around the world or next door to maintain
convenient asynchronous communication through bulletin boards and e-mail as well as synchronous (live, real-time) videoconferencing and computer-mediated conferencing (CMC) for online discussion and interactive simulations (McGreal, 1997).

Distance learning resources available to users, including professional practitioners, now range from virtual universities, to powerful search engines called Web Browsers, to collaborative chat room discussions, to personal mentoring through synchronous and asynchronous dialogue (McGreal, 1997). Besides online degree programs offered through both traditional universities and nontraditional entities (Kerka, 1996), Internet-based distance learning generally is conducted through e-mail, bulletin boards and newsgroup postings and discussions, downloaded and interactive tutorials, real-time interactive conferencing, institutional intranets for limited distribution of training to employees, and the utilization of online databases, library catalogs, gophers, and websites for specific research and information acquisition (Wulf, 1996).

Continuously advancing telecommunications and computer technologies, including the Internet and World Wide Web in particular, and the utilization of these technological advances in public schools, have greatly expanded teachers’ professional development opportunities through distance learning (Bank Street College of Education, 1993; Kerka, 1996). A study of 550 K-12 educators in a 1992 national survey conducted by the Center for Technology in Education, revealed that educators were utilizing these technological resources to engage in the following professional development activities: 76% exchange e-mail with professional colleagues, 62% access newsgroups and bulletin boards, 51% access databases containing information relevant to students, and 49%
access educational research information. Roughly two-thirds of respondents reported engaging in collegial exchanges and accessing information services at least once weekly, with 69% engaging in these professional development activities from their own homes and on their own time (Bank Street College of Education, 1993).

Compared to their professional cohort, respondents to the 1992 national survey were, on average, older (44.9 vs. 40.2), proportionately more male (43%, compared to 29% of the national teaching population), more experienced (83% taught 10 or more years, compared to 57% of the national teaching population), and more educated (79% having achieved at least a Masters degree, compared to 47% of the national teaching population) (Bank Street College of Education, 1993). One-fifth (20%) identified themselves as elementary teachers, while roughly half taught computer instruction, sciences, or mathematics (23%, 13%, and 8%, respectively); 14% were library or media specialists, with each other discipline comprising 6% or less of the sample. Eighty-eight percent described themselves as self-taught, with at least four years experience in telecommunicating for professional development reasons. Only 45% reported learning about telecommunications activities through formal workshops and conferences (Bank Street College of Education, 1993; NCES, 1992).

In addition to highlighting actual and potential opportunities for the use of distance learning resources and technologies in the continuing professional development of teachers, the survey also revealed an important intangible benefit: the collaborations being made possible through telecommunications networks help to diminish, in some cases even eliminate, the experiences of professional isolation common among teachers
Emerging perspectives on alternative ways of knowing and learning.

Flannery (1994) questioned the prevailing conceptualizations of adults as learners, specifically challenging universality, the “broad, objective depiction of universal truth...[in which] ways of understanding people, ideas, and events are seen as applicable to all (p. 18).” Citing four types of errors that typically occur in the application of the scientific approach to the search for universal truths, Flannery contends that these errors cast doubt on the accepted dogma of knowledge-building. *Faulty generalization* typically plagues conclusions drawn from research utilizing subjects not representative of all persons, groups, or cultures, thereby confounding theories based on the flawed conclusions. When such flawed conclusions or theories subsequently are applied universally, their use leads to *circular reasoning*, which, in turn, contributes to the perpetuation of *mystified concepts*, that is, ideas unquestioned because of their familiarity and widespread acceptance. As these errors of reasoning subtly compound each other and shape ideas that ultimately become accepted as facts, the result is the perpetuation of a persistent state of *partial knowledge*.

Compounding the problems of partial knowledge and universality gone awry is the exclusive power wielded by a relatively small cadre of elite researchers in the field of adult education. Flannery contends that these authors, editors, and researchers function as *de facto* gatekeepers of published research, and as such they end up shaping universal truths by filtering their ideas, interpretations, and conclusions through lenses “influenced
by their own culture, values, and expectations (Flannery, 1994, p. 19).” Ultimately, departures from accepted ideas and theories are overlooked or dismissed because they are not defined in terms of known and valued, but potentially flawed, truths.

Advocating more inclusive views of adults as learners, Flannery cites the accepted dogma regarding self-directed learning and andragogy as examples of how errors of partial knowledge have shaped these central tenets of adult learning theory. Andragogy and self-directed learning are anchored in the concept of individual autonomy. In andragogy, adult education’s purpose is the enhancement of personal development in terms each adult learner defines. Self-directed learning literature largely emphasizes individuality in terms of each adult learner’s acceptance of the responsibility for managing and monitoring his or her own learning, as well as for the continuing enhancement of one’s own capacities for self-direction. In each case, individual freedom and responsibility are assumed to be universal ideals, yet not all groups or cultures value individuality and autonomy to the same degree (Flannery, 1994). In particular, women appear more likely to favor collective interdependence and collaborative learning environments (Belenky, Clinchy, Goldberger & Tarule, 1986; Gilligan, 1982; Goldberg, 1993).

Using Maslow’s (1970) theory of motivation and self-actualization to further illustrate the effects of reasoning errors and universality, Flannery points to a male bias inherent in Maslow’s original findings, which were based on studies whose subjects were mostly male. The needs of self-actualization and its precursor, the need for self-esteem, are described in a masculine context of competition and individual achievement;
however, both self-esteem and self-actualization are conceptualizations that do not incorporate values and needs posited to be important to women (e.g., empathy, intimacy, connected relationships, and communion). Through the errors of faulty generalization and circular reasoning, self-esteem and self-actualization have been elevated to the status of mystified concepts; consequently, their widespread acceptance and general use promotes a persistent state of partial knowledge (Flannery, 1994).

By raising important issues that challenge the dominant understandings of learning and ways of knowing among adult learners, Flannery (1994) underscored the need to reexamine the accepted tenets of adult education and adult learning theory from the perspectives of other cultures or groups whose distinctive values, beliefs, or characteristics could influence how they learn. The awareness, acceptance, and understanding of alternative ways of knowing and learning have very practical significance for the current study. Because this research focuses on the discretionary continuing professional development activities of public school teachers, a profession in which women comprise 71% of the national teaching population (Bank Street College of Education, 1993), alternative ways of knowing and learning preferred by women might be manifested in gendered preferences for discretionary continuing professional development activities that incorporate collaborative learning in informal learning environments and interdependent relationships among participants.
Special aspects of women’s ways of learning and knowing.

Within the context of discovering and appreciating alternative ways of learning and knowing, special attention has been devoted to the discernment of whether or not women exhibit distinctive preferences and needs as learners. Goldberg (1993) described the importance to women of diverse learning environments in which they can experience security in connecting with one another and in safely exploring “alternative ways of thinking and being... (p. 67).” These learning opportunities span informal institutional and noninstitutional settings in which groups convene to “talk through their thoughts (p. 69)” and learn collectively about issues, needs, and interests of individual or mutual importance. Goldberg asserted that, for women, learning groups function as strong personal growth agents and sources of significant learning.

Despite contentions that women exhibit distinctive approaches to knowing and learning (Belenky, Clinchy, Goldberger & Tarule, 1986; Gilligan, 1982; Goldberg, 1993), Hayes and Flannery (1995; 1996), found little consistency and coherence within the limited body of research that has, to date, addressed issues in women’s learning. Presenting the results of their critical reviews of scholarly journals (Hayes & Flannery, 1995) and dissertation research (Hayes & Flannery, 1996), these researchers found a dearth of studies devoted to the discernment or explication of uniqueness in the process of learning among adult women, concluding that little empirical support has so far been constructed for propositions about women’s unique ways of learning that appears to be consistent with adult learning and feminist theories.

Hayes and Flannery focused on the processes, products, and functional aspects of
women’s learning, and in doing so, they uncovered sometimes contradictory findings related to three themes in the literature that are central to propositions about the uniqueness of women’s ways of knowing: self-doubts of women; women as silent or silenced learners; and women as connected learners.

Numerous qualitative studies reported that women exhibited a lack of confidence in their own abilities, a finding linked by Hayes and Flannery to the theme of women learners as silent or silenced (1995, p. 6). But the use of both terms, silent and silenced, in the same context (Hayes & Flannery, 1995, p. 6) raises a question that is more than semantic. “Silenced” can be inferred to mean that the learner’s expression or full participation has been suppressed or externally inhibited, implying an external locus of control possibly related to the gender of co-learners. In contrast, “silent” implies the retention of an internal locus of control that presumably is related to the learner’s level of self-confidence, as noted by Hayes and Flannery. Such a difference in locus of control might further explain Furst’s (1994) findings, reported by Hayes and Flannery (1996, p.4-5), in which reentry adult women in higher education classes were decidedly more outspoken than classmates, attributed by Furst to her subjects’ differing stages of self-development.

The theme of women as preferring to engage in learning activities that permit them to connect new ideas with personal experiences in communal efforts, rather than through isolated and competitive efforts (Hayes & Flannery, 1996), underscores the potential significance to women of the nature of learning contexts and learning modalities. This theme suggests that the impersonal formality of traditional higher
education courses would not present optimum facilitating conditions for learning that many women may prefer, contributing to a widespread perception among adult women learners that they are “outsiders” in higher education (Hayes & Flannery, 1996, p. 7), and suggesting that women subjects in the present study will tend to prefer informal, collaborative, low-risk learning environments and activities in their discretionary continuing professional development participation.

With distance learning no longer an activity typified by isolation due to the greatly expanded potential for collaborative learning through chat rooms, computer mediated conferencing, and e-mail, women learners who are willing and able to access and utilize available technology have vastly increased opportunities to participate in safe collaborative or collective professional development experiences that retain an interdependent quality while preserving participants’ personal privacy.

**Continuing Professional Development for Teachers**

**The Context of Continuing Professional Development**

Formal continuing professional education is only part of a complex societal movement, the rapid growth of which has been punctuated by strong tensions, conflicting goals, and ingenious innovations (Nowlen, 1987). Expenditures for the provision of formal continuing education programs and participants’ costs of attendance are estimated to total billions of dollars annually (Eurich, 1985), and organizations devote
significant time and human resources as well to the development, implementation, and promotion of continuing professional education programs for their employees (Holt, Streer, & Clark, 1992). The provision of formal continuing education programs for professional practitioners is big business, according to Nowlen, who lists the following competitors in the continuing professional education market: universities and colleges; scholarly societies; professional associations; foundations; employers; federal, state, and local governments; voluntary groups; proprietary schools; churches and synagogues; individual, self-employed consultants; for-profit corporations whose only products are seminars for professionals; and (still) the largest provider group, individuals who organize and carry out learning activities for themselves (Nowlen, 1987; p. 211).

Nowlen’s assertion that individual practitioners are primary sources of ongoing professional growth initiatives is conceded by others (Holt, Streer, & Clark, 1992), but is not reflected in the field’s research and literature emphasis, which is oriented instead toward formal sponsored programs of a didactic nature.

Cervero (1988, 1989) noted the dramatic growth in formal continuing professional education over the last three decades, but cautioned against an over-emphasis on formal instruction, noting anecdotal evidence to confirm that practitioners learn through many methods, formats, and modalities. Nevertheless, formal continuing professional education programs are the accepted standard for some professions, such as engineering, while informal continuing learning measures, such as journal reading and collegial consultation so long characteristic of professional practitioners, are increasingly challenged as simply insufficient to maintain competence and accountability (Smutz &
In its broadest sense, the term continuing professional education includes a virtually unlimited spectrum of career-long learning activities that remediate deficiencies in practitioners’ skills and performance, encourage the adoption and application of new knowledge and techniques into daily practice, enhance the proficiencies of professionals, and advance their careers; these activities range from the self-directed efforts of individuals to formal, sponsored, and externally provided programs (Knox & McLeish, 1989; Smutz & Queeney, 1989). The term continuing professional development, however, subtly implies more of a qualitative orientation than continuing professional education. As described by Smutz and Queeney (1990), continuing professional development is driven by the wants, needs, and goals of individual practitioners and ultimately is focused on achievement of maximum potential, not the maintenance of minimum acceptable competence. Characterized by systematic, coherent and integrated learning initiatives, continuing professional development is individualized, cumulative, and likely to require at least some expert consultative assistance in needs assessment and the planning, implementation, and evaluation of even self-directed learning activities (Smutz & Queeney, 1990). It is in this continuing professional development context that teachers’ ongoing growth and learning initiatives should be considered.

Achieving consensus on a definition of just what comprises continuing professional development for teachers in public education is difficult due to its all-encompassing nature and because it is known by various names and descriptions (Rourke, 1997). A national telephone survey of teachers commissioned by NFIE and
conducted during February 1996, revealed many interpretations of the term *professional growth*, a term used interchangeably with continuing professional development.

The format of the most rewarding continuing professional development experiences reported by teachers varied widely, with 45% mentioning formal courses, seminars, workshops, or degree programs. Collegial interactions, collaborative efforts, and daily teaching experiences were frequently cited as most rewarding. Surveyed teachers reported that they regularly engage in professional growth initiatives, with 35% of the NFIE National Survey respondents reporting daily participation in professional development activities that increased their professional knowledge or skill, and another 27% reporting such efforts on a weekly basis. In all, 79% of the responding teachers said they participate at least monthly in continuing professional development activity (Renyi, 1996), in apparent contrast to Singiser’s (1989) finding that fewer than 37% of his teacher-subjects had amassed more than 18 hours of discretionary participation in formal continuing professional development activities over the course of one year. The results from these two studies cannot be directly compared, however, because they considered participation in different contexts. Singiser (1989) quantified participation in only formal, sponsored, other-directed continuing professional development activities, while the NFIE survey (Renyi, 1996) employed qualitative methods to describe what teachers reported as their continuing professional development activities over a period of time.

Based upon the findings of the NFIE study (Renyi, 1996), teachers essentially define continuing professional development as any activity or initiative that improves
their instruction and students’ achievement, including such diverse experiences as attending a graduate school course or a conference, studying student portfolios and collaborating in the development of a set of rubrics by which to assess writing, conducting action research with their students, or reading articles in professional journals (Renyi, 1996). This point of view is not reflected in research underlying proposed theoretical models of participation, nor is it reflected in most participation research, particularly research that focuses on professionals’ participation in continuing learning endeavors. Criticizing training sessions and workshops prepared by a centralized agency as having little relevance to teachers’ actual classroom work, Cameron (1996) advocates a reconceptualization of teacher continuing professional development that acknowledges teachers’ mastery of a valuable body of knowledge, recognizes their ability to make critical decisions, and is implemented within a supportive rather than a prescriptive system that ensures sufficient access to resources for meeting ongoing individual and building-level professional development needs.

**The Role of Supervisors’ Expectations**

Fundamental to the conceptualization of teachers’ continuing professional development are teachers’ perceptions and beliefs about their own meaningful professional growth experiences. Also important are the beliefs and expectations of supervisory personnel such as superintendents, principals, and their assistants. Supervisors can exert considerable influence on the perceived credibility and value of learning activities, on teachers’ decisions about whether or not to participate in
professional development activities, on participants’ evaluations of their professional
growth experiences (Hare, 1996; Hoyo, 1996; Kennedy, 1996). Through a construct
known as the subjective social normative factor (SSN), described in more detail later in
this chapter, teachers may be influenced by their supervisors’ expectations.

According to Babchuk and Courtney (1995), personal influence operates at two
levels, through family members, friends, and co-workers (primary influentials) and
through employers, educators, community figures, and others (secondary influentials).
While secondary influentials, such as principals and other supervisory personnel, are
thought to wield less influence than primary influentials, the expectations and opinions of
supervisors can contribute to the continuing professional development context in at least
two ways. A supervisor’s expectations relative to the value or utility of a professional
development activity may influence potential participants’ perceived value of an
experience as a means to professional growth. Supervisors’ expectations also operate in
the decision context itself, in this case exerted through the teacher’s perception of
whether or not the supervisor expects the teacher to participate in the professional
development experience.

Supervisors’ expectations may be perceived as overt, explicit, and intentional, or
they may be subtle, implicit, and unintentional; they also may be falsely perceived or
misperceived. However, even when perceptions of supervisors’ expectations are
inaccurate, the perception still contributes to beliefs about continuing professional
development and to decisions about participation or nonparticipation (Grotelueschen &
Teacher continuing professional development frequently is associated with school based in-service and staff development programs in which teachers are contractually obligated to participate. These staff development programs generally serve at least one of the following goals: information transfer, skill acquisition, or behavior change. They are driven by personal professional development, credentialing, induction, and school improvement (Gall & Renchler, 1985; Lanier & Little, 1986). Regardless of the purposes of these programs, participation in them is not a matter of choice because they either represent contractual obligations or they serve as the vehicle for completion of state-approved credit applicable toward certification requirements. Even though some degree of choice among program options may exist, nonparticipation generally is not one of those options.

Gall and Renchler (1985), representing a widely held viewpoint, contend that the most effective staff development programs address school improvement rather than teachers’ personal professional development. Staff development for teachers continues to be the focus of research and publication, as well as legislative and executive policy (Butler, 1992; Corcoran, 1995; Markzely, 1996), and the institutional perspective is evident in most of these efforts. The National Staff Development Council’s Staff Development Standards (NSDC, 1994; 1995a; 1995b) for elementary, middle, and high school level staff development, which represents the culmination of the collaborative efforts of eleven national education organizations, addresses issues of context, process, and content from an institutional perspective but not from that of personal professional
development needs as perceived by teachers themselves.

While an abundance of staff development handbooks and guides exist that generally focus on the provision of formal programs to address institutional needs, Sparks and Loucks-Horsley (1990) identified five staff development models used for teachers, including approaches geared to personal continuing professional development: (1) individually guided staff development, through which individuals identify, plan and pursue learning activities of their own choosing; (2) observation/assessment, in which teachers’ classroom performance is observed to generate objective feedback; (3) involvement in development/improvement processes, in which they participate in curriculum development, program design, or other school improvement initiatives; (4) training, the most widely utilized and researched model, which is characterized by group or individual instruction; and (5) inquiry, through which teachers engage in action research.

School systems often are perceived by teachers employed within them to value formal continuing professional education programs over informal continuing professional development activities, yet the formal in-service activities and staff development workshops provided by school systems frequently are judged by teacher participants to be worthless or meaningless because the programs are perceived as having little demonstrated effect on teachers’ professional growth or on the achievement of their students (Renyi, 1996).

Teacher staff development also is criticized as excessively structured and characterized by top-down authority that has the effect of impeding teacher learning; it
also is resisted when it carries implications that it is remediation for skills or traits judged to be deficient in some individuals (Butler, 1992). While such criticisms suggest a generally negative orientation toward staff development among teachers, evidence exists refuting a resistant mindset. Among the results revealed in a survey of state education officials, school district administrators, national and state education organizations, and elementary and secondary school administrators and teachers in the mid-Atlantic region conducted by the Association for Supervision and Curriculum Development (ASCD) and the Temple University Center for Research in Human Development and Education (CRHDE) (1995) was the finding that 71% of the respondents (of which 89% reported that they were directly involved with students) rated awareness of current research findings a "high" or "very high" priority, but only 21% rated the quality of current programs to convey such information to them as "high" or "very high." Over one-third of the respondents (34.2%) had 10 or more years of experience in their current position, suggesting that the conventional perception of experienced teachers as uninterested in research-based improvements to their practice may be an inaccurate one. Interestingly, professional development of school staff received more "high" or "very high" priority ratings (84%) than any other survey item, yet 60% of respondents were not satisfied with current professional development programs (ASCD & CRHDE, 1995). Clearly teachers perceive discrepancies between “what is” and “what should be” in staff development programs.

There are some recent indications that the critical viewpoint of professions, described earlier in this chapter, has begun to influence the view of teaching.
Characteristics discerned in more recent teacher staff development programs suggest that a paradigm shift is underway from deficit-based update model programs to staff development experiences in the competence model that focus more on reflective practice (Smylie & Conyers, 1991). As noted earlier, the competence model of continuing professional education attempts to assess, create, maintain, enhance, and assure the professional competencies upon which reflective practice is contingent. It also addresses additional aspects of professional role, human relations, and intellectual development needs of practitioners.

Advocates of staff development approaches that utilize collaborative planning and collegial relationships to highlight and address the expressed needs of teachers (Purkey and Smith 1983) have benefitted from an emerging view of teacher professional development, casting it as instrumental in establishing ongoing learning as an intrinsic and integral to the culture of schools and teaching (Fullan, 1991). According to Butler (1992), recent staff development directions reflect a growing recognition that teachers must play more of a self-determining role in the activities and content of their continuing professional development, a view endorsed by Burgess (1995).

**Informal and Nonmandatory Continuing Professional Development**

Across all professions, individual practitioners’ needs for continuing professional development and enhancement of competence vary tremendously and often are specific to their individual practice settings. Although formal continuing professional education programs lend themselves readily to regulation and attendance tabulation, practitioners
utilize other approaches in their pursuit of professional competence and expertise. Other approaches cited include daily practice experiences, reading professional literature, communicating with professional colleagues, and pursuing self-directed learning projects, in addition to the more formal lectures, conferences, workshops, and classes (Apps, 1989; Rockhill, 1983).

Advanced telecommunications and computer technologies, and the utilization of these technological advances within public schools, have greatly expanded teachers’ opportunities to engage in collegial information exchange, and gain access to databases, bulletin boards, and world-wide web sites (Bank Street College of Education, 1993; Kerka, 1996). Nearly two-thirds of teachers surveyed about their use of these resources reported accessing them at least once weekly, mostly on their own time and from their own homes (Bank Street College of Education, 1993).

The national telephone survey of teachers commissioned by NFIE cited earlier in this chapter revealed many interpretations of the term professional growth, a term commonly used interchangeably with continuing professional development; almost 75% of the teacher respondents sounded the theme that, at its core, their professional development consisted of those things that enabled them to better help students learn (Renyi, 1996). According to Judith Renyi, Executive Director of NFIE, teachers engage in a great number of activities that cannot be characterized as formal courses or studies, but that indeed constitute substantial and ongoing professional development and need to be recognized as such, first by the profession itself, and next by the school systems that employ teachers and the agencies that credential them (J. Renyi, personal...
NFIE Research Associate Robert Ganem described the expanded conceptualization of continuing professional development supported by that organization, a view that includes not only traditional formal courses and workshops, but also a variety of other formal and informal activities, such as “developing school curricula and student assessments; helping to evaluate school programs; establishing and maintaining a mentoring relationship either as a mentor or as a mentee; giving or receiving peer reviews; participating in or moderating an online teacher discussion group; observing other teachers; independent or group study; serving on textbook or software adoption committees; conducting educational or some other academic research; writing a paper for publication; [and] collaborating with a museum or other cultural or scientific agency” (R. Ganem, personal communication, September 22, 1997).

Citing the need to build professional knowledge within the profession (i.e., teacher-to-teacher knowledge emanating from practice, not from attending courses), Renyi contends that teachers themselves must first learn to recognize the value of such knowledge, articulate that knowledge, and pass it on to their professional colleagues (J. Renyi, personal communication, October 9, 1997). Fullan, Bennett, and Rolheiser-Bennett (1990), in reporting a growing recognition that teachers’ capacity for reflective practice is essential to their continuing professional development, lend support to the contention that “That’s just what teachers do” actually represents an enormous repertoire of unrecognized knowledge, skills, and abilities (Renyi, personal communication, October 9, 1997) essential to the development of Schon’s (1987) concept of professional
Consistent with NFIE’s recommendation that appropriate activities and experiences, as alternatives to formal courses and programs, be counted toward teacher recertification or relicensure requirements, some states, including Pennsylvania, have moved to adopt such a stance (R. Ganem, personal communication, September 22, 1997; D. J. Gondak, personal communication, September 24, 1997). According to David J. Gondak, past president of the Pennsylvania State Education Association (PSEA) (which supports a broad interpretation when considering activities that constitute continuing professional development), recent legislative changes affecting teachers’ sabbatical leave laws reflect a growing recognition that both formal and informal activities can meet existing criteria as valid and appropriate continuing professional development in the context of sabbatical leaves for study purposes (D. J. Gondak, personal communication, September 24, 1997).

Nearly two decades of attention to teachers’ continuing professional development have spawned not only a plethora of staff development handbooks and how-to guides for program planning and implementation, but also recognition that valid alternatives to formal continuing professional education and staff development programs do exist. Recent studies, like the NFIE survey, have disclosed something of teachers’ beliefs about continuing professional development and identified a variety of informal professional development initiatives in which teachers engage, but they offer little empirical evidence about the extent to which these options actually are utilized on a discretionary basis across the population of public school teachers (Doran, 1994; Ellefson, 1994; Hoover,
For the most part, research on teachers’ continuing professional growth has not focused on participation per se but on various aspects of specific professional development activities (Corabi, 1995; Ju, 1995; Kessler, 1990; Kolk, 1990; Maley, 1996; Middlemiss, 1990; Rier, 1990; Rivera, 1991; Ropp-Jackson, 1991). Those studies that have focused on participation itself and factors related to participation have been confined mostly to teachers’ engagement in formal, sponsored courses and programs. Ironically, as teachers are being encouraged to take greater responsibility for their own professional development and to assume more active leadership in the operation of their schools, they are faced with less time and desire to pursue the formal research-based university instruction that most frequently has been associated with teachers’ continuing professional development (Dilworth & Imig, 1995).

The Phenomenon of Participation in Continuing Professional Development

Perhaps no other subject in adult and continuing education receives more attention and research interest than participation (Courtney, 1992). Participation by adults has been scrutinized from several perspectives as adult educators, program planners, and policy makers pursue an understanding of who engages in adult learning endeavors and who does not (Aslanian & Brickell, 1980; Becker & Gibson, 1998; Boshier, 1973; Carp, Peterson, & Roelfs, 1974; Darkenwald, Kim, & Stowe, 1998; Hall, 1990; Hayes, 1988; Houle, 1961; Johnstone & Rivera, 1965; Kim, Collins, Stowe, &
Chandler, 1995; Livneh & Livneh, 1999; Yang, Blunt & Butler, 1994), why they do or do not participate (Beder, 1990; Boshier, 1971; Childers, 1993; Cross, 1981; Gryzb, 1995; Hayes, 1988), and how they participate (Gleeson, 1992; Hope, 1994; Katzman, 1997; Penland, 1977; Tough, 1979; Varlejs, 1996; Willis, 1997; Zeph, 1991). Theoretical models proposed to describe and explain participation continue to be proposed and tested (Becker & Gibson, 1998; Cookson, 1986; Cross, 1981; Darkenwald & Merriam, 1982; Grotelueschen & Caulley, 1977; Henry & Basile, 1994; Rubenson, 1978; Thompson, 1992; Yang, Blunt, & Butler, 1994;). Yet as models of adult education participation that are both effective and parsimonious in predictive and explanatory utility continue to be sought, the complexity of participation as a behavior and phenomenon has never been more evident (Becker & Gibson, 1998; Cervero & Yang, 1994; Cookson, 1986; Henry & Basile, 1994; Thompson, 1992; Yang, Blunt, & Butler, 1994).

Descriptive Studies of Participation and Participant Typologies

Houle’s (1961) qualitative study involving twenty-two subjects resulted in his relatively enduring typology of adult learners: goal-oriented, who intended to put acquired knowledge to practical use; activity-oriented, whose reasons centered on the enjoyment of learning activities; and learning-oriented, because their participation in adult learning activities was based on a desire to obtain knowledge for its own sake. National surveys by Aslanian and Brickell (1980), Carp, Peterson, and Roelfs (1974), Darkenwald, et. al. (1998), Johnstone and Rivera (1965), Kim, et. al, (1995) are noteworthy for their elaboration of participant characteristics, illustrative participant
profiles, and estimates of adult education participation rates among the population in general and segments thereof.

These descriptive research efforts revealed important demographic information about those who were participating in formal adult education programs, and they established benchmarks for later participation research that incorporated variables other than age, gender, formal educational attainment, occupation, income, and other demographic and socioeconomic factors. The surveys provided insight into participant motivations, revealing a prominence of occupational motives among their reasons cited for participation. Qualitative research contributed to the development of typical adult learner profiles (Merriam, 1989), and survey research added additional details, but such snapshots in time do not aid in understanding other dynamic forces and conditions affecting participation.

Boshier’s successive versions of the Education Participation Scale (EPS) (1971, 1982, 1991) were intended to refine and elaborate Houle’s original typology through factor analysis. Boshier’s refinements to the original scale produced the EPS-A (Alternative-form) (Boshier, 1991) which yielded a seven-factor typology of adult learners, describing the following types of participants: 

- communication improvement, those seeking improved communication skills;
- social contact, whose goals are meeting people and making friends;
- educational preparation, includes people desiring to remediate educational deficiencies and prepare for additional education;
- professional advancement, characterized by those aspiring to improving or change their current occupational status;
- family togetherness, a category added in the most recent typology to
recognize those seeking to improvement in their family relationships and intergenerational understanding; *social stimulation*, for whom escape from unhappiness, loneliness, and boredom drive their participation; and *cognitive interest*, distinguished by their quest for knowledge for its own sake (Boshier, 1991; Fujita-Starck, 1996).

Other researchers have developed typologies of potential and actual learners, too. Darkenwald and Hayes (1988) developed the Adult Attitudes Toward Continuing Education Scale (AACES) through their efforts to conceptualize the attitude construct and learn more about the role of attitudes in adult education participation. The three-factor structure (*enjoyment of learning, importance of adult education, and intrinsic value of adult education*) revealed through factor analysis applied to a sample of 275 New Jersey residents produced a five-pronged descriptive typology (Hayes & Darkenwald, 1990).

Scanlan and Darkenwald (1984) developed the Deterrents to Participation Scale (DPS) through their survey of New Jersey health professionals. Six deterrent factors were isolated: *disengagement* (inertia, apathy, negative attitudes); *lack of quality* (referring to the perceived quality of available education opportunities); *cost; family constraints; lack of benefit* (doubts about the worth and need for participation); and *work constraints*. Darkenwald and Valentine (1985) presented a more generic form of the instrument, DPS-G (general) for general population use that identified six deterrent factors: *lack of confidence, lack of course relevance, time constraints, low personal priority, cost, and personal problems*. Valentine and Darkenwald (1990), utilizing the DPS-G in a survey of New Jersey households, identified five types of adults: *people*
deterred by personal problems, people deterred by a lack of confidence, people deterred by educational costs, people not interested in organized education, and people not interested in available courses. Typologies such as these reinforce the complex multidimensional nature of participation and the limitations imposed on comprehending and explaining participation decisions and behavior when only some of the myriad factors are considered. Regardless of their theoretical or empirical derivation, typologies cannot by themselves reveal enough to advance a clear understanding and explanation of the origin of learning needs, determinants of the intention to participate, factors and forces affecting the decision to participate, nor can they be used to satisfactorily predict participation (Boshier, 1989).

**Models of Participation**

**Motivational Orientation**

Motivational orientation research grew out of Houle’s (1961) work that produced his typology of adult learners. Subsequent research by Boshier (1971, 1976, 1980, 1989), Boshier and Collins (1985), Morstain and Smart (1974) attempted to identify precursor conditions that ultimately produce a need to learn, rather than focusing on the participation decision itself. The typologies that have resulted from motivational orientation research do not themselves represent models of participation, but other more comprehensive decision models do subsume the motivational orientation concept.
Life Cycle (Developmental) Theories

Life cycle theories are premised on the work of life stage theorists, notably Havighurst (1963), and the assumptions of andragogy (Knowles, 1980). This research has focused on the various phases (fairly stable, age-related periods in adulthood) and stages (increasingly complex developmental levels related more to maturity than age) of adult development and transition periods between them, developmental tasks (Havighurst, 1973) of adulthood (combining the concepts of individual needs and societal demands), and so-called trigger events (Aslanian & Brickell, 1980) or change stimuli, all of which are posited to contribute to motivation and participation in adult learning activities. Life changes, life changing events, and coping with change, hypothesized by Knox and Videbeck (1963) to be key elements in understanding and predicting adults’ participation behavior, are central to life cycle theories.

Aslanian and Brickell’s (1980) focus on life transition periods seem to be easily connected with real-life experiences for many subjects (Beder, 1990; Thompson, 1992). While life transitions may demand an individual’s mastery of new knowledge, skills, and abilities, and often are associated with identifiable trigger events that precipitate one’s involvement in learning, other research suggests that life changes and critical events inhibit, rather than stimulate, participation (Henry & Basile, 1994). Blaxter and Tight (1995), on the basis of interviews with 36 adult part-time degree students, concluded that the link between life transitions, triggering events, and participation in adult education has been overstated and provides an insufficient basis for explaining and predicting adult education participation.
Decision Models

Decision models (Courtney, 1992) have been the primary focus of adult education participation research. Decision models share several characteristics, most notably their focus on how an individual arrives at the decision leading to participation behavior. While some of the research underlying these theoretical models addresses factors involved in processes that culminate in the act of participation, other research examines intention to participate but not actual participation behavior. Another distinguishing feature of decision frameworks is their multidimensional nature. Demographic, psychological, sociological, and situational factors are posited to contribute in varying degrees to the act of participation.

The Force Field Analysis Model (Miller, 1967) incorporates Maslow’s concept of hierarchical human needs and draws heavily on Kurt Lewin’s theories of driving (positive) and restraining (negative) forces, the interplay of which can be figuratively illustrated as a force field through which the relative strength of individual needs, personal traits, sociological forces, and psychological factors ultimately facilitate or impede participation behavior. Miller’s model describes the interacting forces in general terms, without attributing relative influence to any positive or negative forces, and the processes governing their interplay and influence are not addressed in specific terms, nor is an action sequence proposed. The Force Field Analysis Model has intuitive appeal because it accounts to some degree for the origins of learning and some conditions that can influence participation. It also illustrates the dynamic interaction of multiple factors. However, its failure to suggest a sequence of variable interactions and its lack of any
indication of the relative contribution of positive and negative forces render the model insufficient for predicting and explaining participation behavior.

Boshier’s (1973) Congruence Model provides another example of the recognition that the decision to engage in participatory behavior results from the interaction of multiple factors. Boshier’s model, in which his descriptive typology research finds particular application, identifies individuals as either growth motivated (i.e., open to new experiences, autonomous) or deficiency motivated (i.e., driven by social pressures, satisfaction of basic needs). While the congruence model adds additional support to the multivariate nature of participation decision-making and behavior, acknowledges the importance of factors external to the individual, and suggests that the influence of factors may be additive, it does not adequately differentiate relative influence of the factors at work nor does it suggest whether they are sequentially or otherwise related.

Rubenson’s (1978) Expectancy Valence Paradigm (Expectancy Motivation Model) places greater premium on current conditions than on individuals’ past experience, and like several other participation models, it draws heavily on Lewin’s concepts of expectancy and valence. Expectancy refers to the result of interplay between an individual’s expectation that engaging in a particular course of action will accrue benefits and the belief that the course of action can be completed successfully; valence, in this context, is the individual’s assessment of the relative value of the course of action or benefit to be gained. Individual values systems and prior learning influence the individual’s assessment of these factors, but the decision horizon is fixed in present circumstances. Personal perceptions, beliefs, attitudes, and interpretations play more
explicit roles in this model than in those described previously, and the influence of past experiences as well as current external conditions are acknowledged. Rubenson’s model has been described as a “…close-to-commonsense account of why people act as they do...(Courtney, 1992, p.63),” and attractive because it depicts participation behavior as the result of a process characterized by rationality rather than one governed by forces beyond individual control. The concept of expectancy-valence and its role in decision-making also gains considerable credibility in its role other participation models.

The Chain of Response Model proposed by Cross (1981) represented participation not as a single act culminating from the combination forces, but as the outcome of a series of actions or *chains of response* that occur in a particular order. Unlike previous models, the order in which the elements occur is posited to be important because the triggering of each action is contingent on the completion of the preceding element. The chain of response model not only retains the notion that intrinsic and extrinsic variables impinge on participation behavior, it depicts the locations of those links in the chain of responses. Importantly, Cross specifically placed the individual’s responses to perceived opportunities and barriers as a final link in the chain, and acknowledged the contribution of critical information at this late stage. While the potential impact of barriers and opportunities may be great, their order in the chain of responses illustrates that deficit conditions in precursor links may suppress participation behavior, thus rendering the effects of potentially facilitating situational factors moot.

Darkenwald & Merriam (1982), in their Psychosocial Interaction Model, also specified multiple factors affecting participation and, like Cross, stipulated the sequence
in which the model’s components are posited to influence participation behavior. This model is further distinguished by its focus on behavioral determinants arising from the individual’s social-environmental context, including family characteristics, socioeconomic status, and formal educational attainment, and less emphasis on individual characteristics, such as attitudes. The psychosocial interaction model of participation incorporates concepts akin to Rubenson’s expectancy-valence (“perceived value and utility of adult education”), Aslanian and Brickell’s triggers (“participation stimuli”), and Cross’s treatment of barriers. To these elements shared by both models, Darkenwald and Merriam introduced the concept of “learning press”, defined as “the extent to which one’s total current environment requires or encourages further learning” (Darkenwald & Merriam, 1982, p. 143), and posited to be a function of the individual’s social participation, occupational complexity, and lifestyle (Darkenwald & Merriam, 1982, p. 142).

The Interdisciplinary, Sequential-Specificity, Time Allocation, Life-span (ISSTAL) model, proposed by Smith (1980) to describe social participation and applied to adult education by Cookson (1986), represents the most comprehensive and empirically challenging of all the theoretical frameworks so far suggested. In his examination of participation theories, Courtney (1992) cited Cookson’s adaptation of ISSTAL as one of the most complete and inclusive, but expressed doubts about its testability because its cumbersome nature. Singiser (1989) did attempt to apply Cookson’s ISSTAL to teachers’ discretionary participation in formal continuing professional education, and while he found support for some variable relationships
posed by the model, he could not confirm their sequential specificity due to data
limitations that precluded stepwise multiple regression analysis.

The ISSTAL model encompasses the major concepts and components of the
previously described decision models. ISSTAL’s sequential-specificity, for example,
resembles the causal chain of factors and events portrayed in both the chain of response
and psychosocial interaction models, and the placement of external context and
socioeconomic factors in ISSTAL’s hierarchical continuum of variables as distal, rather
than proximal, to the participation decision is consistent with the relative weighting given
to social-environmental forces by Darkenwald and Merriam. Rubenson’s
conceptualization of expectancy-valence is captured in ISSTAL’s retained information
variable class, and the role of opportunities and barriers (Cross, 1981; Darkenwald &
Merriam, 1982) appears in ISSTAL’s situational variables.

Like other decision models, ISSTAL posits a sequence in which variables
contribute to the participation decision, but it depicts in greater detail the mediating
influence exerted by each more proximal class of variables on the preceding (more distal)
variable classes. In addition, the interrelationships among psychological factors
(personality, intellect, and attitudes) and retained information (knowledge of
opportunities, resources, barriers, etc.) are stated more explicitly. The model’s unique
time-allocation orientation, and its anticipation that educational participation will covary
with other forms of social participation across one’s life-span serve to highlight the
important discretionary nature of participation decisions and behavior.

Another line of inquiry into the theoretical nature of participation is not
traditionally considered with the previous models, but merits consideration as a decision model. Drawing heavily on expectancy-valence theory, it was applied specifically to continuing professional education by Grotelueschen and Caulley (1977). This model of behavioral intention, now known as the Theory of Reasoned Action (TRA), was developed by Fishbein and Ajzen (1975), and modified by Triandis (1975, 1977, 1980). Differing from other decision models in its focus on the intention to participate, rather than actual participation behavior itself, the theory is based upon the relationship among beliefs, attitudes, and intentions as determinants of behavioral intention. In this theory, beliefs are cognitions associated with qualities or attributes of an object, concept, or behavior, and attitudes are a function of the positive or negative affect arising from cognitions about objects, concepts, and behaviors.

Expressing the relative contributions of attitudes and beliefs as an equation representing intention, and presumably, resultant behavior, Fishbein and Ajzen (1975) introduced the concept of a subjective normative factor that operates within the individual’s belief system in a manner similar to expectancy-valence. Triandis (1975, 1977, 1980) further differentiated this subjective normative factor into a social normative component and a personal normative component. The subjective social normative factor (SSN) represents what the person thinks others important to her/him think about her/his participation, while the subjective personal normative factor (SPN) is comprised of the person’s own beliefs about whether or not she/he should participate as well as her/his motivation for complying with this belief. Granting the presumption that the intention to participate correctly predicts actual participation behavior, participation studies based
upon the TRA have yielded mixed results (Becker & Gibson, 1998 Pryor, 1990; Ray, 1981; Southern, 1980; Yang, Blunt & Butler, 1994;), but the theory appears to be testable, fairly clear, and more parsimonious than other theories.

**Discretionary Participation**

As described in Chapter One, the conceptualization of discretionary participation underlying the current study recognizes an individual’s internal locus of control in decision-making, while conceding that elements of the decision or learning context may make participation something that is less than voluntary. Discretionary participation decisions result from individuals’ consideration of participation options and potential consequences of participation, their perceptions of the expectations held by others as well as their own self-expectations, and their valuing of perceived potential consequences, including implications of conformance to the desires or expectations of self and others. Although subtle implicit or explicit pressures may impinge upon the decision process, discretionary participation results from personal choice, not compulsion by legislation, policy, or other regulation.

This conceptualization of discretionary participation is grounded in concepts fundamental to the participation models described previously. Rubenson’s (1978) expectancy-valence interaction captures the individual’s anticipation of benefits or risks as a participation consequence, including the perceived magnitude of the potential benefits or risks. Personal values, perception and interpretation, prior learning, beliefs, and attitudes all serve as filters that influence the individual’s assessment of the
participation context as well as the individual’s response. These factors or composites of
them are posited to influence participation in the decision models described above.

Operating within this expectancy-valence decision context are Fishbein and
Ajzen’s (1975) subjective normative factors, discernible as Triandis’ (1975, 1977, 1980)
subjective social norm (SSN) and subjective personal norm (SPN), described in the
preceding section of this chapter. Triandis’ subjective social norm (SSN) manifests itself
through the construct of personal influence. According to Babchuk and Courtney (1995),
personal influence operates at two levels, through family members, friends, and co-
workers who are termed primary influentials, and through employers, educators,
community figures, and others termed secondary influentials. Primary influentials are
posited to influence participation decisions more than secondary influentials. Operating
within the context of subjective social norms, personal influence may be overt, explicit,
and intentional, or it may be subtle, implicit, and unintentional, or, perhaps, even falsely
perceived. Even if perceived inaccurately, however, the expectations and influence of
significant other individuals contribute to the expectancy-valence interaction, and
ultimately to a participation or nonparticipation decision. Subjective personal norm
(SPN) operationalizes a discrete characteristic of professionals not explicit in any of the
participation models reviewed, but evident in Grotelueschen and Caulley’s (1977)
conviction that professionals are “characterized by a personal sense of obligation to
continue their education” (p. 35), acknowledging yet another factor making participation
an action chosen at the discretion of the participant.

Applying the Fishbein and Ajzen and Triandis TRA models to veterinary
professionals’ participation in formal continuing professional education, Yang, Blunt and Butler (1994) found that personal attitudes toward the programs in question and subjective norms, especially subjective personal norm, strongly influenced participation decisions, findings that support the conceptualization of discretionary participation as resulting from a decision process that considers a range of internal personal issues as well as a variety of external factors, and is based on judgments about their respective value and relative importance. Ultimately, an individual’s discretion to choose to participate, or choose not to participate, in continuing professional development activities reflects an internal locus of control. Garrison (1992) noted this internal locus of control particularly in decision-making related to self-directed learning, the primary and preferred learning modality of professionals (Knox & McLeish, 1989; McLaughlin, 1991).

**Predominant Research Focus on Participation in Formal Continuing Professional Development**

A search for comprehensive statistics on national participation in continuing professional education failed to produce results indicating data collection on a national basis. Furthermore, extrapolation from existing multiple sources cannot yield specific details about the learning activities of practitioners in most professions (Hunt, 1992). Of those studies that have dealt with participation in continuing professional development, the focus has almost always been restricted to formal, sponsored continuing professional education (Becker & Gibson, 1998; Blaxter & Tight, 1995; Cervero & Yang, 1994; Childers, 1993; Fujita-Starck, 1996; Garrett, 1996; Grotelueschen & Caulley, 1977;
Grudnoski, 1992; Grzyb, 1995; Harrison, 1993; Henry & Basile, 1994; Scanlan & Darkenwald, 1984; Thompson, 1992; Willis, 1997; Yang, Blunt, & Butler, 1994;). As evidenced earlier and throughout this chapter, those studies that have produced or illustrated theoretical models of participation behavior are largely based upon research subjects’ participation in formal education experiences. Regardless of the model cited to describe participation, the methods utilized by subjects in their learning endeavors, or the format of activities scrutinized in participation studies, continuing professional development is assumed to include an unspecified variety of learning modes and educational content that contribute to the development of increased knowledge, competence, and performance in individual practitioners and across professional groups (Hunt, 1992).

**Summary**

McLaughlin (1991), in her review of literature on professionals’ preferred learning activities, noted that for a broad range of professional occupations ranging from engineers, chemists, and pharmacists to physicians and other health care professionals, self-directed learning activities represent the preferred modality, followed in descending order by collaborative learning experiences and other-directed activities. Her findings concerning the learning preferences of biomedical research scientists support the contention that professionals engage in a broad range of continuing professional development activities.

Extrapolating McLaughlin’s (1991) results to the teaching profession raises the
suggestion that Singiser’s (1989) consideration of teacher participation in only formal, sponsored, other-directed continuing professional development activities overlooked a potentially substantial amount of professional learning in which his subjects had been engaged. Documentation of the extent to which informal methods and initiatives are utilized within the general population of public school teachers has remained elusive.

This chapter has focused on the roles of professions and professionals, and the ways professionals learn. The conceptualization of continuing professional development and the rationale for the conceptualization of discretionary participation were addressed, with special attention given to teachers’ continuing professional development as well as some issues related to teacher staff development, posited in this research to lie outside the realm of teachers’ discretionary participation. The chapter concluded with an examination of theories and models of participation in adult and continuing education.

The literature reveals that much participation research has been preoccupied with formal, sponsored, educational programs, even while acknowledging other forms of professional learning. For teaching professionals in public education, attention increasingly is being focused on mandatory continuing education as a means to assure teacher competence, and on staff development that is intended to achieve organizational goals. Little is known, however, about what teachers actually do when their continuing professional development choices are their own.
Chapter 3

RESEARCH METHODOLOGY

Introduction

The purpose of this chapter is to describe in detail the procedures used to determine the nature of, extent of, and reasons for public school teachers’ discretionary participation in nonmandatory self-directed, other-directed, and collaborative continuing professional development activities. The four specific research questions addressed were posed in the first chapter. First, in what kinds of continuing professional development activities do teachers engage on a discretionary basis? Second, to what extent do teachers engage in continuing professional development activities on a discretionary basis? Third, what reasons do teachers express for choosing to participate, or for choosing not to participate, in continuing professional development activities? And fourth, what demographic and professional characteristics are associated with teachers’ discretionary participation in continuing professional development?

The following subsections of this chapter organize and describe the processes and methods employed in this study: research method, design of the study, population and sample, instrumentation, data collection, and data analysis.
Research Method

Survey research, the methodology chosen for this study, is described by Babbie (1989) as “the best method available... in collecting original data for a population too large to observe directly” (p. 237). Noting its utility for descriptive, exploratory, and explanatory purposes, Babbie observed that survey research is the methodology most often utilized in the social sciences, with a long history of use evident from Old Testament and New Testament biblical references to censuses.

Survey research is extensively utilized in adult education, with Courtney (1992) observing that “Survey research has now become a fixed part of the adult education research scene . . .” (p. 9), and that it “. . . has been responsible for providing the field with some of its most enduring findings . . .” (p. 152). Discussing potential limitations inherent in this methodology that pertain especially to adult education, Houle (1961) cautioned that survey research, when focused only on single events involving individuals, fails to describe their motivations or ascribe reasons to their actions. Acknowledging this important explanatory limitation, Courtney (1992) added the caveat that survey research must accept subjects’ responses at face value.

While the present study is of an exploratory and descriptive nature, the general explanatory limitations of survey research noted above are not expected to compromise this study’s findings since the instrumentation is designed to ascertain subjects’ reasons for their discretionary participation and nonparticipation in continuing professional development activities. Furthermore, the potential limitation imposed by possible inaccuracy in subjects’ self-reporting (noted in Chapter One) was acknowledged as part
of the context for interpreting the study’s results.

Surveys are distinguished chiefly by the manner in which data are collected (Babbie, 1989). Self-administered questionnaires require subjects to complete survey questionnaires. Under this format, a survey may be administered in several ways: to groups of respondents assembled in one location at the same time, through home delivery to individual subjects by a research worker, or more frequently, through postal delivery of the survey questionnaires. The two other common types of surveys are interviews, conducted either by telephone or in face-to-face contact with a research worker (Babbie, 1989). The present study employed both postal delivery of questionnaires and interviews conducted by telephone to collect data.

Dillman’s (1978) *Total Design Method* (TDM) guided the present research. In general, TDM procedures were followed in the mailed distribution and return of self-administered questionnaires targeting data from public school teachers. TDM principles also guided telephone interviews conducted with school district personnel whose responsibilities include oversight of local continuing professional development programming, and with Pennsylvania State Education Association (PSEA) staff personnel.

Surveys utilizing questionnaire and interview formats, or a combination thereof, have been used extensively and for diverse purposes in educational research with teachers. Previous studies utilizing the questionnaire format include: teacher attitudes about program participation (Nath & Henry, 1997); efficacy, empowerment, and school learning climate (Ruscoe & Whitford, 1991); and professionalization (Middleton, 1991).
Other studies have focused on: professional concerns (Boccia, 1989), descriptive profiles of teachers (Vergiels & Snow, 1988), master’s degree program content preferences (Selke, 1994), factors motivating continuing professional development (Koll, 1989), barriers to continuing professional development (Fifer et al., 1989), satisfaction in professional development activities (Kolk, 1990), the relationship between job satisfaction and staff development activities (Bowers, 1991), and factors relating to teachers’ participation in continuing professional development activities (Hall, 1990; Livneh & Livneh, 1999).

**Design of the Study**

This study’s design was cross-sectional (Babbie, 1989; Merriam & Simpson, 1989), characterized by the collection of data or observations at a single point in time, relying on two methods of data collection, mailed questionnaire and telephone interviews. Under a mailing plan modeled on the principles of Dillman’s (1978) Total Design Method (TDM), survey questionnaires (Appendix A) were mailed to a stratified random sample of teachers selected from the membership of the Pennsylvania State Education Association (PSEA). The survey instrument solicited information about subjects’ participation in several types of formal and informal continuing professional development activities, the reasons cited by subjects regarding their participation and nonparticipation, and subjects’ demographic and professional characteristics.

Telephone interviews also were conducted by the researcher with school district administrative personnel whose responsibilities include the coordination and/or
administration of continuing professional development plans and/or Act 178 Committee
functions (see Appendix G for protocol). These interviews sought to ascertain: the nature
of district-sponsored continuing professional development opportunities and teachers’
participation therein, communication of district-wide and/or supervisors’ expectations for
teachers’ participation in continuing professional development activities, district-
provided incentives for teachers’ participation, district perceptions of teachers’
participation reasons and deterrents, and districts’ facilitation of and resources available
to support teachers’ self-directed and collegial professional growth experiences.

Telephone interviews also were conducted with PSEA professional staff members
whose responsibilities include the provision, brokering, and/or promotion of content-
related professional development opportunities for PSEA members (see Appendix H for
protocol). These interviews sought to ascertain: the nature of PSEA-sponsored/brokered
continuing professional development opportunities and teachers’ participation therein;
PSEA perspectives on teachers’ reasons for participation and deterrents to participation;
and PSEA efforts to promote, support, and/or facilitate members’ continuing professional
development.

**Population and Sample**

In order to effectively study participation, Henry and Basile (1994) stressed that
research into this topic must include both participants and nonparticipants, and should
include sufficient numbers of subjects who are actual participants. Although Henry and
Basile did not further define criteria for determining when the number of participants can
be deemed sufficient, the magnitude of both the population and sample on which this research focused are presumed to meet criteria for sufficient numbers.

For the purposes of this research, teachers who met all of the following criteria comprised the defined population: membership in the Pennsylvania State Education Association (PSEA) (N=147,000); possession of Instructional II Certificates as of September 1, 1998; employment as a full-time teacher under a professional employee contract for the 1998-99 school year; and employment during the 1998-99 school year in one of the public school districts within the Commonwealth of Pennsylvania. A random sample of 2,450 PSEA members, stratified on gender, level of teaching assignment (i.e., elementary, middle/junior high school, high school, K-12), school district size, and school district wealth comprised the segment of the population targeted for receipt of the mailed questionnaire. Of the usable questionnaires returned (n = 942), 888 were from subjects (respondents) who met the population criteria specified above and included in the analysis of data (sample: n = 888). Using Dillman’s (1978) suggested basis for calculating survey response rates, the exclusion of noneligible (54) and nonreachable (24) subjects from the 2,450 initially targeted translates into a 37.4% response rate for the 888 usable responses.

The selection of school district personnel as subjects for telephone interviews flowed from the pool of school districts employing those teachers selected to receive the mailed questionnaire. Fifteen (n = 15) prospective interviewees representing fifteen school districts were selected from among the school districts that represent the approximately 2,450 teacher-subjects comprising the defined sample. The selection of
PSEA professional staff members \((n = 2)\) for interview purposes was based on their having responsibilities related to the provision or promotion of continuing professional development among PSEA members.

**Dependent Variable**

The dependent variable in this study was actual participation behavior. To facilitate the analysis of data, the dependent variable was surveyed and measured using both nominal and ordinal scales. The defined nominal values were the dichotomous values *yes* and *no* with respect to subjects’ participation in specific types of continuing professional development activities. Ordinal values were assigned to other measures of the dependent variable. Ordinal response categories for participation in specific types of continuing professional development activities were defined in terms of frequency of participation, credits earned through participation, and hours of participation.

**Independent Variables**

Five classes of independent variables were considered with respect to the dependent variable. These variable classes include: type of format of the professional development activity (formal or informal), reasons motivating participation, reasons deterring participation, influence of others, and professional and demographic characteristics.
Instrumentation

Data in this study were drawn from three sources: the Survey of Discretionary Professional Development Activity (SDPDA) (Appendix A) completed by teachers, from telephone interviews conducted by the researcher with school district personnel, and from telephone interviews conducted by the researcher with PSEA professional staff members. The SDPDA yielded most of the data subjected to statistical analysis. Interview data supplement the survey data and, through triangulation, provided additional perspective in the interpretation of survey results.

The SDPDA was revised and modified extensively in its evolution. In the final form mailed to the research subjects, the survey consisted of three parts. Part I of the SDPDA was comprised of 13 questions that addressed the nature and extent of subjects’ discretionary participation in formal and informal continuing professional development activities. Three items-in-a-series questions (Dillman, 1978) in Part II solicited information relating to respondents’ expressed reasons for discretionary participation, perceived deterrents to participation, and relative influence of others on subjects’ participation decisions. Eight items in Part III of the SDPDA focused on subjects’ demographic information and professional characteristics. The structure, grouping, and order of items included in the instrument followed Dillman’s (1978) suggestions for maximizing subjects’ responses.

Part I - Participation in Continuing Professional Development Activities

The items in Part I of the SDPDA surveyed and measured subjects’ participation
in continuing professional development activities during the yearlong period extending
from July 1, 1998, through June 30, 1999, specifically focusing on participation not
compelled by contractual obligation, Instructional II Certification requirements, or other
statute. The first section of Part I of the instrument surveyed respondents’ informal
continuing professional development activity. Subjects reported their discretionary
participation in twelve types of informal self-directed or collaborative professional
growth activities for which credit is not awarded.

The specific informal professional development activities included (in item
order): (a) reading professional journals and/or trade publications; (b) participating in
profession-related discussions with colleagues (including face-to-face and e-mail
exchanges, and online chat room exchanges); (c) learning to use new technology through
self-teaching or by receiving instruction; (d) learning to use computer software related to
respondents’ teaching or curriculum situation by receiving informal instruction or by
engaging in computer-assisted self-instruction; (e) conducting computer-assisted searches
(Internet, database, etc.) related to respondents’ instructional or professional needs; (f)
serving as a mentor, model, or peer coach; (g) utilizing audiocassette, videocassette,
videodisc, or CD-ROM resources related to respondents’ instructional or professional
needs; (h) participating in profession-related noncredit correspondence course or other
distance learning; (i) engaging in professional leadership activity including, but not
limited to, writing proposals, chairing meetings, and presenting ad hoc workshops; (j)
conducting or participating in action research, program review, or program evaluation;
(k) devising, designing, piloting, or field-testing new instructional or assessment
procedures, programs, or curriculum innovations; and (l) conducting other profession-related research, including self-observation, analysis, and evaluation.

Response categories for each activity produced the following ordinal values describing respondents’ participation: 1 - never (not at all during the specified period), 2 – yearly (once or twice during the specified period), 3 – monthly (once or twice a month during the specified period), 4 – weekly (once or twice a week during the specified period), and 5 – daily (at least once a day during the specified period).

Part I of the SDPDA also addressed teachers’ participation in formal, sponsored continuing professional education activities for which credit is awarded or participants’ involvement can be quantified by contact hours. Specifically, respondents reported on (in the item order): (a) completion of formal graduate-level courses conducted on college or university campuses for which they earned credit; (b) completion of formal graduate-level courses conducted at off-campus locations for which they earned college or university credit; (c) completion of Pennsylvania Department of Education (PDE) approved inservice or continuing education programs for credit; (d) completion of formal courses by distance education for which they earned college or university credits; (e) noncredit continuing education or PDE-approved inservice programs, excluding those for which attendance was contractually obligated; and (f) noncredit seminars, workshops, conferences, or training sessions, including those in which a respondent was a presenter or trainer.
As was the case with the assessment of informal professional development activities, subjects reported their discretionary participation in formal continuing professional education during the period from July 1, 1998, through June 30, 1999.

Response categories for credit earned through graduate courses completed (a) on college or university campuses, (b) at off-campus locations, (c) in PDE inservice or continuing education programs, and (d) through distance education formats produced the following ordinal values: 1 = 1 to 3 credits, 2 = 4 to 6 credits, 3 = 7 to 9 credits, 4 = 10 to 12 credits, and 5 = more than 12 credits. Subjects’ participation in noncredit inservice or continuing education programs, and in seminars, workshops, conferences and other training experiences was reported in terms of hours, according to these ordinal values: 1 = under 1 hour, 2 = 1 to 5 hours, 3 = 6 to 10 hours, 4 = 11 to 15 hours, and 5 = more than 15 hours.

**Part II - Influences on Participation in Continuing Professional Development Activities**

Part II of the SDPDA elicited responses from teachers about factors that may have influenced their decisions about participating in professional development activities during the yearlong period from July 1, 1998 through June 30, 1999. The factors, surveyed through three items-in-a-series questions (Dillman, 1978), comprise three classes of independent variables: (a) reasons for participation, (b) deterrents to participation (presented in the SDPDA as reasons for nonparticipation), and (c) personal influence exerted by others on respondents’ participation decisions.

Previous research on participation reasons and deterrents guided the selection of
items included in Part II questions. The content of the 12 items comprising the participation reasons question is adapted from findings of Boshier (1991), Childers (1993), Fujita-Starck (1996), Grotelueschen (1985), Grzyb (1995), Hall (1990), Jordan (1990), and Livneh and Livneh (1999), with specific item wording made relevant to teachers. Respondents were directed to consider the twelve participation reasons in the context that their participation was not required. The SDPDA response categories produced the following ordinal values to describe the importance attributed by the respondent to each reason: 1 - none (of no importance in the decision to participate), 2 – slight (of slight importance in the decision to participate), 3 – moderate (of moderate importance in the decision to participate), and 4 – great (of great importance in the decision to participate).

The 12 specific reasons for participation posed to respondents, in item order, included the following: (a) feeling of professional obligation; (b) compliance with expectations of others; (c) need to keep pace with changes in my field; (d) opportunity for salary advancement or other financial incentives; (e) opportunity to acquire new knowledge, learn new skills, or practice new teaching methods; (f) opportunity to earn graduate credit; (g) desire to learn through interactions with professional colleagues; (h) personal interest in topic or program; (i) opportunity to keep abreast of new developments or advancements in my curriculum area; (j) desire to increase my teaching competence and proficiency; (k) desire to demonstrate my commitment to the teaching profession; and (l) opportunity to retain independent control over my own professional learning.
Twelve potential reasons for nonparticipation in professional development activities were posed to respondents in Part II of the SDPDA. As was the case for the question on participation reasons, the 12 items encompassed by the deterrents question likewise drew on the findings of previous research (Blais, Duquette, & Painchaud, 1989; Darkenwald, Kim, & Stowe, 1998; Fifer, et al., 1989; Hayes, 1988; Langsner, 1994; Lawrence, 1991; Martindale & Drake, 1989; Scanlan and Darkenwald, 1984) with specific item wording made relevant to teachers.

Through one of four ordinal response options, respondents’ reported the relative importance they attributed to the nonparticipation reasons. Potential responses included: 1 - none (of no importance in the decision not to participate), 2 – slight (of slight importance in the decision not to participate), 3 – moderate (of moderate importance in the decision not to participate), and 4 – great (of great importance in the decision not to participate).

The nonparticipation reasons included (in item order): (a) participation infringes on my family or leisure time; (b) I don’t like to attend programs alone; (c) I don’t like formal courses in which I must take tests, complete research papers, or do graded work; (d) programs usually are not relevant to my professional development needs; (e) I lack the energy to participate in professional development activities; (f) professional development program locations often are inconvenient for me; (g) professional development programs usually are scheduled at times inconvenient for me; (h) my teaching responsibilities leave little time for professional development; (i) I am unfamiliar or uncomfortable with technologies I need for self-directed professional
development; (j) I am uncomfortable directing my own informal professional
development efforts; (k) I don’t have access to the resources necessary for independent
and self-directed professional development; and (l) there are no financial incentives or
other benefits that reward my participation in professional development.

One question in Part II of the instrumentation addressed the relative influence of
others on respondents’ decisions about whether or not to participate in professional
development activities. Eight classes of primary and secondary influentials (Babchuk &
Courtney, 1995) were included in this items-in-a-series question assessing subjects’
perceptions of the relative influence that others (Fifer, et al., 1989; Lawrence, 1991;
Singiser, 1989) exert on subjects’ decisions about whether or not to participate in
professional development activities: (a) spouse, (b) dependents, (c) teacher colleagues,
(d) immediate supervisor, (e) assistant superintendent, (f) superintendent, (g) school
board members, and (f) community constituents.

As a precaution intended to reduce the potential effects of response patterning
attributable to the order of item responses, the ordinal response categories for this
question were presented in order of decreasing influence: 1 – strong influence on my
participation, 2 – moderate influence on my participation, 3 – no influence on my
participation, and 4 – not applicable to my situation. Item responses for previous
questions in Part I and Part II were presented in increasing order with respect to each
question’s context.
Part III - Demographic Information and Professional Characteristics

Part III of the SDPDA encompassed eight questions focusing on subjects’ professional and demographic characteristics. The characteristics were included to discern whether they are related to discretionary participation and because of their potential use in interpreting data collected in this study. The eight items follow, in the order of their inclusion in the instrument.

The gender of each respondents was requested as a dichotomous nominal variable, 1 = female and 2 = male.

Possession of the Pennsylvania Instructional II Certificate, with response categories defined as 1 = no and 2 = yes, was a check on whether respondents are subject to professional certification regulations and, therefore, do not meet eligibility criteria for inclusion in the sample.

The level of teaching assignment for the period of the study was defined as a nominal variable, with the following response categories: 1 = elementary, 2 = middle/junior high school, 3 = high school, and 4 = K-12.

Subjects’ teaching experience was assessed from three perspectives, each addressed by a separate question. Consecutive years in most recent teaching assignment was defined as a numerical variable and required a unique response reflecting the number of consecutive years the subject had completed in the teaching assignment that she/he held during the period of the study. Subjects also were asked to report the total number of years in (their) current school district, a numerical variable requiring a unique response relative to the period of the study. Finally, respondents’ experience in terms of their total
number of years of teaching completed was defined as an ordinal variable with values as follows: 1 = 1 – 5 years, 2 = 6 – 10 years, 3 = 11 – 15 years, 4 = 16 – 20 years, 5 = 21 – 25 years, 6 = 26 – 30 years, and 7 = over 30 years, with the specific number of years requested of respondents with more than 30 years of service.

Respondents were asked to supply their age, in years, as of January 1, 1999. This question addressed an ordinal variable with the following response intervals:

The final question of the SDPDA yielding data for analysis on an ordinal variable requested that subjects report their highest level of formal education achieved, choosing their responses from the following categories: 1 = bachelor’s degree, 2 = bachelor’s degree plus at least 24 graduate credits, 3 = master’s equivalency, 4 = master’s degree, 5 = master’s degree plus at least 24 graduate credits, and 6 = doctoral degree.

Data Collection

Mailed Questionnaires

The implementation of Dillman’s (1978) TDM mailing procedures for survey questionnaires provided the mechanism for collecting most of the participation and professional development data subjected to statistical analysis. The specific components of each mailing in the plan are described below. The mail drop for each phase was
executed with the assistance of PSEA’s Research Division, utilizing the mailroom services at PSEA Headquarters.

The Phase One mailing, targeted to all subjects in the sample, included the Survey of Discretionary Professional Development Activity (SDPDA) form (Appendix A), which was accompanied by the researcher’s cover letter (Appendix B) introducing the study, explaining its purpose, and requesting the recipient’s participation. A letter from the president of PSEA personalized each mailing to its member recipient, thus preserving the confidentiality of information from the Association’s membership files. An official PSEA business reply envelope was enclosed with each mail-out package to facilitate the recipient’s timely response.

Phase Two of the mailing plan, implemented one week following the Phase One mail drop, targeted each subject in the sample and consisted of a postcard (Appendix C) bearing a message of thanks for recipients who already had responded and reminding nonrespondents to complete and return the original SDPDA.

Major assistance with the implementation of this study was provided by the Research Division of PSEA, specifically in the selection of research subjects from the PSEA membership base as well as in the provision of mailing services for the data collection plan (see Appendix E for assistance request letter and PSEA response).

**Interviews**

Telephone interviews were conducted with school district administrative personnel and with PSEA staff members, (see Appendix F for letters requesting
interviews and Appendices G and H for respective interview protocols). These interviews secured information regarding organizational perspectives on teachers’ discretionary participation in continuing professional development activities. Interview questions focused on the nature of each organization’s sponsored or brokered continuing professional development opportunities, perceptions regarding teachers’ discretionary participation therein, organizational communication of expectations for teachers’ participation in continuing professional development activities, organizational incentives to encourage teachers’ participation, and organizational perspectives on participation reasons and deterrents.

Data Analysis

Four specific research questions were addressed in the analysis of data. (1) In what kinds of continuing professional development activities do teachers engage on a discretionary basis? (2) To what extent do teachers engage in professional development activities on a discretionary basis? (3) What reasons do teachers express for choosing to participate, or for choosing not to participate, in continuing professional development activities? (4) What demographic and professional characteristics are associated with teachers’ discretionary participation in continuing professional development?

The SPSS Base 9.0 statistical analysis program (SPSS, Inc., 1999) was employed for data analysis and interpretation because of the power and variety of statistical methods incorporated into the software. Both parametric and nonparametric tests were employed in the analysis of the nominal, ordinal, and numerical data collected through
the mailed questionnaires, including \( t \) tests and ANOVA comparing group means and variances (Babbie, 1989; Fink, 1995). Bivariate correlation analyses included the use of the Pearson product-moment correlation, Spearman’s rank correlation coefficient (rho), and Kendall’s rank correlation coefficient (tau_b).

Skewed distributions of several variables did not permit direct parametric analysis for all data, but this contingency was anticipated in light of Singiser’s (1989) research on teachers’ discretionary participation in continuing professional development in which the severe skew of the data did not permit the application of parametric analytic methods.

This study’s definition of most of the independent and dependent variables as nominal and ordinal data did not impose limitations on the statistical methods available for analysis since conversions through collapsed categories, recoding, and transformation permitted extensive examination of the data set.

**Summary**

Given the exploratory and descriptive purposes of this study, a cross-sectional survey research design was chosen for implementation. Utilizing a mailed self-administered questionnaire (Survey of Discretionary Professional Development Activity) and telephone interviews, data collection focused on the kinds of discretionary continuing professional development activities in which teachers have engaged, the extent to which they engaged in those discretionary professional development activities, their reasons for participation or nonparticipation, and the demographic and professional characteristics associated with teachers’ discretionary participation.
The research subjects in this study were comprised of: public school teachers; school district officials responsible for the provision, promotion, or coordination of continuing professional development activities; and Pennsylvania State Education Association (PSEA) staff personnel. A stratified random sample of 2,450 teacher members of PSEA received the mailed questionnaire through the implementation of a plan modeled on Dillman’s (1978) Total Design Method (TDM). Additional data for the purposes of triangulation were collected through interviews with school district officials and with PSEA professional staff personnel, adhering to Dillman’s (1978) TDM protocol for telephone interviews. Both parametric and nonparametric methods were utilized in the analysis of data obtained through the survey questionnaire and interviews.
Chapter 4

RESEARCH FINDINGS

Introduction

The purpose of this study was to determine the nature of, extent of, and reasons for public school teachers’ actual engagement in discretionary participation in nonmandatory self-directed, other-directed, and collaborative continuing professional development activities. The study’s findings are intended to contribute to a better understanding of teachers’ motivations to grow professionally, and to provide a basis for developing structures to support, facilitate, and promote their learning endeavors. Four research questions guided this study: (a) in what kinds of continuing professional development activities do teachers engage on a discretionary basis? (b) to what extent do teachers engage in continuing professional development activities on a discretionary basis? (c) what reasons do teachers express for choosing to participate, or for choosing not to participate, in continuing professional development activities? and (d) what demographic and professional characteristics are associated with teachers’ discretionary participation in continuing professional development? The organization of this chapter is driven by the same four research questions.

Underlying this research is the concept of discretionary participation in continuing professional development activities. Discretionary participation refers to involvement
that results from individual choices made within a decision context in which certain elements may render participation less than voluntary but which, nonetheless, flow from the participant’s internal locus of control. For public school teachers, discretionary participation in professional development encompasses those professional learning endeavors that are not compelled by statutes governing professional certification or by contractual obligation.

Previous studies of teachers’ professional development activities have not established the relative extent of their participation in informal, self-directed, and collaborative professional learning efforts. Therefore, a major thrust of this exploratory research was devoted to establishing baseline data on teachers’ participation in informal professional development activities.

The primary source of data subjected to statistical analysis was the Survey of Discretionary Professional Development Activity (SDPDA) (Appendix A), which was mailed initially to 2,450 potential subjects. Of the 942 recipients who completed and returned the survey instrument, 888 met all criteria for inclusion in the sample population. Fifty-four potential subjects were excluded because they did not meet the criterion of the possession of Pennsylvania Instructional II Certificate or its equivalent.

Female respondents eligible for inclusion outnumbered male respondents eligible for inclusion by a ratio of more than 2 to 1 (68.2% to 31.8%), with 57.2% of the female respondents teaching in elementary grades. Nearly half of the male respondents (46.1%) taught in high schools. Almost half of all respondents (46.2%) reported that their teaching assignments during the period surveyed were in the elementary school level;
high school teachers comprised nearly one-third (29.2%) of the sample. Based on modal values in each of the demographic and professional characteristics, the typical respondent was a female elementary teacher who holds an Instructional II teaching certificate, earned a master’s degree, and has taught ten years in her most recent assignment. Now past age fifty, she has completed her twenty-eighth year of teaching, nearly all in the service of her current school district.

**Discretionary Participation in Continuing Professional Development Activities**

Virtually all of the eligible respondents (N= 888) to the Survey of Discretionary Professional Development Activity (SDPDA) (Appendix A) reported participation in informal or formal professional growth endeavors during the previous year. Nearly one-third of the responding teachers (32.0%) reported earning credits through participation in formal graduate courses offered by colleges and universities during the survey period. More than three-fourths (75.7%) of the SPDPA respondents also reported discretionary participation in noncredit formal continuing professional education programs, including seminars, workshops, conferences, and Pennsylvania Department of Education (PDE) inservice programs. Combining all categories of formal professional learning activities included in the SDPDA, 81.8% of respondents reported discretionary participation.

The highest participation rates emerged within the area of informal continuing professional development activities. All but one respondent reported discretionary participation in informal professional growth activities during the yearlong period on which the study focused, and all but four teachers reported participating at least monthly
in informal activities. Nine of ten respondents reported weekly participation in informal professional development activities, but the size of the cohort reporting daily participation reached only 58.8%.

**Informal Professional Development Activities**

The SDPDA elicited information about teachers’ reported participation in twelve types of self-directed or collaborative professional growth activities for which credit is not awarded. The specific activities (in the order addressed within the instrumentation) included: (a) reading professional journals and/or trade publications; (b) participating in profession-related discussions with colleagues (including face-to-face and e-mail exchanges, and online chat room exchanges); (c) learning to use new technology through self-teaching or by receiving instruction; (d) learning to use computer software related to respondents’ teaching or curriculum situation by receiving informal instruction or by engaging in computer-assisted self-instruction; (e) conducting computer-assisted searches (Internet, database, etc.) related to respondents’ instructional or professional needs; (f) serving as a mentor, model, or peer coach; (g) utilizing audiocassette, videocassette, videodisc, or CD-ROM resources related to respondents’ instructional or professional needs; (h) participating in profession-related noncredit correspondence course or other distance learning; (i) engaging in professional leadership activity including, but not limited to, writing proposals, chairing meetings, and presenting ad hoc workshops; (j) conducting or participating in action research, program review, or program evaluation; (k) devising, designing, piloting, or field-testing new instructional or assessment
procedures, programs, or curriculum innovations; and (l) conducting other profession-
related research, including self-observation, analysis, and evaluation.

The yearlong period for which subjects reported their discretionary participation in informal professional development activities extended from July 1, 1998, through June 30, 1999. Response categories for each activity produced the following ordinal values describing respondents’ participation: 1 - never (not at all during the specified period), 2 – yearly (once or twice during the specified period), 3 – monthly (once or twice a month during the specified period), 4 – weekly (once or twice a week during the specified period), and 5 – daily (at least once a day during the specified period).

Table 1 summarizes respondents’ reported discretionary participation in each informal activity according to the aforementioned response categories. The order in which the activities are listed in Table 1 reflects the order in which the activities appeared in the SDPDA.

Table 1: Discretionary Participation in Informal Professional Development Activities

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>(N = 888)</th>
<th>Count of Respondents Reporting Discretionary Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal reading (n = 886)</td>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Collegial discussion (n = 883)</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>Learn technology use (n = 886)</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Learn software use (n = 883)</td>
<td></td>
<td>65</td>
</tr>
<tr>
<td>Internet/database searching (n = 882)</td>
<td></td>
<td>112</td>
</tr>
<tr>
<td>Mentoring/modeling (n = 878)</td>
<td></td>
<td>289</td>
</tr>
<tr>
<td>Audio/visual resource utilization (n = 882)</td>
<td></td>
<td>109</td>
</tr>
<tr>
<td>Noncredit distance learning (n = 883)</td>
<td></td>
<td>680</td>
</tr>
<tr>
<td>Professional leadership (n = 881)</td>
<td></td>
<td>337</td>
</tr>
<tr>
<td>Action research/program evaluation (n = 882)</td>
<td></td>
<td>329</td>
</tr>
<tr>
<td>Piloting/field-testing innovations (n = 883)</td>
<td></td>
<td>249</td>
</tr>
<tr>
<td>Observation/analysis/evaluation/research</td>
<td></td>
<td>190</td>
</tr>
</tbody>
</table>

(N = 884)
Ranking the means of respondents’ reported participation frequencies across all categories (Table 2) revealed that collaborative learning through discussions with colleagues was reported as the predominant type of informal professional development activity, occurring at least weekly among the teachers in the sample studied. Professional learning related to the use of technology and its applications, and learning through reading journals and trade publications emerged as informal professional development activities that occurred at least monthly within the sample population.

**Table 2: Ranking of Informal Professional Development Activities by Mean Participation Frequency**

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>n</th>
<th>Mean</th>
<th>S.D.</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collegial discussion</td>
<td>883</td>
<td>4.08</td>
<td>.99</td>
<td>1</td>
</tr>
<tr>
<td>Learn technology use</td>
<td>886</td>
<td>3.27</td>
<td>1.01</td>
<td>2</td>
</tr>
<tr>
<td>Journal reading</td>
<td>886</td>
<td>3.11</td>
<td>.69</td>
<td>3</td>
</tr>
<tr>
<td>Internet/database searching</td>
<td>882</td>
<td>3.08</td>
<td>1.18</td>
<td>4</td>
</tr>
<tr>
<td>Audio/visual resource utilization</td>
<td>882</td>
<td>2.98</td>
<td>1.15</td>
<td>5</td>
</tr>
<tr>
<td>Learn software use</td>
<td>883</td>
<td>2.91</td>
<td>1.08</td>
<td>6</td>
</tr>
<tr>
<td>Mentoring/modeling</td>
<td>878</td>
<td>2.61</td>
<td>1.51</td>
<td>7</td>
</tr>
<tr>
<td>Observation/analysis/evaluation/research</td>
<td>884</td>
<td>2.54</td>
<td>1.26</td>
<td>8</td>
</tr>
<tr>
<td>Piloting/field-testing innovations</td>
<td>883</td>
<td>2.15</td>
<td>1.06</td>
<td>9</td>
</tr>
<tr>
<td>Professional leadership</td>
<td>881</td>
<td>1.94</td>
<td>.93</td>
<td>10</td>
</tr>
<tr>
<td>Action research/program evaluation</td>
<td>882</td>
<td>1.89</td>
<td>.86</td>
<td>11</td>
</tr>
<tr>
<td>Noncredit distance learning</td>
<td>883</td>
<td>1.29</td>
<td>.62</td>
<td>12</td>
</tr>
</tbody>
</table>

In order to obtain relative comparisons of discretionary participation in the informal professional development activities included in this study and to explore possible correlations with other variables, participants’ responses were recoded from the original ordinal values into numerical values. The recoded values approximate the number of participation episodes during the yearlong time frame of the study. Due to the nature of the informal professional development activities, the numerical estimates of
participation episodes were based on a ten-month school-year calendar rather than on a full twelve-month year (see Table 3).

**Table 3: Variable Recoding Scheme for Discretionary Participation in Informal Professional Development Activities**

<table>
<thead>
<tr>
<th>Original Value</th>
<th>Key</th>
<th>Conversion factor</th>
<th>Recoded value (participation episodes/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Never</td>
<td>0 times yearly</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Yearly</td>
<td>1 time yearly</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Monthly</td>
<td>1 time/month @10 months</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Weekly</td>
<td>1 time/week @ 45 weeks</td>
<td>45</td>
</tr>
<tr>
<td>5</td>
<td>Daily</td>
<td>1 time/day @ 250 days</td>
<td>250</td>
</tr>
</tbody>
</table>

Using the recoding scheme described above, the original ordinal response values were recalculated into numerical data. The newly recoded values then were used to derive summary data for discretionary participation, with those results shown in Table 4.

**Table 4: Discretionary Participation in Informal Professional Development Activities: Ranked by Mean Number of Episodes per Year**

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>S.D.</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collegial discussion (n = 883)</td>
<td>.00</td>
<td>250.00</td>
<td>118.41</td>
<td>108.66</td>
<td>1</td>
</tr>
<tr>
<td>Mentoring/modeling (n = 878)</td>
<td>.00</td>
<td>250.00</td>
<td>52.83</td>
<td>93.99</td>
<td>2</td>
</tr>
<tr>
<td>Learn technology use (n = 886)</td>
<td>.00</td>
<td>250.00</td>
<td>48.81</td>
<td>80.27</td>
<td>3</td>
</tr>
<tr>
<td>Internet/database searching (n = 882)</td>
<td>.00</td>
<td>250.00</td>
<td>43.41</td>
<td>74.54</td>
<td>4</td>
</tr>
<tr>
<td>Audio/visual resource utilization (n = 882)</td>
<td>.00</td>
<td>250.00</td>
<td>38.46</td>
<td>71.37</td>
<td>5</td>
</tr>
<tr>
<td>Observation/analysis/evaluation/research (n = 884)</td>
<td>.00</td>
<td>250.00</td>
<td>35.38</td>
<td>77.34</td>
<td>6</td>
</tr>
<tr>
<td>Learn software use (n = 883)</td>
<td>.00</td>
<td>250.00</td>
<td>34.25</td>
<td>68.49</td>
<td>7</td>
</tr>
<tr>
<td>Journal reading (n = 886)</td>
<td>.00</td>
<td>250.00</td>
<td>20.92</td>
<td>34.70</td>
<td>8</td>
</tr>
<tr>
<td>Piloting/field-testing innovations (n = 883)</td>
<td>.00</td>
<td>250.00</td>
<td>18.12</td>
<td>56.44</td>
<td>9</td>
</tr>
<tr>
<td>Professional leadership (n = 881)</td>
<td>.00</td>
<td>250.00</td>
<td>7.08</td>
<td>26.53</td>
<td>10</td>
</tr>
<tr>
<td>Action research/program evaluation (n = 882)</td>
<td>.00</td>
<td>250.00</td>
<td>5.52</td>
<td>22.11</td>
<td>11</td>
</tr>
<tr>
<td>Noncredit distance learning (n = 883)</td>
<td>.00</td>
<td>250.00</td>
<td>2.09</td>
<td>17.31</td>
<td>12</td>
</tr>
<tr>
<td>All Activities</td>
<td>1.00</td>
<td>2350.00</td>
<td>425.28</td>
<td>391.64</td>
<td>-</td>
</tr>
</tbody>
</table>

Both the original ordinal variables and the recoded numerical variables exhibited skewed distributions for discretionary participation across all of the informal professional development activities. Neither the calculation of standardized values (z-score
transformation) nor transformation to logged values (Log10) corrected the severity of the skew of the distributions of participation across the sample population for each of the informal professional development activities. Thus, using parametric statistics for separate analyses of discretionary participation in each of the informal professional development activities was precluded.

However, a new proxy variable representing an overall measure of discretionary participation across all forms of informal activities ($d_{pinf}$) was derived for each case by summing the values of the variables after their transformation to episodes of participation per year. Although the distribution of $d_{pinf}$ remained skewed, its log transformation produced another proxy variable ($l_{gdpinf}$) more normally distributed across the sample population. This proxy variable proved useful not only in comparing participation in informal and formal types of professional development activities, but also as one of two components summed to produce a derived score for total discretionary participation in professional development activities ($DP_{tl}$). Discretionary participation in formal professional development activities, addressed in the next section, contributes the other component to $DP_{tl}$.

**Formal Professional Development Activities**

The SDPDA also addressed teachers’ participation in formal, sponsored continuing professional education activities for which credit is awarded or involvement quantified by contact hours. In the item order addressed within the instrumentation, respondents reported their: (a) completion of formal graduate-level courses conducted on
college or university campuses for which they earned credit; (b) completion of formal
graduate-level courses conducted at off-campus locations for which they earned college
or university credit; (c) completion of Pennsylvania Department of Education (PDE)
approved inservice or continuing education programs for credit; (d) completion of formal
courses by distance education for which they earned college or university credits; (e)
noncredit continuing education or PDE-approved inservice programs, excluding those for
which attendance was contractually obligated; and (f) noncredit seminars, workshops,
conferences, or training sessions, including those in which a respondent was a presenter
or trainer.

As was the case with the assessment of informal professional development
activities, subjects reported their discretionary participation in formal continuing
professional education during the period from July 1, 1998, through June 30, 1999.
SDPDA items focused on credit earned through graduate courses completed on college or
university campuses, at off-campus locations, through PDE inservice or continuing
education programs, and through distance education formats. The following ordinal
variables were assigned to the original response categories: 1 = 1 to 3 credits, 2 = 4 to 6
credits, 3 = 7 to 9 credits, 4 = 10 to 12 credits, and 5 = more than 12 credits.

Subjects’ participation in noncredit inservice or continuing education programs,
and in seminars, workshops, conferences and other training experiences was reported in
terms of hours, according to the these ordinal values: 1 = under 1 hour, 2 = 1 to 5 hours,
3 = 6 to 10 hours, 4 = 11 to 15 hours, and 5 = more than 15 hours.
Table 5 summarizes respondents’ reported discretionary participation in credit and noncredit continuing professional education. Ranking the means of respondents’ reported participation in formal continuing professional development exposes the difficulty inherent in comparing activities that are measured in differing units, a problem addressed later in this chapter through the recoding of credits into units of time.

Table 5: Discretionary Participation in Formal Professional Development Activities: Count of Respondents

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>1-3 cr.</th>
<th>4-6 cr.</th>
<th>7-9 cr.</th>
<th>10-12 cr.</th>
<th>Over 12 cr.</th>
<th>Number of Credits Earned/Hours of Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-campus graduate credits (n=169)</td>
<td>74</td>
<td>48</td>
<td>22</td>
<td>13</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Off-campus graduate credits (n=148)</td>
<td>77</td>
<td>40</td>
<td>15</td>
<td>12</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PDE/Inservice credits (n=124)</td>
<td>87</td>
<td>21</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Credits by Distance Education (n=18)</td>
<td>12</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Noncredit CE/Inservice hours (n=342)</td>
<td>12</td>
<td>115</td>
<td>102</td>
<td>52</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>Noncredit seminar/workshop/conference hours (n=600)</td>
<td>6</td>
<td>138</td>
<td>189</td>
<td>132</td>
<td>135</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 lists the activities in descending order of means, but direct comparisons could not be made across all categories because credits earned and hours completed are different units of measurement.

Table 6: Discretionary Participation in Formal Professional Development Activities: Credits Earned or Hours Completed

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>S.D.</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal, for Credit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-campus graduate credits (n=169)</td>
<td>2.00</td>
<td>18.00</td>
<td>5.4615</td>
<td>4.4481</td>
<td>1</td>
</tr>
<tr>
<td>Off-campus graduate credits (n=148)</td>
<td>2.00</td>
<td>16.00</td>
<td>4.5270</td>
<td>3.4116</td>
<td>2</td>
</tr>
<tr>
<td>PDE/Inservice credits (n=124)</td>
<td>2.00</td>
<td>20.00</td>
<td>3.8145</td>
<td>3.8028</td>
<td>3</td>
</tr>
<tr>
<td>Credits by Distance Educ. (n= 18)</td>
<td>2.00</td>
<td>11.00</td>
<td>3.6667</td>
<td>2.7653</td>
<td>4</td>
</tr>
<tr>
<td>Formal, Noncredit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noncredit seminar/workshop/conference hours (n=600)</td>
<td>.00</td>
<td>36.00</td>
<td>14.1700</td>
<td>12.2667</td>
<td>1</td>
</tr>
<tr>
<td>Noncredit CE/Inservice hours (n=342)</td>
<td>.00</td>
<td>33.00</td>
<td>11.2573</td>
<td>10.7544</td>
<td>2</td>
</tr>
</tbody>
</table>
To remedy some of the problems inherent in comparing variables with differing units of measurement, recoding the variables provides a solution. In this case, two stages of recoding were required. First, the original ordinal values, each of which represented a range of credits or hours, were recoded into specific amounts of credits and hours. The mean of each original value range associated with the ordinal values was used as a proxy for the second stage of the recoding process, except for those cases originally assigned the maximum ordinal value, since the actual mean was available from subjects’ response data on the SDPDA for recoding those cases.

To convert credits to hours in the second stage of the recoding process, each credit was assigned a value of 15 contact hours and new variable values then were computed for all cases. For noncredit hours, no further conversion was necessary after the first-stage recoding from original to proxy values. Table 7 presents the recoded data for subjects’ discretionary participation in formal continuing professional education.

Table 7: Discretionary Participation in Formal Professional Development Activities: Recoded as Hours Completed

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>S.D.</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-campus graduate credits (n=169)</td>
<td>30.00</td>
<td>270.00</td>
<td>81.9231</td>
<td>66.7217</td>
<td>1</td>
</tr>
<tr>
<td>Off-campus graduate credits (n=148)</td>
<td>30.00</td>
<td>240.00</td>
<td>67.9054</td>
<td>51.1734</td>
<td>2</td>
</tr>
<tr>
<td>PDE/Inservice credits (n=124)</td>
<td>30.00</td>
<td>300.00</td>
<td>57.2177</td>
<td>57.0419</td>
<td>3</td>
</tr>
<tr>
<td>Credits by Distance Educ. (n=18)</td>
<td>30.00</td>
<td>165.00</td>
<td>55.0000</td>
<td>41.4800</td>
<td>4</td>
</tr>
<tr>
<td>Noncredit seminar/workshop/conference hours (n=600)</td>
<td>.00</td>
<td>36.00</td>
<td>14.1700</td>
<td>12.2667</td>
<td>5</td>
</tr>
<tr>
<td>Noncredit CE/Inservice hours (n=342)</td>
<td>.00</td>
<td>33.00</td>
<td>11.2573</td>
<td>10.7544</td>
<td>6</td>
</tr>
</tbody>
</table>

The sample population distributions of discretionary participation for each of the formal professional development categories exhibited severe skew that was not
eliminated by the recoding from ordinal values to numerical values. Subsequent attempts to normalize the distributions through the calculation of standardized values (z-scores) and transformation to logged values (Log10) also failed to correct the skew of each variable’s distribution, precluding the use of parametric statistics for analysis of discretionary participation across the formal professional development activities.

However, a new proxy variable representing an overall measure of discretionary participation across all categories of formal activities was derived for each case by summing the values of that case’s variables after their transformation to hours of participation per year. Log transformation of the total hours of discretionary participation produced a more normally distributed proxy variable ($\text{lgdpfrmh}$). The new variable was useful not only in comparing participation in informal and formal types of professional development activities, but also as the second of two components summed to produce a derived score for total discretionary participation in professional development activities ($\text{DP}_{\text{ttl}}$).

**Discretionary Participation in Professional Development Activities**

For each case in the sample population, the ordinal variable values corresponding to subjects’ original responses were transformed through recoding and calculation into two new numerical proxy variables, $\text{DP}_{\text{inf}}$ and $\text{DP}_{\text{frm}}$, by the following procedure. For each statistical case, the calculated variable for informal participation, $\text{dpinf}$, represented the sum of the episodes of participation drawn from that subject’s transformed original responses in Part I of the SDPDA. To reduce the skew of the distribution of $\text{dpinf}$, each
value of $dpinf$ was log transformed (Log 10) to produce the more normally distributed variable ($lgdpinf$), which is symbolized hereafter as $DP_{inf}$ for reporting purposes. $DP_{inf}$ represents *discretionary participation in informal professional development activities*.

To derive the proxy variable $DP_{frm}$, each subject’s original responses to Part I of the SDPDA regarding their participation in formal professional development activities were recoded into a calculated variable, $frmparth$, representing the *sum of the hours of participation* in formal professional development activities. To reduce the skew of the distribution of $frmparth$, each value of $frmparth$ was log transformed (Log 10) to produce the more normally distributed variable ($lgfrmparth$), symbolized hereafter as $DP_{frm}$ for reporting purposes. $DP_{frm}$ represents *discretionary participation in formal professional development activities*. The measure for total discretionary participation in professional development activities, $DP_{ttl}$, was derived by summing the two proxy variables, i.e.,

$$(DP_{frm} + DP_{inf} = DP_{ttl}).$$

To test the significance of the higher levels of participation reported in informal professional development activities, the proxy variables $DP_{frm}$ and $DP_{inf}$ were subjected to the paired-samples $t$ test procedure. The paired-samples results confirmed the significance of the difference between teachers’ participation in informal and formal professional development within the sample population, based on $DP_{inf}$ ($M = 2.4535$, $SD = .4634$) and $DP_{frm}$ ($M = 1.4609$, $SD = .5496$), yielding $t(724) = -40.338$, $p < .01$. Thus, $H_0: DP_{frm} = DP_{inf}$ is rejected. This result suggests that informal professional development activities attract more participation than formal activities, at least among teachers in the sample population. The nature of the proxy variables does not support
further inferences about whether the significant difference in discretionary participation favoring informal professional development is attributable to greater numbers of participants, more frequent involvement, or some combination thereof.

Irrespective of differences in teachers’ discretionary participation in informal versus formal types of professional development activities, the derived measure, DP_{ttl}, functions as the dependent variable in exploring possible relationships with four classes of independent variables: (a) reasons for participation, (b) deterrents to participation, (c) personal influence, and (d) demographic and professional characteristics.

**Influences on Discretionary Participation in Professional Development**

The SDPDA elicited responses from teachers about three types of factors that may have influenced their decisions about participating in professional development activities during the yearlong period from July 1, 1998 through June 30, 1999. The factors in question comprise three classes of independent variables: (a) reasons for participation, (b) deterrents to participation (presented in the SDPDA as reasons for nonparticipation), and (c) personal influence exerted by others on subjects’ participation decisions.

**Reasons for Discretionary Participation**

The SDPDA asked respondents to consider twelve reasons for participating in professional development activities when their participation was not required. Response
categories produced the following ordinal values describing the importance attributed by
the respondent to the reason: 1 - none (of no importance in the decision to participate),
2 - slight (of slight importance in the decision to participate), 3 - moderate (of moderate
importance in the decision to participate), and 4 - great (of great importance in the
decision to participate).

Table 8 lists the specific reasons, in their SDPDA in item order, with response
frequencies and percentages.

Table 8: Reasons for Discretionary Participation in Professional Development Activities

<table>
<thead>
<tr>
<th>Participation Reason</th>
<th>None</th>
<th>Slight</th>
<th>Moderate</th>
<th>Great</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( f )</td>
<td>( % )</td>
<td>( f )</td>
<td>( % )</td>
</tr>
<tr>
<td>Feeling of professional obligation ( (n=882) )</td>
<td>60</td>
<td>6.8</td>
<td>150</td>
<td>16.9</td>
</tr>
<tr>
<td>Compliance with expectations of others ( (n=883) )</td>
<td>222</td>
<td>25.0</td>
<td>314</td>
<td>35.4</td>
</tr>
<tr>
<td>Need to keep pace with changes in the field ( (n=885) )</td>
<td>11</td>
<td>1.2</td>
<td>54</td>
<td>6.1</td>
</tr>
<tr>
<td>Opportunity for salary advancement or other financial incentive ( (n=885) )</td>
<td>307</td>
<td>34.6</td>
<td>170</td>
<td>19.1</td>
</tr>
<tr>
<td>Opportunity to acquire new knowledge, Learn new skills, or practice new teaching methods ( (n=886) )</td>
<td>4</td>
<td>0.5</td>
<td>21</td>
<td>2.4</td>
</tr>
<tr>
<td>Opportunity to earn graduate credit ( (n=882) )</td>
<td>391</td>
<td>44.0</td>
<td>189</td>
<td>21.3</td>
</tr>
<tr>
<td>Desire to learn through interactions with professional colleagues ( (n=886) )</td>
<td>22</td>
<td>2.5</td>
<td>122</td>
<td>13.7</td>
</tr>
<tr>
<td>Personal interest in topic or program ( (n=885) )</td>
<td>5</td>
<td>0.6</td>
<td>33</td>
<td>3.7</td>
</tr>
<tr>
<td>Opportunity to keep abreast of new developments or advancements in curriculum area ( (n=886) )</td>
<td>6</td>
<td>0.7</td>
<td>52</td>
<td>5.9</td>
</tr>
<tr>
<td>Desire to increase teaching competence and proficiency ( (n=886) )</td>
<td>10</td>
<td>1.1</td>
<td>38</td>
<td>4.3</td>
</tr>
<tr>
<td>Desire to demonstrate commitment to teaching profession ( (n=886) )</td>
<td>81</td>
<td>9.1</td>
<td>183</td>
<td>20.6</td>
</tr>
<tr>
<td>Opportunity to retain independent control over own professional learning ( (n=884) )</td>
<td>48</td>
<td>5.4</td>
<td>128</td>
<td>14.4</td>
</tr>
</tbody>
</table>
When ranked in descending order of means, as illustrated in Table 9, the reasons that emerged as the more powerfully motivating factors in respondents’ participation decisions were those that imply intrinsic motivation rather than motivation by extrinsic reward. Least important among the motivating reasons for participation were those associated with monetary gain (opportunity for salary advancement or other financial incentive, \(n = 885, M = 2.32, SD = 1.16\)), conformance (compliance with expectations of others, \(n = 883, M = 2.22, SD = .91\)), and formal credit gain (opportunity to earn graduate credit, \(n = 882, M = 2.06, SD = 1.13\)). The comparatively lower ranking of the last two reasons was not unexpected, given the criteria for subjects’ inclusion in the sample population, i.e., possession of permanent certification. However, financial gain was consistently ranked high among teachers’ motivating reasons by school district and PSEA interviewees, a perception not reinforced by this ranking.

Table 9: Reasons for Discretionary Participation in Professional Development Activities: Ranked by Relative Importance

<table>
<thead>
<tr>
<th>Participation Reason</th>
<th>(n)</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity to acquire new knowledge, learn new skills, or practice new teaching methods</td>
<td>886</td>
<td>3.70</td>
<td>0.53</td>
<td>1</td>
</tr>
<tr>
<td>Desire to increase teaching competence and proficiency</td>
<td>886</td>
<td>3.64</td>
<td>0.62</td>
<td>2</td>
</tr>
<tr>
<td>Personal interest in topic or program</td>
<td>885</td>
<td>3.63</td>
<td>0.34</td>
<td>3</td>
</tr>
<tr>
<td>Need to keep pace with changes in the field</td>
<td>885</td>
<td>3.57</td>
<td>0.66</td>
<td>4</td>
</tr>
<tr>
<td>Opportunity to keep abreast of new developments or advancements in curriculum area</td>
<td>886</td>
<td>3.57</td>
<td>0.64</td>
<td>5</td>
</tr>
<tr>
<td>Desire to learn through interactions with professional colleagues</td>
<td>886</td>
<td>3.26</td>
<td>0.79</td>
<td>6</td>
</tr>
<tr>
<td>Opportunity to retain independent control over own professional learning</td>
<td>884</td>
<td>3.23</td>
<td>0.89</td>
<td>7</td>
</tr>
<tr>
<td>Feeling of professional obligation</td>
<td>882</td>
<td>3.04</td>
<td>0.88</td>
<td>8</td>
</tr>
<tr>
<td>Desire to demonstrate commitment to teaching profession</td>
<td>886</td>
<td>2.98</td>
<td>0.97</td>
<td>9</td>
</tr>
<tr>
<td>Opportunity for salary advancement or other financial incentive</td>
<td>885</td>
<td>2.32</td>
<td>1.16</td>
<td>10</td>
</tr>
<tr>
<td>Compliance with expectations of others</td>
<td>883</td>
<td>2.22</td>
<td>0.91</td>
<td>11</td>
</tr>
<tr>
<td>Opportunity to earn graduate credit</td>
<td>882</td>
<td>2.06</td>
<td>1.13</td>
<td>12</td>
</tr>
</tbody>
</table>
The SDPDA items addressing the relative importance of reasons for participation did not differentiate between participation in informal and formal types of professional development activities. Attempting to associate these reasons with either format therefore was inappropriate. However, bivariate correlation procedures revealed significant associations between DP_{ttl} and all but two of the participation reasons included in the study. Table 10 presents correlation coefficients computed for each participation reason using the procedures for Pearson product-moment correlation ($r$), Spearman’s rank correlation coefficient ($r_s$), and Kendall’s rank correlation coefficient ($\vartheta$).

**Table 10: Bivariate Correlations: Total Discretionary Participation (DP_{ttl}) X Participation Reasons**

<table>
<thead>
<tr>
<th>Participation Reasons</th>
<th>$n$</th>
<th>$r$</th>
<th>$r_s$</th>
<th>$\vartheta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling of professional obligation</td>
<td>882</td>
<td>.138**</td>
<td>.133**</td>
<td>.102**</td>
</tr>
<tr>
<td>Compliance with expectations of others</td>
<td>883</td>
<td>-.012</td>
<td>-.021</td>
<td>-.016</td>
</tr>
<tr>
<td>Need to keep pace with changes in the field</td>
<td>885</td>
<td>.259**</td>
<td>.247**</td>
<td>.197**</td>
</tr>
<tr>
<td>Opportunity for salary advancement or other financial incentive</td>
<td>885</td>
<td>.055</td>
<td>.064</td>
<td>.048</td>
</tr>
<tr>
<td>Opportunity to acquire new knowledge, learn new skills, or practice new teaching methods</td>
<td>886</td>
<td>.262**</td>
<td>.248**</td>
<td>.202**</td>
</tr>
<tr>
<td>Opportunity to earn graduate credit</td>
<td>882</td>
<td>.190**</td>
<td>.191**</td>
<td>.144**</td>
</tr>
<tr>
<td>Desire to learn through interactions with professional colleagues</td>
<td>886</td>
<td>.310**</td>
<td>.294**</td>
<td>.230**</td>
</tr>
<tr>
<td>Personal interest in topic or program</td>
<td>885</td>
<td>.201**</td>
<td>.185**</td>
<td>.149**</td>
</tr>
<tr>
<td>Opportunity to keep abreast of new developments or advancements in curriculum area</td>
<td>886</td>
<td>.272**</td>
<td>.258**</td>
<td>.206**</td>
</tr>
<tr>
<td>Desire to increase teaching competence and proficiency</td>
<td>886</td>
<td>.235**</td>
<td>.227**</td>
<td>.183**</td>
</tr>
<tr>
<td>Desire to demonstrate commitment to teaching profession</td>
<td>886</td>
<td>.160**</td>
<td>.151**</td>
<td>.115**</td>
</tr>
<tr>
<td>Opportunity to retain independent control over own professional learning</td>
<td>884</td>
<td>.230**</td>
<td>.220**</td>
<td>.170**</td>
</tr>
</tbody>
</table>

Since Pearson’s $r$ is based on the premise of a linear association between the
correlated variables, both the nonparametric Spearman’s rho and Kendall’s tau-b tests were run to provide additional verification of potential correlation. Due to the exploratory nature of this study, the statistical significance of the correlation coefficients is of greater interest and importance than their magnitude. It is worth noting that two of the three least important reasons, based on the means rankings in Table 9, do not show statistically significant correlations with participation (see Table 10). However, the lowest ranking reason, opportunity to earn graduate credit, does show a significant correlation. Recalling the nature of the variables being associated, respondents rated the importance of each reason as it affected their participation decisions. Subjects who ranked the opportunity to earn graduate credit low as a reason for participation might very well show a low score as well for the proxy variable $DP_{it}$. The more consistent that association is across the sample population, the higher the correlation coefficient will be, despite the fact that the reason itself had a low ranking across the same sample population. The significance of the correlation coefficients for ten of the participation reasons included in the study suggests that the importance teachers assign to their reasons for participating in professional development activities truly is associated with their actual participation behavior.

Deterrents to Discretionary Participation

Twelve potential reasons for nonparticipation in professional development activities were posed to respondents in the SDPDA, with ordinal response categories attributing respondents’ relative importance to the reasons. Potential responses included:
1 - none (of no importance in the decision not to participate), 2 – slight (of slight importance in the decision not to participate), 3 – moderate (of moderate importance in the decision not to participate), and 4 – great (of great importance in the decision not to participate). Table 11 lists the specific nonparticipation reasons, in their SDPDA item order, with response frequencies and percentages.

**Table 11: Deterrents to Discretionary Participation in Professional Development Activities (Nonparticipation Reasons)**

<table>
<thead>
<tr>
<th>Nonparticipation Reason</th>
<th>f</th>
<th>%</th>
<th>f</th>
<th>%</th>
<th>f</th>
<th>%</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation infringes on family or leisure time (n=878)</td>
<td>81</td>
<td>9.1</td>
<td>236</td>
<td>26.6</td>
<td>288</td>
<td>32.4</td>
<td>273</td>
<td>30.7</td>
</tr>
<tr>
<td>Dislike attending programs alone (n=882)</td>
<td>476</td>
<td>53.6</td>
<td>243</td>
<td>27.4</td>
<td>131</td>
<td>14.8</td>
<td>32</td>
<td>3.6</td>
</tr>
<tr>
<td>Dislike formal courses with tests, research papers, or graded work (n=883)</td>
<td>230</td>
<td>25.9</td>
<td>259</td>
<td>29.2</td>
<td>217</td>
<td>24.4</td>
<td>177</td>
<td>19.9</td>
</tr>
<tr>
<td>Programs usually not relevant to professional development needs (n=877)</td>
<td>158</td>
<td>17.8</td>
<td>203</td>
<td>22.9</td>
<td>255</td>
<td>28.7</td>
<td>261</td>
<td>29.4</td>
</tr>
<tr>
<td>Lack energy to participate in professional development activities (n=882)</td>
<td>525</td>
<td>59.1</td>
<td>235</td>
<td>26.5</td>
<td>102</td>
<td>11.5</td>
<td>20</td>
<td>2.3</td>
</tr>
<tr>
<td>Professional development program locations often inconvenient (n=881)</td>
<td>142</td>
<td>16.0</td>
<td>313</td>
<td>35.2</td>
<td>259</td>
<td>29.2</td>
<td>167</td>
<td>18.8</td>
</tr>
<tr>
<td>Professional development program time schedules often inconvenient (n=881)</td>
<td>116</td>
<td>13.1</td>
<td>305</td>
<td>34.3</td>
<td>280</td>
<td>31.5</td>
<td>180</td>
<td>20.3</td>
</tr>
<tr>
<td>Teaching responsibilities leave little time for professional development (n=882)</td>
<td>111</td>
<td>12.5</td>
<td>270</td>
<td>30.4</td>
<td>289</td>
<td>32.5</td>
<td>212</td>
<td>23.9</td>
</tr>
<tr>
<td>Unfamiliar or uncomfortable with technologies needed for self-directed professional development (n=879)</td>
<td>521</td>
<td>58.7</td>
<td>242</td>
<td>27.3</td>
<td>90</td>
<td>10.1</td>
<td>26</td>
<td>2.9</td>
</tr>
<tr>
<td>Uncomfortable directing own informal professional development efforts (n=882)</td>
<td>636</td>
<td>71.6</td>
<td>182</td>
<td>20.5</td>
<td>55</td>
<td>6.2</td>
<td>9</td>
<td>1.0</td>
</tr>
<tr>
<td>Lack access to resources necessary for independent and self-directed professional development (n=881)</td>
<td>515</td>
<td>58.0</td>
<td>236</td>
<td>26.6</td>
<td>96</td>
<td>10.8</td>
<td>34</td>
<td>3.8</td>
</tr>
<tr>
<td>No financial incentives or other benefits that reward participation in professional development (n=882)</td>
<td>401</td>
<td>45.2</td>
<td>236</td>
<td>26.6</td>
<td>128</td>
<td>14.4</td>
<td>117</td>
<td>13.2</td>
</tr>
</tbody>
</table>
When the nonparticipation reasons are ranked in descending order of means, as illustrated in Table 12, it appears that none of the teachers’ nonparticipation reasons carry the relative weight exhibited by the reasons that motivate their participation decisions.

**Table 12: Deterrents to Discretionary Participation in Professional Development Activities: Ranked by Relative Importance**

<table>
<thead>
<tr>
<th>Nonparticipation Reason</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation infringes on family or leisure time</td>
<td>878</td>
<td>2.86</td>
<td>0.96</td>
<td>1</td>
</tr>
<tr>
<td>Programs usually not relevant to professional development needs</td>
<td>877</td>
<td>2.71</td>
<td>1.08</td>
<td>2</td>
</tr>
<tr>
<td>Teaching responsibilities leave little time for professional development</td>
<td>882</td>
<td>2.68</td>
<td>0.97</td>
<td>3</td>
</tr>
<tr>
<td>Professional development program scheduled times often inconvenient</td>
<td>881</td>
<td>2.59</td>
<td>0.96</td>
<td>4</td>
</tr>
<tr>
<td>Professional development program locations often inconvenient</td>
<td>881</td>
<td>2.51</td>
<td>0.95</td>
<td>5</td>
</tr>
<tr>
<td>Dislike formal courses with tests, research papers, or graded work</td>
<td>883</td>
<td>2.39</td>
<td>1.08</td>
<td>6</td>
</tr>
<tr>
<td>No financial incentives or other benefits that reward participation in professional development</td>
<td>882</td>
<td>1.96</td>
<td>1.06</td>
<td>7</td>
</tr>
<tr>
<td>Dislike attending programs alone</td>
<td>882</td>
<td>1.68</td>
<td>0.86</td>
<td>8</td>
</tr>
<tr>
<td>Lack access to resources necessary for independent and self-directed professional development</td>
<td>881</td>
<td>1.60</td>
<td>0.83</td>
<td>9</td>
</tr>
<tr>
<td>Lack energy to participate in professional development activities</td>
<td>882</td>
<td>1.57</td>
<td>0.78</td>
<td>10</td>
</tr>
<tr>
<td>Unfamiliar or uncomfortable with technologies needed for self-directed professional development</td>
<td>879</td>
<td>1.57</td>
<td>0.79</td>
<td>11</td>
</tr>
<tr>
<td>Uncomfortable directing own informal professional development efforts</td>
<td>882</td>
<td>1.36</td>
<td>0.65</td>
<td>12</td>
</tr>
</tbody>
</table>

On face value at least, motivating reasons appear to carry more influence than deterrent reasons in teachers’ decisions about whether or not to engage in continuing professional development activities. While none of the means in Table 12 rose to the level of an ordinal value that corresponded to moderate or great importance, five of the reasons showed mean values that approach a moderate weight. Four of the five reasons
are associated with time and convenience issues, while the remaining reason addresses teachers’ perceptions of whether or not professional development programs appear to be relevant to their self-assessed needs.

As was the case with participation reasons, the SDPDA items addressing the relative importance of nonparticipation reasons did not differentiate between informal and formal types of professional development activities with reference to nonparticipation. Although item wording, i.e., incorporating the word program, could imply an association with formal professional development programs, the study data do not support inferences about whether some nonparticipation reasons are more applicable to formal or informal types of professional development activities. Therefore any attempt to associate these nonparticipation reasons with either format would be inappropriate.

In order to determine whether associations might exist between DP\textsubscript{ttl} and reasons for nonparticipation, the researcher employed bivariate correlation procedures for Pearson product-moment correlation ($r$), Spearman’s rank correlation coefficient ($r_s$), and Kendall’s rank correlation coefficient ($\tau_b$). As was the case with participation reasons, both Spearman’s rho and Kendall’s tau-b tests were run because their usefulness with nonparametric data provided a check against the contingency that a linear association between variables, on which Pearson’s $r$ is based, might be insufficient to justify its use alone. Table 13 presents the correlation coefficients computed for each nonparticipation reason and DP\textsubscript{ttl} using the procedures cited.
Table 13: Bivariate Correlations: Total Discretionary Participation (DP<sub>ttl</sub>) X Nonparticipation Reasons

<table>
<thead>
<tr>
<th>Nonparticipation Reason</th>
<th>n</th>
<th>r</th>
<th>( \rho )</th>
<th>( \theta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation infringes on family or leisure time</td>
<td>878</td>
<td>-.105**</td>
<td>-.097**</td>
<td>-.073**</td>
</tr>
<tr>
<td>Dislike attending programs alone</td>
<td>882</td>
<td>-.141**</td>
<td>-.152**</td>
<td>-.118**</td>
</tr>
<tr>
<td>Dislike formal courses with tests, research papers, or graded work</td>
<td>883</td>
<td>-.152**</td>
<td>-.163**</td>
<td>-.121**</td>
</tr>
<tr>
<td>Programs usually not relevant to professional development needs</td>
<td>877</td>
<td>-.118**</td>
<td>-.107**</td>
<td>-.081**</td>
</tr>
<tr>
<td>Lack energy to participate in professional development activities</td>
<td>882</td>
<td>-.163**</td>
<td>-.161**</td>
<td>-.126**</td>
</tr>
<tr>
<td>Professional development program locations often inconvenient</td>
<td>881</td>
<td>-.131**</td>
<td>-.132**</td>
<td>-.100**</td>
</tr>
<tr>
<td>Professional development program scheduled times often inconvenient</td>
<td>881</td>
<td>-.155**</td>
<td>-.152**</td>
<td>-.115**</td>
</tr>
<tr>
<td>Teaching responsibilities leave little time for professional development</td>
<td>882</td>
<td>-.140**</td>
<td>-.140**</td>
<td>-.105**</td>
</tr>
<tr>
<td>Unfamiliar or uncomfortable with technologies needed for self-directed professional development</td>
<td>879</td>
<td>-.219**</td>
<td>-.225**</td>
<td>-.176**</td>
</tr>
<tr>
<td>Uncomfortable directing own informal professional development efforts</td>
<td>882</td>
<td>-.202**</td>
<td>-.205**</td>
<td>-.164**</td>
</tr>
<tr>
<td>Lack access to resources necessary for independent and self-directed professional development</td>
<td>881</td>
<td>-.187**</td>
<td>-.200**</td>
<td>-.157**</td>
</tr>
<tr>
<td>No financial incentives or other benefits that reward participation in professional development</td>
<td>882</td>
<td>-.132**</td>
<td>-.132**</td>
<td>-.101**</td>
</tr>
</tbody>
</table>

Again, because of the exploratory nature of this study, the statistical significance of the correlation coefficients is of greater interest and importance than their magnitude.

All of the nonparticipation reasons showed statistically significant associations with teachers’ total discretionary participation (DP<sub>ttl</sub>) in continuing professional development activities, even though the nonparticipation reasons (deterrents) were not rated by subjects as carrying the same weight as participation reasons (motivations). Although the ordinal values for the motivation and deterrent values were the same, the mean value for nine of the motivation reasons exceeded the highest rated (strongest) deterrent reason,
Lower weights do not imply weaker associations, however, since the correlation coefficients suggest that the associations exist and are not due to chance. Given the negative value of each coefficient in Table 13, the data suggest that the more important the deterrent reason is to the subject, the more likely it is to deter participation behavior, an observation not unexpected.

**Personal Influence on Discretionary Participation**

The instrumentation included items intended to assess the relative influence of others on respondents’ decisions about whether or not to participate in professional development activities. The SDPDA items addressed only the respondents’ perception of extrinsic influence on their decisions. No attempt was made in the specific items to differentiate the direction of influence perceived by respondents, i.e., whether perceived influence was positive (encouragement) or negative (discouragement). The SDPDA items also did not address the question of whether respondents perceived external influence to be passive or active, only differentiating between degrees of strength of the perceived influence the respondents attributed to others.

Ordinal response categories included the following assessments of perceived influence: 1 – strong influence on my participation, 2 – moderate influence on my participation, 3 – no influence on my participation, and 4 – not applicable to my situation. The sources of potential influence and the frequency distributions of subjects’ responses are presented in SDPDA item order in Table 14.
Table 14: Personal Influence on Discretionary Participation in Professional Development Activities

(N = 888)

<table>
<thead>
<tr>
<th>Potential Influencers</th>
<th>Strong</th>
<th>Moderate</th>
<th>None</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f (%)</td>
<td>f (%)</td>
<td>f (%)</td>
<td>f (%)</td>
</tr>
<tr>
<td>Spouse (n = 885)</td>
<td>159</td>
<td>17.9</td>
<td>315</td>
<td>35.5</td>
</tr>
<tr>
<td>Dependents (n = 883)</td>
<td>173</td>
<td>19.5</td>
<td>213</td>
<td>24.0</td>
</tr>
<tr>
<td>Teacher Colleagues (n = 886)</td>
<td>103</td>
<td>11.6</td>
<td>433</td>
<td>48.8</td>
</tr>
<tr>
<td>Immediate Supervisor (n = 886)</td>
<td>86</td>
<td>9.7</td>
<td>358</td>
<td>40.3</td>
</tr>
<tr>
<td>Assistant Superintendent (n = 886)</td>
<td>57</td>
<td>6.4</td>
<td>171</td>
<td>19.3</td>
</tr>
<tr>
<td>Superintendent (n = 886)</td>
<td>66</td>
<td>7.4</td>
<td>228</td>
<td>25.7</td>
</tr>
<tr>
<td>School Board Members (n = 886)</td>
<td>31</td>
<td>3.5</td>
<td>121</td>
<td>13.6</td>
</tr>
<tr>
<td>Community Constituents (n = 886)</td>
<td>28</td>
<td>3.2</td>
<td>132</td>
<td>14.9</td>
</tr>
</tbody>
</table>

When ranked according to mean ratings (see Table 15), the group of potential influencers that carries the most weight with respondents is their professional peer group.

Even the mean rating for that group, teacher colleagues, lies on the weak side of moderate influence (n = 886, M = 2.30, SD = .70). Respondents’ immediate supervisors (n = 886, M = 2.44, SD = .72), and spouses (n = 885, M = 2.46, SD = .98) show mean ratings barely below 2.5, above which the rating is closer to no influence than to moderate influence. No groups were perceived as having strong influence overall.

Table 15: Personal Influence on Discretionary Participation in Professional Development Activities – Influencers Ranked by Mean Ratings

(N = 888)

<table>
<thead>
<tr>
<th>Potential Influencers</th>
<th>n</th>
<th>Mean</th>
<th>S.D.</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Colleagues</td>
<td>886</td>
<td>2.30</td>
<td>.70</td>
<td>1</td>
</tr>
<tr>
<td>Immediate Supervisor</td>
<td>886</td>
<td>2.44</td>
<td>.72</td>
<td>2</td>
</tr>
<tr>
<td>Spouse</td>
<td>885</td>
<td>2.46</td>
<td>.98</td>
<td>3</td>
</tr>
<tr>
<td>Dependents</td>
<td>883</td>
<td>2.63</td>
<td>1.07</td>
<td>4</td>
</tr>
<tr>
<td>Superintendent</td>
<td>886</td>
<td>2.65</td>
<td>.70</td>
<td>5</td>
</tr>
<tr>
<td>Assistant Superintendent</td>
<td>884</td>
<td>2.82</td>
<td>.75</td>
<td>6</td>
</tr>
<tr>
<td>School Board Members</td>
<td>886</td>
<td>2.87</td>
<td>.58</td>
<td>7</td>
</tr>
<tr>
<td>Community Constituents</td>
<td>886</td>
<td>2.88</td>
<td>.59</td>
<td>8</td>
</tr>
</tbody>
</table>
In order to determine whether associations might exist between DP\textsubscript{ttl} and personal influence, the researcher employed bivariate correlation procedures for Pearson product-moment correlation (\(r\)), Spearman’s rank correlation coefficient (\(r_s\)), and Kendall’s rank correlation coefficient (\(\vartheta\)). As was the case with participation and nonparticipation reasons, both Spearman’s rho and Kendall’s tau-b tests were run because their usefulness with nonparametric data provided a check against the contingency that a linear association between variables, on which Pearson’s \(r\) is based, might be insufficient to justify its use alone. Before computing the correlation coefficients, the ordinal values of the response data were collapsed into two categories and assigned values corresponding to the presence or absence of the factor (influence). Response values for *strong* or *moderate* influence ratings were recoded to reflect the presence of influence, while *none* and *not applicable* response values were recoded to reflect the absence of the factor. Table 16 presents the correlation coefficients computed for each potential source of influence and DP\textsubscript{ttl} using the procedures cited above.

**Table 16: Bivariate Correlations: Total Discretionary Participation (DP\textsubscript{ttl}) X Influence of Others (recoded as presence vs. absence of the factor)**

<table>
<thead>
<tr>
<th>Source of Perceived Influence</th>
<th>(n)</th>
<th>(r)</th>
<th>(r_s)</th>
<th>(\vartheta)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse</td>
<td>885</td>
<td>.019</td>
<td>.018</td>
<td>.015</td>
</tr>
<tr>
<td>Dependents</td>
<td>883</td>
<td>-.023</td>
<td>-.027</td>
<td>-.022</td>
</tr>
<tr>
<td>Teacher Colleagues</td>
<td>886</td>
<td>.069*</td>
<td>.075*</td>
<td>.061*</td>
</tr>
<tr>
<td>Immediate Supervisor</td>
<td>886</td>
<td>.059</td>
<td>.057</td>
<td>.046</td>
</tr>
<tr>
<td>Assistant Superintendent</td>
<td>886</td>
<td>.069*</td>
<td>.073*</td>
<td>.060*</td>
</tr>
<tr>
<td>Superintendent</td>
<td>886</td>
<td>.034</td>
<td>.032</td>
<td>.026</td>
</tr>
<tr>
<td>School Board Members</td>
<td>886</td>
<td>.046</td>
<td>.050</td>
<td>.041</td>
</tr>
<tr>
<td>Community Constituents</td>
<td>886</td>
<td>.074*</td>
<td>.091**</td>
<td>.074**</td>
</tr>
</tbody>
</table>

*\(p < .05\) (2-tailed)  
**\(p < .01\) (2-tailed)
Statistically significant correlation coefficients emerged for only three groups, two of which had mean rankings suggesting that they exert virtually no influence on participation decisions across the sample population. Community constituents, ranked last in influence (n = 886, M = 2.88, SD = .59), and assistant superintendents, ranked sixth out of the eight potential sources of influence, (n = 884, M = 2.82, SD = .75), show significant associations in Table 16. Teacher colleagues, top-ranked among influencers (n = 883, M = 2.30, SD = .70), was the only other group for which significant associations surfaced. The caveat that correlation does not mean causation guides interpretation of these statistics. One highly speculative inference that could be drawn suggests that as teachers’ total discretionary participation increases, they tend to be more sensitive to or cognizant of hints of potential influence, whether or not they heed those cues or act on perceived influence.

**Demographic and Professional Correlates with Discretionary Participation**

Participation studies generally collect demographic information about research subjects. These characteristics are useful both in developing an understanding of the nature of the sample population and in identifying factors that may influence or be related to participation behavior. For the most part, the demographic and professional information requested from subjects in this research are of interest for both reasons.
Gender

As noted in the introduction to this chapter, women (n = 605) far outnumbered men (n = 282) in responding to the SDPDA from a sample that was stratified on gender. Previous research has shown mixed results on what role gender may play in differentiating participation behavior. Assuming the null hypothesis with respect to gender differences in actual professional development participation, the researcher conducted independent samples t test procedures testing gender against the three forms of discretionary participation, $\text{DP}_{\text{inf}}$, $\text{DP}_{\text{frm}}$, and $\text{DP}_{\text{ttl}}$, and found no significant differences attributable to gender across all three forms (see Table 17).

Table 17: Independent Samples t Tests- Gender vs. Discretionary Participation

<table>
<thead>
<tr>
<th>Participation Type</th>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{DP}_{\text{inf}}$</td>
<td>Female</td>
<td>604</td>
<td>2.4345</td>
<td>.4679</td>
<td>884</td>
<td>1.638</td>
<td>.102</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>282</td>
<td>2.3770</td>
<td>.5239</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\text{DP}_{\text{frm}}$</td>
<td>Female</td>
<td>503</td>
<td>1.4661</td>
<td>.5444</td>
<td>723</td>
<td>.354</td>
<td>.723</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>222</td>
<td>1.4504</td>
<td>.5629</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\text{DP}_{\text{ttl}}$</td>
<td>Female</td>
<td>605</td>
<td>3.6494</td>
<td>.9371</td>
<td>885</td>
<td>1.850</td>
<td>.065</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>282</td>
<td>3.5189</td>
<td>1.0624</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The null hypothesis is accepted for each form of discretionary participation with respect to gender.

Pennsylvania Instructional II Certificate

The sole reason for this variable’s inclusion in the SDPDA was its use as a filter to screen ineligible respondents from the sample population. During the period of time
for which teachers’ discretionary participation in professional development activities was being considered, possession of the Instructional II Certificate in Pennsylvania essentially conveyed permanent professional certification to the holder. Upon earning permanent certification, a teacher became exempt from compulsory continuing professional education requirements. With permanent certification, teachers were not compelled by legal statute or professional licensing regulation to engage in professional development activities, effectively making such participation discretionary when it was not compelled under conditions set forth in their locally negotiated professional employment contracts.

For the purposes of this research it was necessary to focus only on discretionary participation in continuing professional development. This variable and the SDPDA question associated with it enabled the researcher to include in the population sample only those research subjects whose participation could reasonably be assumed to be discretionary.

**Level of Teaching Assignment**

The setting in which teachers work, i.e., the level of their teaching assignment, was included as a variable in this study because of its potential association with discretionary participation. The presumption that professional growth differences exist among elementary school teachers, middle or junior high school teachers, high school teachers, and kindergarten through twelfth grade special subject teachers was tested by comparing reported discretionary participation by teachers in these four levels of teaching assignment. Table 18 illustrates the breakdown of teachers in the sample population
reporting their respective teaching assignments for the period under study, which included the 1998-1999 school year.

Table 18: Level of Teaching Assignment

<table>
<thead>
<tr>
<th>Group</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>410</td>
<td>46.2</td>
</tr>
<tr>
<td>Middle/Junior High</td>
<td>199</td>
<td>22.4</td>
</tr>
<tr>
<td>High School</td>
<td>260</td>
<td>29.3</td>
</tr>
<tr>
<td>K-12</td>
<td>19</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td>888</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A One-way ANOVA was conducted for each of the three types of discretionary participation, based on grouping of subjects by teaching assignment. The effect of teaching assignment was not shown to be statistically significant for any of the types of discretionary participation under study: $\text{DP}_{inf}, F(3, 883) = .746, p = .525$; $\text{DP}_{frm}, F(3, 722) = .585, p = .625$; and $\text{DP}_{ttl}, F(3, 884) = .712, p = .545$. Therefore, the null hypothesis is accepted for each form of discretionary participation with respect to teaching assignment.

Years of Experience in Teaching

Teaching experience was included as a variable in this study because of its potential association with discretionary participation. The presumption that professional growth differs with experience was tested for the three types of discretionary participation across categories reflecting teachers’ reported total years of teaching experience. Table 19 illustrates the breakdown of teachers in the sample population
reporting their respective years of experience through the end of the period under study, which included the 1998-1999 school year.

Table 19: Total Years of Experience in Teaching at the End of 1998-1999

<table>
<thead>
<tr>
<th>Group</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>27</td>
<td>3.1</td>
</tr>
<tr>
<td>6-10 years</td>
<td>122</td>
<td>13.8</td>
</tr>
<tr>
<td>11-15 years</td>
<td>101</td>
<td>11.4</td>
</tr>
<tr>
<td>16-20 years</td>
<td>112</td>
<td>12.7</td>
</tr>
<tr>
<td>21-25 years</td>
<td>186</td>
<td>21.1</td>
</tr>
<tr>
<td>26-30 years</td>
<td>235</td>
<td>26.6</td>
</tr>
<tr>
<td>Over 30 years</td>
<td>100</td>
<td>11.3</td>
</tr>
<tr>
<td>Total</td>
<td>883</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A One-way ANOVA was conducted for each of the three types of discretionary participation, based on grouping of subjects by their reported total years of teaching experience. The effect of total years of teaching assignment was not shown to be statistically significant for informal discretionary participation, $\text{DP}_{\text{inf}}: F(6, 875) = .704$, $p = .646$. However, for both formal and total discretionary participation, the effect of years of teaching experience was significant with respect to decreased participation. For $\text{DP}_{\text{frm}}$, $F(6, 714) = 9.710$, $p < .001$, and for $\text{DP}_{\text{ttl}}$, $F(6, 875) = 4.933$, $p < .001$. For the sample population studied, as the total years in experience increase, both the formal and total discretionary participation declined; however, discretionary participation in informal professional development activities does not appear to be affected in a statistically significant way by length of teaching experience. These results suggest that as their experience increases, teachers are more apt to choose informal professional development activities over formal activities. With respect to total years of teaching experience, the
null hypothesis is accepted for informal discretionary participation but rejected for both formal discretionary participation and total discretionary participation.

**Age**

Age was included as an independent variable in this study to test the common presumption in education that there is an inverse relationship between participation in professional growth activities and teacher age. Because of its potential association with discretionary participation, teacher age was tested for the three types of discretionary participation. Table 20 illustrates the age breakdown of teachers in the sample population effective January 1, 1999, the midpoint of the period under study.

*Table 20: Age on January 1, 1999*

<table>
<thead>
<tr>
<th>Group</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-30</td>
<td>40</td>
<td>4.5</td>
</tr>
<tr>
<td>31-35</td>
<td>70</td>
<td>7.9</td>
</tr>
<tr>
<td>36-40</td>
<td>76</td>
<td>8.6</td>
</tr>
<tr>
<td>41-45</td>
<td>144</td>
<td>16.3</td>
</tr>
<tr>
<td>46-50</td>
<td>272</td>
<td>30.9</td>
</tr>
<tr>
<td>Over 50</td>
<td>279</td>
<td>31.7</td>
</tr>
<tr>
<td>Total</td>
<td>881</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A One-way ANOVA, based on the grouping of subjects by their reported age, revealed that the effect of age was not statistically significant for informal discretionary participation, $\text{DP}_{\text{inf}}$: $F(5, 874) = 1.201$, $p = .307$. However, for discretionary participation in formal professional development activities and for total discretionary participation, the effect of age was significant with respect to decreased participation. For $\text{DP}_{\text{fm}}$, $F(5, 715) = 8.510$, $p < .001$, and for $\text{DP}_{\text{ttl}}$, $F(5, 875) = 4.101$, $p = .001$. 
Formal Education Attainment

The final independent variable in the category of demographic and professional characteristics, formal education attainment, appears frequently in participation studies and has been linked to continued participation behavior. By its very nature, this variable is related to professional growth because it represents the completion of formal courses for graduate credit and the attainment of advanced degrees. Ironically, formal education attainment is contingent upon participation and results from participation behavior, but is tested in this study as an independent variable with respect to participation behavior, participation that was subsequent to credit or degree completion. Table 21 presents the sample population grouped by subjects’ highest level of formal education achievement.

Table 21: Formal Education Attainment

<table>
<thead>
<tr>
<th>Group</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s degree</td>
<td>21</td>
<td>2.4</td>
</tr>
<tr>
<td>Bachelor’s + 24 graduate credits</td>
<td>200</td>
<td>22.7</td>
</tr>
<tr>
<td>Master’s equivalency</td>
<td>144</td>
<td>16.3</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>268</td>
<td>30.4</td>
</tr>
<tr>
<td>Master’s + 24 graduate credits</td>
<td>243</td>
<td>27.5</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>7</td>
<td>.8</td>
</tr>
<tr>
<td>Total</td>
<td>883</td>
<td>100.0</td>
</tr>
</tbody>
</table>

One-way ANOVA procedures conducted for the three forms of discretionary participation ($D_{inf}$, $D_{frm}$, and $D_{ttl}$) with respect to groups based on formal education attainment yielded mixed results. The effect of formal education attainment was not statistically significant for formal discretionary participation, $D_{frm}$: $F(5, 715) = .792$, $p = .556$. For discretionary participation in informal professional development activities,
however, the effect of formal education attainment associated with increased participation was significant, $DP_{inf}: F(5, 876) = 2.744, p = .018$. The effect associated with increased participation was significant for total discretionary participation, as well, $DP_{ttl}: F(5, 875) = 4.101, p = .004$.

These results suggest that, after teachers complete graduate degrees and coursework, they are more likely to engage in professional growth through participation in informal activities than through formal courses for credit or formal noncredit programs.

**Interviews for Organizational Perspective**

The researcher conducted interviews for triangulation purposes with individuals whose non-teaching oversight or supervisory roles provided organizational perspectives on teachers’ discretionary participation in continuing professional development activities. The interviewed subjects were members of one of two groups: school district administrative personnel whose responsibilities include oversight of professional development, and PSEA professional staff members whose responsibilities include the provision or promotion of continuing professional development among PSEA members.

Interview questions focused on the representatives’ perceptions regarding teachers’ discretionary participation in professional development activities, as well as organizational perspectives on participation reasons, deterrents, and the role of others’ influence. Questions also addressed the nature of each organization’s sponsored or brokered continuing professional development opportunities, the ways that organizational
expectations regarding participation are communicated to teachers, and the incentives the organizations employ to encourage teachers’ participation.

**Organizational Views on Discretionary Participation in Professional Development**

The officials interviewed for this study expressed views on teachers’ discretionary participation that closely matched the patterns reported by teachers in the sample population. Those interviewed used the same rating scale to which teachers responded on the SDPDA. The response values included: 1 = never (not at all during the specified period), 2 = yearly (once or twice during the specified period), 3 = monthly (once or twice a month during the specified period), 4 = weekly (once or twice a week during the specified period), and 5 = daily (at least once a day during the specified period). In rating teachers’ frequency of participation in informal professional development activities, the organization representatives’ six highest-ranked activities included five of those most frequently cited by teachers, although not in the same rank order.

Interviewed officials recognized participation in profession-related discussions with colleagues (including face-to-face and e-mail exchanges, and online chat room exchanges) as the informal professional development activity in which teachers most frequently engage on a discretionary basis. In fact, the interviewed officials (n = 17) estimated rates of discretionary participation in this activity (M = 4.47, SD = .72) approaching daily participation, higher even than teachers’ own reports of their involvement (n = 883, M = 4.08, SD = .99).
The interviewed officials’ perceptions also showed fairly strong agreement with teacher’s rankings of several other activities, citing them as occurring on at least a monthly basis: utilizing audiocassette, videocassette, videodisc, or CD-ROM resources related to teachers’ instructional or professional needs (M = 3.82, SD = .73) (practically weekly); conducting computer-assisted Internet or database searches related to teachers’ instructional or professional needs (M = 3.41, SD = .51); learning to use computer software related to one’s teaching or curriculum situation by receiving informal instruction or by engaging in computer-assisted self-instruction (M = 3.18, SD = .53); devising, designing, piloting, or field-testing new instructional or assessment procedures, programs, or curriculum innovations (M = 3.12, SD = .70); and reading professional journals and/or trade publications (M = 3.00, SD = .35). While the interviewed officials’ highest rated activities generally reflected teachers’ ratings, teachers did not similarly rank one activity, i.e., devising, designing, piloting, or field-testing new instructional or assessment procedures, programs, or curriculum innovations.

The interviewed officials also expressed views that closely approximated teachers’ discretionary participation in formal types of professional development activities. For most forms of formal, credit-bearing professional development activities, officials’ estimates of discretionary participation coincided with the rates of participation observed in the sample population. Those interviewed estimated that 10% to 25% of teachers meeting the criteria for inclusion in the sample population had participated in courses for graduate credit on college or university campuses; the SDPDA returns placed the actual figure within the sample population at 19%. Likewise, the expected figure for
participation in courses for graduate credit at off-campus locations closely approximated the rate observed in the sample population; the officials’ estimate of 10% to 25% encompassed the reported rate of 17%.

Officials’ estimates of discretionary participation in credit-bearing PDE inservice and continuing education programs also showed fairly high accuracy, with the interviewed officials’ estimate of 10% to 25% of teachers participating annually encompassing the observed figure, 14%. The only credit-bearing activity for which officials’ estimates did not approximate the observed figure of participation was for teachers’ involvement in formal courses through distance education. Interviewed officials estimated the figure between 10% and 25% yearly, but the observed rate of discretionary participation within the questionnaire sample emerged as only 2%.

The accuracy of officials’ estimates of participation in credit-bearing professional development activities may be tied, at least in part, to two financial incentives offered by many school districts. The practice of reimbursing teachers for costs they incur in completing graduate courses generally requires that teachers submit documentation of their successful completion of eligible course work. Likewise, documentation of course completion generally is required for graduate credits to be counted in teachers’ lateral movement across salary schedules. Both of these practices were cited as incentives offered within the school districts represented among the interviewed officials, so their accurate assessment of teachers’ discretionary participation in formal courses for credit is a likely result of their ability to monitor such participation. In most instances, however, distance education courses were not eligible for reimbursement unless such courses were
required components within an advanced degree program, a condition that might give rise to the discrepancy in estimation by the interviewed officials.

Officials’ estimates of teachers’ discretionary participation in formal noncredit forms of professional development failed to match the accuracy of their estimates of participation in courses for graduate credit. In general, school district and PSEA officials underestimated the levels of teachers’ participation in noncredit inservice or continuing education programs, and in seminars, workshops, conferences and other training experiences. Those interviewed estimated teachers’ annual discretionary participation in noncredit inservice or continuing education programs in the range of 10% to 25%; teachers’ actual participation reported through the SDPDA was 38.5%. And while school district and PSEA officials placed the figure reflecting teachers participation in seminars, workshops, conferences, and other training experiences higher (25% to 50%), the participation rate reported through SDPDA returns reached 67%.

Organizational Views Regarding Influences on Discretionary Participation in Professional Development

Interviewed officials’ rankings of relative importance of reasons for, deterrents to, and sources of personal influence on teachers’ discretionary participation reveal organizational perceptions that differ from those expressed from the teachers’ perspective. Discrepancies in the rankings of each category of influence revealed some views that appear to be nearly diametrically opposed.
Reasons for Discretionary Participation

Table 22 illustrates the discrepancies between the perceived importance of reasons for participation (motivations) as viewed by the school district and PSEA officials interviewed for this study and as reported by teachers responding to the SDPDA. While two of the three participation reasons top-ranked by the interviewed officials placed among the top three reasons cited by teachers in this study, the officials’ overrated the motivating influence of the opportunity for teachers to earn graduate credit.

*Table 22: Relative Importance Rankings of Reasons for Discretionary Participation in Professional Development Activities: Teachers Vs. School District and PSEA Officials*

<table>
<thead>
<tr>
<th>Participation Reason (Motivation)</th>
<th>Ranking by District &amp; PSEA Officials (N=17)</th>
<th>Ranking by Teachers (N=888)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal interest in topic or program</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Opportunity to earn graduate credit</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Desire to increase teaching competence and proficiency</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Desire to learn through interactions with professional colleagues</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Opportunity for salary advancement or other financial incentive</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Opportunity to keep abreast of new developments or advancements in curriculum area</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Opportunity to acquire new knowledge, learn new skills, or practice new teaching methods</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Feeling of professional obligation</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Compliance with expectations of others</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Desire to demonstrate commitment to teaching profession</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Opportunity to retain independent control over own professional learning</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Need to keep pace with changes in the field</td>
<td>12</td>
<td>4</td>
</tr>
</tbody>
</table>

Since the teacher-subjects in this study already possessed Pennsylvania Instructional II Certificates and most already had acquired master’s degrees, the opportunity to earn additional credits may lack effectiveness as an incentive. However, the view expressed by the interviewed officials may accurately reflect the extrinsic
motivating value of graduate credits to teachers who may lack so-called permanent
certification or advanced degrees.

Two other reasons for which the discrepancies in rankings were notable included
the opportunity to acquire new knowledge, learn new skills, or practice new teaching
methods, and the need to keep pace with changes in the field. Teachers’ rankings of both
factors among their four most important participation reasons suggest that such intrinsic
motivations are not so easily perceived by school district and PSEA officials, whose
rankings of these factors placed both in the bottom half of their ordered list.

Deterrents to Discretionary Participation

The discrepancies between the importance rankings of nonparticipation reasons
(deterrents) (Table 23) were even more striking than those observed for participation
reasons. As illustrated in Table 23, school district and PSEA officials shared the same
view of the role of family and leisure time as a deterrent influence on discretionary
participation as was expressed by teachers in the study. Both the SDPDA respondents
and the interviewed officials cited the perception of participation as an infringement on
family and leisure time as the strongest reason for nonparticipation in professional
development activities. Beyond that, however, perceptions again diverged considerably.

As Table 23 shows, the interviewed officials expressed clearly different
perspectives on deterrents than those held by the teachers in this study. The second,
third, and fourth most important nonparticipation reasons expressed by teachers fell
among the four least compelling nonparticipation reasons as seen by the interviewed
officials. Furthermore, two of the top three nonparticipation reasons cited by the interviewed officials ranked among the bottom four nonparticipation reasons expressed by SDPDA respondents.

Table 23: Relative Importance Rankings of Reasons for Discretionary Nonparticipation in Professional Development Activities: Teachers vs. School District/PSEA Officials

<table>
<thead>
<tr>
<th>Nonparticipation Reason (Deterrent)</th>
<th>Ranking by District &amp; PSEA Officials (N=17)</th>
<th>Ranking by Teachers (N=888)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation infringes on family or leisure time</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lack access to resources necessary for independent and self-directed professional development</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Uncomfortable directing own informal professional development</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>No financial incentives or other benefits that reward participation in professional development</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Unfamiliar or uncomfortable with technologies needed for self-directed professional development</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Dislike formal courses with tests, research papers, or graded work</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Professional development program locations often inconvenient</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Dislike attending programs alone</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Teaching responsibilities leave little time for professional development</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Professional development program scheduled times often inconvenient</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Programs usually not relevant to professional development needs</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Lack energy to participate in professional development activities</td>
<td>12</td>
<td>10</td>
</tr>
</tbody>
</table>

Aside from infringement on family and leisure time, the interviewed officials perceived teachers’ greatest participation deterents to revolve around issues of access to resources, the use of technology, incentives to encourage participation, and teachers’ self-direction. In contrast, teachers’ other major deterrents revolve around issues of time for participation, convenience, and the relevance of programs to their perceived needs.
Personal Influence on Discretionary Participation

Considering the role of others’ influence on teachers’ discretionary participation in professional development activities, the interviewed officials again showed some agreement in perception, but also some sharp contrasts. Table 24 contrasts each group’s rankings of the impact of potential influencers on teachers’ participation.

Table 24: Relative Rankings of Personal Influence on Discretionary Participation in Professional Development Activities: Teachers vs. School District/PSEA Officials

<table>
<thead>
<tr>
<th>Potential Influencers</th>
<th>Ranking by District &amp; PSEA Officials (N=17)</th>
<th>Ranking by Teachers (N=888)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Supervisor</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Assistant Superintendent</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Superintendent</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Teacher Colleagues</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Dependents</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Spouse</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>School Board Members</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Community Constituents</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

While the immediate supervisor was acknowledged by both groups as one of the two most significant sources of personal influence on participation decisions, school district and PSEA officials did not perceive the role of peer influence to be as strong as did teachers themselves. In addition, the interviewed officials appeared to overestimate the impact of influence by both superintendents and their assistants.
Options, Expectations, and Incentives for Teachers’ Participation

Participation Options

Based on the results of the interviews conducted with school district and PSEA officials, teachers’ options for discretionary participation in continuing professional development activities are frequently broad and varied. Under Pennsylvania’s Act 178 plan options in effect during the period covered by this research, all of the school district officials reported that their local Act 178 Plans included and recognized the following: professionally-related graduate level course work, professionally-related Master’s Degree, PDE-approved inservice, attendance at professional conferences, inservice/staff development, induction support teacher, mini-grants, in-district and out-of-district professional development presentations, and peer interaction and coaching.

Most districts also included curriculum development work and supervised classroom observations of other professional employees (peers) in their local Act 178 Plan options. A number of plans also included collegial study groups, community relations activities, and grant writing, and several officials cited the inclusion of professional leadership, professional reading, publication, research, and textbook selection in their local plans. A few plans recognized teachers’ personally designed options or independent study, but none of the plans included travel as an approved professional development option.

The PSEA officials interviewed for this study shared somewhat different perspectives on the continuing professional development options made available to
members through the organization’s direct sponsorship or through brokering arrangements with third-party providers. Although the interviewed officials did not express unanimity, a number of options were reportedly available through direct PSEA sponsorship, or brokered to members through a limited number of providers with which the Association has cooperated on a long-term basis. Among the options cited were: professionally-related graduate level course work, professionally-related Master’s Degree programs, PDE-approved inservice, professional conferences, inservice/staff development, collegial study groups, community relations activities, grant writing, mini-grants, serving as induction support teacher, peer interaction/coaching, opportunities to make professional development presentations, professional leadership opportunities, professional reading, publication opportunities, research, educational travel, and personally designed options including independent study.

Communication of expectations

Responding to open-ended questions about how their professional development expectations are conveyed by school districts and PSEA to teachers, the officials interviewed for this study sounded similar themes. School districts and PSEA rely on written or printed communications as well as a variety of formal and informal methods of verbal contact. Virtually all representatives cited various forms of published newsletters and general purpose memoranda their organizations utilized to remind teachers about certification regulations and contractual obligations; the same vehicles are used to convey information about professional growth opportunities sponsored, promoted, or favored by
the respective organizations. Several district officials also cited building-level newsletters utilized for the same purposes. Although not mentioned as a universally employed method, written expectations for participation in professional development activities may be communicated to individual teachers in conjunction with districts’ procedures for annual observation and evaluation, or through personal memos from administrative personnel.

District and building level meetings are used broadly to convey general expectations according to school district officials. Immediate supervisors tend to rely on informal discussions and individual consultations to verbally convey their professional development expectations to teachers. The more formal context of the post-observation conference also was cited as an opportunity to share expectations with teachers. To address specific professional development needs of individual teachers (as perceived by administrators), school district officials generally preferred to utilize appropriate administrative personnel to convey expectations orally and on a personal level.

Incentives for Participation

All of the school district officials cited financial incentives as a primary means of motivating teachers to engage in professional development activities on a discretionary basis. Financial incentives typically focused on the completion of formal, quantifiable continuing professional education, most notably college or university graduate courses for credit. Salary advancement through movement across a negotiated salary schedule was the universal incentive mentioned in all interviews.
Interviewed officials also cited other financial incentives, including payment of registration fees and costs of attendance, or at least partial reimbursement for these expenses. In general, these incentives applied to formal professional development activities. Supplemental and summer pay is utilized frequently by districts for more informal professional development activities, such as those relating to curriculum development and learning about technology utilization.

Nonfinancial incentives employed in the school districts represented by the interviewed officials included released time, compensatory time, and flex time for teachers participating in professional development activities. Representatives who described their districts as being beset by financial constraints frequently mentioned time-related incentives. Taking a different approach, least one district had adopted a policy of promotion from within for teachers whose discretionary professional development efforts include the pursuit of education administration as a career choice.

Incentives for discretionary participation in informal professional development activities, as reported by the officials interviewed for this study, generally are nonfinancial in nature. Various forms of scheduled or structured collegial sharing time dominated this type of incentive. Examples cited included professional read-and-discuss groups, breakfast discussions, sharing time, collaborative planning time, and flex time for individualized independent self-directed professional development activities.
Summary

A mailing to a stratified random sample of 2,450 Pennsylvania public school teachers yielded 888 usable survey questionnaires. Virtually all of the respondents reported discretionary participation in some form of continuing professional development activity during the previous school year. Paired-samples t-testing revealed that discretionary participation in informal professional development activities was significantly greater than for formal types of professional growth. Over 90% of respondents reported weekly participation in informal activities.

Teachers expressed reasons for participation more often associated with intrinsic motivation than with a response to extrinsic rewards. Bivariate correlation procedures confirmed that the importance teachers attach to their reasons for participation is associated with their actual participation behavior. Motivating reasons appeared to carry greater influence on actual participation than did deterrents to participation. Teachers attached somewhat less importance to their reasons for nonparticipation, which most often were associated with issues related to time, convenience, and perceptions of program relevance to their personal professional development needs. The role of others’ influence on teachers’ participation decisions was minimal, with only their professional peers wielding influence that approached the level described as moderate.

No significant differences in teachers’ reported discretionary participation were attributable to gender or level of teaching assignment. Mixed results, however, emerged for the characteristics of experience, age, and formal education attainment. One-way ANOVA results revealed that the effects of age and years of experience were significant
in association with teachers’ decreasing discretionary participation in formal professional
development activities and for their total discretionary participation in professional
development activities, but not for their discretionary participation in informal
professional development activities. The effect of formal education attainment was
significant with respect to teachers’ increased discretionary participation in both informal
professional development activities and total discretionary participation, but not for their
discretionary participation in formal professional development activities.

Interviews conducted with school district and professional association
representatives revealed that these officials held overall perceptions that accurately
reflected teachers’ actual discretionary participation behaviors in informal and formal
professional development activities. The greatest discrepancies emerged with respect to
officials’ moderate underestimation of teachers’ discretionary participation in formal,
noncredit professional development activities and severe overestimation of teachers’
utilization of distance education in their discretionary pursuit of continuing professional
growth.

Greater discrepancies emerged from the interviews with school district and PSEA
officials with respect to their perceptions about influences on teachers’ discretionary
participation in professional development activities. In general, those interviewed
attributed greater importance to extrinsic rewards and financial incentives than did
teachers themselves. Those interviewed also overestimated the deterrent influence on
teachers’ participation imposed by a lack of access to learning resources, technologies,
and financial incentives; they also underestimated the impact of time and inconvenience constraints and perceived program irrelevance as deterrents to discretionary participation.

Finally, while recognizing the impact of teachers’ immediate supervisors as somewhat influential in the realm of teachers’ participation decisions, the interviewed officials overestimated the influence of high-ranking administrators, and underestimated the influence of teachers’ professional peers.
Chapter 5

SUMMARY AND CONCLUSIONS

Introduction

Teachers’ participation in continuing professional development has attracted considerable attention within the context of national educational reform efforts. As professionals, teachers are subject to societal expectations of competence and proficiency in which career-long learning is a requisite component. Legislative and public policy initiatives to encourage, if not mandate, professional growth recently have been enacted and implemented in Pennsylvania. This study was initiated just prior to the enactment of such legislation, which effectively eliminated the concept of permanent certification for Pennsylvania’s public school teachers. A question central to this educational reform effort, and germane to this research, asks, “What do public school teachers do about their own professional growth when they are not under a mandate to do anything?”

This chapter presents a summary and discussion of the study’s research context and major findings, and suggests considerations for future research.
Summary and Discussion of Research

Problem

Teachers’ continuing professional development activities have become a central issue in national efforts to reform and improve public education. Much of the existing body of research relating to the professional development activities of teachers has dealt with staff development that is administered in the form of inservice programs, the purpose of which is the advancement of institutional training goals. Outside the context of staff development, research on teachers’ participation in professional growth activities has focused primarily on their pursuit of graduate education and involvement in formal, other-directed, didactic programs.

More recently, attention to teachers’ continuing professional growth has expanded to include a broader spectrum of activities that incorporate informal learning methods, including teachers’ collaborative and self-directed activities. Such a comprehensive perspective is essential to the development of an understanding of teachers’ professional growth because it encompasses participation across the full spectrum of professional learning experiences in which they choose to engage on a discretionary basis. So that teachers’ participation in continuing professional development activities may be optimally encouraged, supported, and facilitated, an understanding of the discretionary context of their participation also must include some knowledge of the reasons underlying participation or nonparticipation decisions, and of the factors that may enhance or inhibit their discretionary participation. Such an understanding of public
school teachers’ continuing professional development needs and practices requires a 
broad conceptualization of the kinds of learning activities through which teachers pursue 
professional knowledge, competence, and proficiency.

The problem underlying the current research context stems from the prevailing 
perception of teachers’ participation in continuing professional development activity. 
The typical participation research preoccupation with formal didactic continuing 
professional education programs has failed to capture the full scope and substance of 
teachers’ actual discretionary involvement in profession-related learning or the rationale 
underlying their discretionary participation. Consequently, past research also has failed 
to yield comprehensive empirical information about teachers’ actual discretionary 
participation in professional development activities that span all activity formats and 
learning modalities.

**Purpose**

The purpose of this research was to contribute to a greater understanding of the 
nature of, and reasons underlying, teachers’ discretionary participation in continuing 
professional development activities. Achieving this purpose was contingent upon the 
collection of empirical data about public school teachers’ actual engagement in 
discretionary participation in nonmandatory self-directed, other-directed, and 
collaborative continuing professional development activities, and about the factors that 
influence the context of participation decisions.
Sample

For the purposes of this research, teachers who met all of the following criteria comprised the defined population: membership in the Pennsylvania State Education Association (PSEA) (N=147,000); possession of Instructional II Certificates as of September 1, 1998; employment as a full-time teacher under a professional employee contract for the 1998-99 school year; and employment during the 1998-99 school year in one of the public school districts within the Commonwealth of Pennsylvania. A random sample of 2,450 PSEA members, stratified on gender, level of teaching assignment (i.e., elementary, middle/junior high school, high school, K-12), school district size, and school district wealth comprised the segment of the population targeted for receipt of a mailed questionnaire. Of the usable questionnaires returned (n = 942), 888 were from subjects (respondents) who actually met all of the population criteria specified above; these subjects were included in the analysis of data (sample: n = 888).

Using Dillman’s (1978) suggested basis for calculating survey response rates, excluding noneligible (54) and nonreachable (24) subjects from the initial sample to which the SDPDA was mailed (2,450), the 888 usable responses represent a 37.4% response. Although higher survey response rates add more predictive power to studies of this type, the exploratory nature of this research and the resource limitations inherent in its implementation make the response rate acceptable in the opinion of the researcher.

The selection of school district personnel as subjects for telephone interviews flowed from the pool of school districts employing those teachers selected to receive the mailed questionnaire. Prospective interviewees representing fifteen school districts were
selected from among the school districts that represented the approximately 2,450 teacher-subjects comprising the defined sample. The selection of PSEA professional staff members for interview purposes was based on their having responsibilities related to the provision or promotion of continuing professional development among PSEA members.

The research sample appears to be fairly representative of the greater population of public school teachers, at least in terms of those characteristics on which the stratified random sampling was based. The gender breakdown of the sample was the same as the gender composition of Pennsylvania’s population of public school teachers (32% male, 68% female) for 1998-99, the year under study (PDE, 1999e). The most recent national staffing statistics (NCES, 1995), covering the 1993-94 school year, show an even more pronounced dominance of women’s numbers in the profession, with the national population of public school teachers reported to be 27% male and 73% female in composition.

In terms of the level of subjects’ teaching assignments, ages, years of experience, and formal education attainment, direct comparison of the research sample to state and national profiles is somewhat less precise due to the variations in how data are collected and reported at those levels. The research sample’s composition of 46% elementary teachers falls between the state and national proportions. Pennsylvania’s 1998-99 elementary level teaching cohort comprised 41% (PDE, 1999e) of the population of public school teachers, with the latest national figure (1993-94) reported as 52% (NCES, 1995). State and national reports list the secondary level cohort in combined figures
(middle schools, junior high schools, and senior high schools); in Pennsylvania, secondary level teachers comprised 45% of the public school teaching force in 1998-99 (PDE, 1999e), compared to 48% nationally in 1993-94 (NCES, 1995). Secondary teachers comprised 52% of the respondents in the research sample for this study, but the base populations on which the proportions were calculated at the state and national levels treated K-12 and special category teachers separately. Educational Specialists in each teaching assignment level of the research sample were not distinguishable from their peers. Allowing for the differences in reporting formats, the research sample appears to be similar to and representative of the greater population of public school teachers on this characteristic.

Despite variations in how teachers’ ages are reported, the research sample appears to be comparable in age to the general population of public school teachers at both the state and national levels. Although the sampling and selection procedures for this study excluded teachers lacking the PA Instructional II certification, that exclusion of generally younger teachers did not skew the age distribution appreciably compared to state and national figures, although some discrepancies exist. Compared to national figures for 1993-94 (NCES, 1995), the sample had a larger cohort of teachers over age 49 (32% vs. 25%), but nearly matched the 1998-99 statewide figure for this characteristic (PDE, 1999e). In terms of teachers in the roughly 30 – 50 age group, the sample (63%) closely matched the national figure of 64% (NCES, 1995). The narrower age range for statewide figures (ages 35 – 49) yielded a lower 45%, with no indication of the magnitude of
change that might be produced by expanding the lower end of that reporting range (PDE, 1999e).

Variations in how teaching experience is reported statewide and nationally make direct comparisons to the research sample tenuous for this characteristic. Pennsylvania figures for 1998-99 report an average of nearly 17 years experience across all teaching levels (PDE, 19993), but do not break down that figure any further. The latest national figures (1993-94) show that 65% of the public school teaching population has amassed 10 or more years of full-time experience (NCES, 1995), compared to the research sample cohort of 83% with more than 10 years of experience.

In addition to reflecting a base of more experience in teaching, the research sample also appears to be comprised of teachers with higher levels of formal education attainment, which may be attributable at least in part to the exclusion from the sample base of teachers lacking the Instructional II Certificate. Nationally, 52% of teachers hold a bachelor’s degree, while 42% have earned master’s degrees (NCES, 1995). In Pennsylvania, the 1998-99 figures nearly matched the national profile, with 54% holding bachelor’s degrees and 44% having earned master’s degrees (PDE, 1999e). In contrast, the research sample reflected a composition of 41% bachelor’s degree holders, with 58% of the teachers having earned master’s degrees. In the research sample as well as statewide and nationally, no more than 1% of teachers reportedly had earned doctorates.
Instrumentation

Data in this study were drawn from three sources: the Survey of Discretionary Professional Development Activity (SDPDA) (Appendix A) completed by teachers, from telephone interviews conducted by the researcher with school district personnel (Appendix G), and from telephone interviews conducted by the researcher with PSEA professional staff members (Appendix H). The SDPDA yielded most of the data subjected to statistical analysis. Interview data supplemented the survey data and, through triangulation, provided additional perspective in the interpretation of survey results.

The SDPDA was revised and modified extensively in its evolution. In the final form mailed to the research subjects, the survey consisted of three parts. Part I of the SDPDA was comprised of 13 questions that addressed the nature and extent of subjects’ discretionary participation in formal and informal continuing professional development activities. The items in Part I of the SDPDA surveyed and measured subjects’ participation in continuing professional development activities during the yearlong period extending from July 1, 1998, through June 30, 1999, specifically focusing on participation not compelled by contractual obligation, Instructional II Certification requirements, or other statute. Subjects reported their discretionary participation in twelve types of informal self-directed or collaborative professional growth activities for which credit is not awarded. Survey respondents also reported their completion of formal, sponsored continuing professional education activities for which their involvement could be quantified in credits earned or contact hours.
Part II of the SDPDA elicited responses from teachers about factors that may have influenced their decisions about participating in professional development activities during the yearlong period from July 1, 1998 through June 30, 1999. The factors comprised three classes of independent variables: (a) reasons for participation, (b) deterrents to participation (presented in the SDPDA as reasons for nonparticipation), and (c) personal influence exerted by others on respondents’ participation decisions.

Previous research on participation reasons and deterrents guided the selection of items included in Part II questions. The content of the items addressing participation reasons question was adapted from findings of Boshier (1991), Childers (1993), Fujita-Starck (1996), Grotelueschen (1985), Grzyb (1995), Hall (1990), Jordan (1990), and Livneh and Livneh (1999), with specific item wording made relevant to teachers.

Questions addressing reasons for nonparticipation in professional development activities were patterned on previous research findings on deterrents to participation (Blais, Duquette, & Painchaud, 1989; Darkenwald, Kim, & Stowe, 1998; Fifer, et al., 1989; Hayes, 1988; Langsner, 1994; Lawrence, 1991; Martindale & Drake, 1989; Scanlan & Darkenwald, 1984).

Subjects were queried about the relative influence of primary and secondary influentials (Babchuk & Courtney, 1995) on respondents’ participation decisions. The eight classes of potential influencers were drawn from previous research on participation in continuing professional development activities (Fifer, et al., 1989; Lawrence, 1991; Singiser, 1989).

Part III of the SDPDA focused on demographic information and professional
characteristics commonly included in participation research. The structure, grouping, and order of items included in the instrument followed Dillman’s (1978) suggestions for maximizing subjects’ responses.

Findings

Virtually all of the survey respondents reported discretionary participation in some form of continuing professional development activity during the previous school year. Similar findings were obtained in a recent study conducted under the auspices of the National Center for Education Statistics (Lewis, et. al., 1999), in which 99% of respondents reported participation in continuing professional development activities.

Paired-samples t-testing revealed that discretionary participation in informal professional development activities was significantly greater than for formal types of professional growth. Over 90% of respondents reported weekly participation in informal activities, with the highest frequency ranking attributed to collaborative interactions and discussions with professional colleagues. Preferences for such collegial interactions as a preferred form of professional development have been noted in previous studies (Collinson, 1994; Lewis, et. al., 1999). In some studies the collaboration tended toward more formal or structured interactions (Doran, 1994; Hoover, 1996; Kovalcik, 1992; Potter, 1991; Potts, 1996; Renyi, 1996), while in others it was found to be informal and rooted within participants’ peer relationships (Howser, 1989; Kennedy, 1996; Little, 1989; 1993; Shafer, 1994).

Additional informal professional development activities that ranked high in
relation to others included activities that focused on learning how to use and apply 
technologies in the context of respondents’ professional responsibilities. The widespread 
effort to incorporate advancing and emerging technologies in support of instruction 
throughout all levels of public education make this finding almost expected. As noted 
below in the context of teachers’ expressed reasons for participation in professional 
development activities, teachers’ self-perceived need to keep pace with changes, 
innovations, and advancements in their fields can be attributed at least in part to 
technology issues.

Subjective comments contributed by the survey respondents give voice to the 
empirical data. One teacher offered this assessment, “I participate in graduate work, 
workshops, and conferences because I am a lifelong learner. I want to be the best teacher 
I can be. I love to learn and interact with others. I like intellectual challenges and 
thinking about teaching and learning.”

Another respondent observed, “I have spent considerable time on self-training and 
innovation in the area of technology. I work frequently with student teachers and field 
students, which brings new ideas into my teaching and helps me know if I’m on the right 
track.” Yet another respondent offered, “I like to keep current by reading journals in my 
field. Speaking to colleagues has also been a great asset to my teaching, and attending 
seminars in my field has been beneficial.”

Other comments underscored this study’s finding that teachers’ participation in 
informal professional development is significantly greater than their involvement in 
formal activities. A recurring theme expressed by many respondents suggests that formal
courses often are perceived as having little or no relevance to teachers’ daily classroom needs. One respondent offered this view, “There are very few graduate classes that have ever offered any significant value to my area of expertise.” Another respondent opined, “I attribute 99.9% of my valuable teaching training to activities outside of formal courses.” Another viewpoint shared by several teachers can be summed up in this comment, “Most graduate level courses that are available I’ve already taken. I enjoy taking courses if they offer me something, but most of them I find to be a waste of time.”

The problem of relevance and applicability in graduate courses also emerged in this secondary educator’s observation, “I find many of the graduate classes I take focus on elementary age students and don’t apply to high school students. When I ask for a specific example for students of high school age, the professor can’t give one.” Similar sentiments do not appear to plague noncredit workshops, seminars, and conferences, which frequently are received favorably. According to one respondent, “Conferences continue to be the most valuable means of continuing my professional development. The same cannot be said for credit and noncredit course work available through local colleges and universities.” Another survey respondent shared the view that “Noncredit professional conferences are some of the best ways to stay on top of the new technologies and materials available to teachers,” while a colleague shared that, “I like to attend workshops that pertain to my specific teaching needs, i.e., hands-on classroom-use experiences.”

Still other teachers endorsed intermediate unit programs, as this comment indicates: “IU credits have proved to be more beneficial courses than college credits.”
They are relevant and, though they do require extra work, they do not place heavy demands on time. I have used more that I learned from IU courses than [from] any college course I took.”

The value of formal noncredit professional development for many teachers appears to be tied to collegial interaction opportunities inherent in many program formats. As one respondent noted, “To improve my teaching, I look for workshops or conferences [where I can] talk with other educators. For the most part teachers are professionals who work hard to improve their teaching.” Others hold opposing views, however, as this comment indicates, “For experienced teachers, many of the workshops and courses teach us nothing new in our fields. The only recent exception relates to advances in technology.”

The popularity and perceived value of collegial interactions are captured in the comments of two respondents. “I learn more about teaching in an hour of discussion with colleagues who are similarly interested in teaching, or in reading one book related to the humanities, than in all the compulsory professional development programs put together over my 29 years. Programs fill time, not real needs.”

In terms of their motivations, teachers expressed reasons for participation more often associated with intrinsic motivation than with a response to extrinsic rewards. The opportunity to learn new skills, teaching methods, and professionally related knowledge, and the opportunity to increase their proficiency in the application of acquired knowledge, skills, and techniques were the most prevalent reasons cited by teachers.
Personal interest in the topic of the learning opportunity also appears to be a key factor in the decision to participate.

Bivariate correlation procedures confirmed that the importance teachers attach to their reasons for participation is associated with their actual participation behavior. Positive significant correlations were noted between subjects’ reported participation and the relative importance they attributed to their participation reasons. In essence, participants “vote with their feet.” The more importance they ascribe to a participation reason, the more likely they are to follow through with participation.

Motivating reasons appeared to carry greater influence on actual participation than did deterrents to participation. In general, through their objective survey responses, teachers attached somewhat less importance to their reasons for nonparticipation, which most often were associated with issues related to time, convenience, and perceptions of program relevance to their personal professional development needs. These findings are similar to those reported by others (Fifer, et. al., 1989; Langsner, 1994).

However, teachers’ subjective survey comments suggest that deterrents remain a powerful force in the participation decision context. Time and other people, particularly dependents, were mentioned frequently in respondents’ comments regarding the forces that have an impact on their discretionary participation in continuing professional development activities. Based on subjects’ objective responses, the role of others’ influence on teachers’ participation decisions was minimal, with only their professional peers wielding influence that approached the level described as moderate. This finding is consistent with those of Lewis, et. al., (1999), who also noted strong peer support for
professional development participation, particularly when collaborative endeavors were utilized in the pursuit of professional growth. However, it is hard to minimize the frequency with which subjective comments surfaced about others’ influence. Personal influence may not have emerged as a major factor in the participation decisions of the larger research sample, but for those individuals for whom personal influence is a force to be reckoned with, their subjective comments suggest that personal influence does loom large in the decision context. One respondent stated the case succinctly, “Because I have a son with disabilities, it has been hard to go back for my master’s [degree].” For others, the influence of family was just as significant. “As a teacher at the bottom of the salary scale with two children to support, I could not afford to take many graduate level courses,” according to one typical respondent. Another respondent observed, “I think many of us would love to be involved with more professional development, but considering the amount of work that goes home on a daily basis in addition to caring for children, spouse, and others, there are only so many hours in a day!”

Other respondents reported similar dilemmas. “My two five year-olds leave little time after work for earning credits,” reported one mother, whose sentiments were echoed by another, “In addition to my teaching responsibilities I am raising a two year old and a seven year old. The demands in teaching are great and so are my family demands.” Similar sentiments came from yet another teaching mother, who reported, “In 1998-99 I had a two year old and a five year old, which limited my involvement in college courses.”

Another respondent saw herself as a role model, “As educators, we have to believe in the importance of strong families. My professional development is on hold
while I raise my children.” Yet another teaching mother reflected, “I have three boys, ages 16, 14, and 9, and a husband who travels extensively in his work. This makes it very difficult to juggle my professional development activities when I want them to have success in their endeavors as well.”

For some respondents, family obligations appear to be just beginning. “The year covered by this survey was not a true representation of my participation in professional development activities. My daughter was born in March 1998 and it was my first full year juggling motherhood and teaching. I had to cut out most workshops and courses,” shared one new mother. For most, however, family influences represent a hiatus in professional development rather than a cessation of all activity. “A new baby has limited my opportunities for now in the area of professional development. I fully intend to further my education as my schedule permits,” reported another new teaching mother, whose sentiments were echoed by a colleague, “I have young children (ages one and three) and at this point I have decided to stop pursuing graduate credits; it is not a priority now. If I didn’t have children I would, no doubt, take courses every summer.”

For teaching couples, the problem may fit this respondent’s description, “I have not participated recently in continuing education because my wife stopped teaching to stay at home with our two children. My time has been consumed by coaching and part-time work to make up for her lost salary. I have no time to take classes or extra money to pay for them.”

Although deterrent conditions may appear to force teaching parents into a choice between attention to family and career, there are those who adjust by shifting to
professional development activities that can be adapted to their changing lifestyles. One survey respondent reported, “Our district has been supportive, allocating money for teachers to attend workshops. At my age and with children at home, I am comfortable with workshops and inservice programs.”

Dependent caretaker functions are implicit in many of the preceding comments. Given the traditional imbalance toward women in the performance of primary caretaker roles, the deterrent themes in these comments raise concern with respect to the current study’s finding that gender was not a significant factor influencing teachers’ discretionary professional development participation. Clearly, concerns about children and families resound in the subjective comments contributed by respondents. While it is noteworthy that women contributed 75% of the 228 subjective comments compiled from the SDPDA, and that women comprised more than two-thirds of the research sample, it also is important to qualify this study’s quantitative findings with respect to gender. Women’s caretaker functions were not tested statistically as specific deterrents to discretionary participation in this study.

School district and PSEA officials interviewed for this study concurred with teachers in the research sample in identifying infringement on family and leisure time as a leading reason for teachers’ discretionary nonparticipation in continuing professional development activities. Beyond some limited options for flex time as an approach to overcoming the deterrent influence of time and family issues, however, remedies for these impediments to professional development continue to be elusive, despite the general agreement on their relative importance.
On other matters relating to influences on teachers’ participation in professional development, discrepancies in perspective persist. School district officials did not identify a lack of relevance of professional development programs to teachers’ professional development needs as an issue that contributed to nonparticipation, but teachers ranked the lack of program relevance as the second most important reason for discretionary nonparticipation in continuing professional development.

In subjective comments, a number of respondents decried a perceived lack of meaningful professional development opportunities. In at least one case, the teacher retired at the end of the year covered by this study’s survey, citing the lack of meaningful professional development programs as influential in that decision. “Other than those I chose for myself, most professional development topics were of little or no value to me; they were chosen by others because they were convenient or available.” Other teachers expressed similar sentiments. “I want courses that will help me in my classroom. I do not want courses that require me to write papers that do not deal with my daily teaching situation.” In several instances, teachers’ comments appeared to be driven by frustration over the dearth of programs offered in their specialty. “I am a multiple disabilities support teacher. There are not many courses relating to my field.” Others shared similar views, “I teach health and physical education. Finding professional development opportunities in these areas is somewhat difficult,” a sentiment echoed by an experienced music teacher, who observed that “in the specialty areas, i.e., art, music, etc., there are not enough or any courses offered in an inservice or staff development program.”
Some teachers with significant experience opined that “Too often continuing professional education courses are redundant and irrelevant; interesting subject courses are nonexistent.” Typical was this next observation, “These programs seem to be directed at younger teachers, but with . . . over 33 years of experience, my needs are different from those of younger teachers.” Other teachers expressed frustration, as voiced by this respondent, over having “very little to say as to the professional development programs presented on inservice and flex days; most of them are of little or no value to me.” Several teachers expressed the view that PDE and universities design and offer programs driven by institutional interests, not by teachers’ needs, while some respondents simply wanted assistance in locating relevant programming, “I’d like more resources for finding out about professional development courses that would be useful or of interest.”

The emerging picture reflects a population of teachers interested in pursuing professional development opportunities they deem relevant to their needs and fitting into their professional lifestyles. As a number of survey respondents observed, “I do not have the time to take a lot of courses with tests and research papers,” and, “learning and professional growth come from taking risks and learning from mistakes, which graded college courses do not encourage. I avoid university graduate courses that require extensive time for reading texts, taking tests, and writing papers.”

The developing scenario seems well suited for the implementation of a self-managed development plan reminiscent of the model proposed by Smutz and Queeney (1990). With supportive consultation for needs assessment and with assistance in the
location of appropriate learning resources, teachers’ professional learning needs can be addressed effectively across their career span.

Support for flexible and individualized professional development plans for teachers across the career span also can be found in this study’s findings with respect to demographic and professional characteristics. While no significant differences in teachers’ reported discretionary participation were attributable to gender or level of teaching assignment, mixed results emerged for the characteristics of experience, age, and formal education attainment. Singiser (1989) and Hyduke (1990) previously noted that teachers’ participation in formal continuing professional development activities appears to be inversely related to age and experience. In this study, one-way ANOVA results revealed similar significant effects of age and years of experience for teachers’ discretionary participation in formal professional development activities and for their total discretionary participation in professional development activities, but not for their discretionary participation in informal professional development activities. The effect of formal education attainment was significant with respect to teachers’ increased discretionary participation in both informal professional development activities and total discretionary participation, but not for their discretionary participation in formal professional development activities. These results suggest that the format of professional learning experiences may well vary in appropriateness and effectiveness throughout the span of one’s career. A consultation model such as Smutz and Queeney’s (1990) self-managed development plan would be applicable to the diversity of educators’ learning needs and adaptable to the dynamic changes that occur across the career span.
Some additional noteworthy findings from this research emerged in the interviews conducted with school district and professional association representatives. These interviews revealed that school district and PSEA officials held fairly accurate overall perceptions of teachers’ actual discretionary participation behaviors in informal and formal professional development activities, but some discrepancies did exist. The greatest discrepancies emerged with respect to officials’ moderate underestimation of teachers’ discretionary participation in formal, noncredit professional development activities and their severe overestimation of teachers’ utilization of distance education in the discretionary pursuit of continuing professional growth. In planning for the provision and implementation of professional development opportunities, it is critically important to have accurate information about the most effective vehicles for program delivery. Program planners need to focus on those formats favored by teachers. Program planners also need to continue to raise teachers’ awareness of, and comfort with, alternative formats that may enhance professionals’ learning in formal and informal settings, and in self-directed, collaborative, and other-directed delivery models.

With respect to school district and PSEA officials’ perceptions about influences on teachers’ discretionary participation in professional development activities, the interviews conducted in this study exposed a number of discrepancies compared to the survey-based profile of the research sample. In general, those interviewed attributed greater importance to extrinsic rewards and financial incentives than did teachers themselves. Those interviewed also overestimated the deterrent influence on teachers’ participation imposed by a lack of access to learning resources, technologies, and
financial incentives; they also underestimated the impact of time and inconvenience constraints and perceived program irrelevance as deterrents to discretionary participation.

Finally, while recognizing the impact of teachers’ immediate supervisors as somewhat influential in the realm of teachers’ participation decisions, the interviewed officials overestimated the influence of high-ranking administrators, and underestimated the influence of teachers’ professional peers. This finding has important implications in the context of encouraging and facilitating teachers’ discretionary participation in professional growth activities. By capitalizing on the strength of teachers’ collegial relationships and their preferences for collaborative learning, more effective promotion of discretionary participation in continuing professional development activities may be achieved. In addition, minimizing the perception of “top-down” participation pressure may help to reduce participation resistance in those cases where such reluctance exists.

**Significance of the Study**

Perhaps the most significant contributions of this research lie in the documentation of teachers’ discretionary participation in informal continuing professional development activities. Related to this documentation is the finding that teachers at mid-career and beyond do not stop pursuing professional growth on a discretionary basis, but shift their focus to more informal, personally relevant activities suited to self-directed independent and collaborative learning. The preference noted for activities of an informal nature, rather than for formal credit-bearing graduate courses, underscores the need for the development of credible, high quality, personalized
professional development accessible to teachers and adaptable to a variety of time constraints.

Within the context of Pennsylvania’s new regulations governing mandatory continuing professional development for educators, Act 48 of 1999, this study’s findings argue for the adaptation of existing performance models of continuing professional development to the current and future landscape of teachers’ career-long professional growth. Given the extent of informal professional development documented by these findings and teachers’ significantly greater discretionary participation in informal versus formal activities, local school district planners charged with Act 48 implementation ought to consider a full range of alternative opportunities for meaningful professional development. An over-reliance on strictly formal activities might serve new and early-career teachers, but mid-career and late-career teachers’ professional development needs might be better served through self-managed development options (Smutz & Queeney, 1990).

Another important finding addressable within the context of local Act 48 implementation is the apparent discrepancy that may persist in many districts between teachers’ and administrators’ perceptions of teachers’ professional development needs and the factors that influence teachers’ participation decisions. Facilitating teachers’ discretionary participation through a greater awareness of and sensitivity to motivating and deterring conditions has implications for the quality of participation and the outcomes of professional development activities. The desired outcomes of professional learning experiences are more likely to be internalized and transferred into daily practice.
if the content of those learning experiences is perceived by participating teachers to be valid, meaningful, and relevant to their particular teaching situation. Besides attending to program content, program planners and sponsors might also try to minimize deterring conditions, such as time constraints imposed by competing professional and lifestyle responsibilities, as a means of maximizing participants’ ability to focus on the learning experience itself. For example, if making time for professional development is not solely the responsibility of participants, but instead facilitated through district-sanctioned released-time, the result may be more reflective learning and greater acquisition, retention, and application of the content of professional development activities.

The strong similarities between the characteristics of the research sample and those of the population of public school teachers combined with the moderate but respectable response rate suggest that these research results reflect views that pervade the teaching profession. As the predominant professional association representing these teachers in Pennsylvania, PSEA’s role in a continuing professional development performance model such as the Practice-Audit Model (Lindsay, Queeney, & Smutz, 1981) seems natural.

**Conclusions**

Among the most important conclusions of this research is the documentation of the importance attributed by teachers to their professional development through independent learning that incorporates informal self-directed and collaborative learning activities. Underscoring this conclusion is the apparent preference of experienced
teachers for these nonformal activities in contrast to the formal, structured, didactic and other-directed methods of professional learning that have dominated continuing professional education. The full spectrum of professionals’ learning needs demands that all types of formats of programs, activities, and learning experiences be represented in professional development opportunities.

Teachers’ intrinsic motivations and extrinsic time constraints represent areas in need of acknowledgment and attention. These are not new themes, but their re-emergence and reinforcement in the current study suggest that new ways be found to capitalize on the intrinsic motivations and to overcome, or at least reduce, deterrent influences. The variety of time-related constraints represents an especially significant area of unresolved challenge that calls for creative solutions.

In contrast to previous research findings (Hyduke, 1990; Singiser, 1989), this study demonstrated that teachers’ participation in continuing professional development does not necessarily decline with age and years of experience; instead, the characteristics of their participation change. In order to encourage professional learning throughout each teacher’s career, different approaches must be invoked to meet individuals’ needs. This study’s results suggest that one size does not fit all.

Given the correlations noted in this study between reasons, deterrents, personal influence, and participation, it is apparent that – as a group - teachers mean what they say about reasons for, deterrents to, and influences on participation. More importantly, though, their behaviors appear to corroborate what they say about their reasons for, deterrents to, influences on participation. Teachers’ participation preferences suggest that
they are drawn to activities and topics for which they can see value, utility, and ease of
application. More collegial sharing opportunities are needed through which teachers can
confirm these desirable attributes of professional development experiences through the
endorsement of professional peers.

The conceptualization of discretionary participation underlying the current study
is rooted in individual decision-making, even though elements of the decision or learning
context (including compulsion by legislation, policy, or other regulation) may make
participation less than truly voluntary. At its core, discretionary participation is
contingent upon an individual’s judgments about the respective value and relative
importance of a range of internal personal issues and a variety of external factors.
External factors may include participation options, potential consequences and
implications of participation, perceptions of the expectations held by others, and a
valuing of conformance to the expectations of others. In addition to subjective norms,
personal attitudes toward programs or learning options also strongly influence
participation decisions. Ultimately, the discretion of individuals to choose whether or not
to participate in continuing professional development activities resides in their internal
locus of control and is an expression of personal choice. Garrison (1992) noted the
critical importance of an internal locus of control in self-directed learning, the primary
and preferred learning modality of professionals (Knox & McLeish, 1989; McLaughlin,

This research focused on teachers for whom participation in non-contractual
professional development was not required at the time the study was conducted. It
established that even experienced teachers with many years of service and considerable formal education continue to pursue professional growth opportunities without external compulsion. Although they may prefer informal self-directed and collaborative learning experiences that represent departures from traditional staff development programs and courses for college credit, their endeavors still are driven by intrinsic desires to stay “ahead of the curve” in the pursuit of professional competence and proficiency. It seems reasonable to conclude that these traits do not simply appear in educators as they approach retirement age. It is more likely that even inexperienced teachers possess these traits, which may be nurtured and developed throughout the career span.

As an outgrowth of this study, and in the context of the provisions of Pennsylvania’s recently enacted Act 48 of 1999, this researcher recommends several courses of action for school districts. Underlying these action recommendations is the concept of discretionary participation as described in this research, and the recognition of individuality and self-determination, two fundamental characteristics of professionals that have been long ignored in the context of teachers’ continuing professional development (Marczely, 1996).

Working through the local professional development planning committees mandated under Act 48, school districts should expand teachers’ options for professional development beyond the Act’s basic provisions for formal collegiate studies, continuing professional education courses, and inservice programs. Recognizing that teachers frequently engage in a significant amount of informal self-directed and collaborative professional learning, districts should act to recognize, legitimate, and facilitate these
ongoing experiences by including provisions for them in the formulation of their Act 48-mandated professional development plans.

An important component for inclusion in districts’ professional development plans is a self-managed professional development option. While such an option would not be immediately appropriate for every teacher, it is highly appropriate self-motivated and intellectually mature teachers who are capable of fairly accurate self-assessment of their professional learning needs. The self-managed professional development option could easily be adapted to varying levels of teacher autonomy and administrative intervention. Minimal adaptations to the Act 48 documentation process (for hours of involvement/credits earned) would permit substantiation of informal self-managed initiatives through the inclusion of brief goal or rationale statements, identification of intended activities, and provision for the evaluation of outcomes.

Incorporation of a self-managed option requires a commitment to trust and support teachers’ self-direction, but it does not necessitate a completely hands-off approach with respect to administration. Inexperienced teachers or those who need assistance to become better teachers (Marczely, 1996) certainly would not be appropriate candidates for this option. The key to its appropriate utilization and ultimate effectiveness lies in the critical role of needs assessment. As noted by Smutz and Queeney (1990), consultative support for ongoing personal needs assessment would be most desirable under any plan of self-managed professional development. Such consultative support may be secured through the administrative supervision process, peer consultation and review, resources and personnel from professional organizations, the
state Department of Education, college faculty and staff, private consultants in human resource development, or any combination of these resources.

Teachers’ personal professional development needs do not supersede institutional professional development needs, nor should they be subordinate to institutional needs. Professional development plans and institutional programs can, and should, integrate both agendas. For administrators, the challenge becomes one of monitoring both institutional and personal professional development needs. In this context, environmental scanning takes on added importance as a tool for institutional needs assessment, utilizing input not only from the Act 48 planning committee, but also from focus groups and individuals throughout all levels of the district.

There are other initiatives that administrators should consider in their efforts to make professional development a powerful force for school improvement and teacher growth. First, district administrators must engage in individual and coordinated efforts to convey and elaborate district goals for professional development so that these goals may be viewed both as options and idea generators with respect to self-managed professional development. Second, administrators must cultivate a culture of expectation within the district that leaves no doubt about how the district values professional development that is both relevant and meaningful for all teachers. Third, administrators must exert individual leadership and be open to shared responsibilities for establishing and nurturing collegial learning opportunities within departments, within buildings, and across entire districts.
For school districts and their leaders, consideration of a number of structural adaptations may be needed and appropriate. Priority should be given to the development of practical and flexible alternatives to traditional inservice and staff development programs that permit the utilization or trading of contractual time for documented individualized professional development activities. In addition, district resources should be invested in accessing and disseminating as much information as possible on conferences, seminars, and workshops that offer relevant, practical strategies and meaningful focused outcomes that teachers may readily implement in their classrooms. Such an investment is likely to require the released time and financial support for teachers to participate in these opportunities. Consideration should be given to forming or joining a consortium with other districts or school entities to capitalize on the sharing of costs and resources in this regard.

To maximize the benefits to be realized from districts’ investments in teachers’ professional development participation, each district must explore and utilize the most appropriate and expedient ways for teachers to share their professional learning experiences, and the implementation thereof, with their colleagues and supervisors. It goes without saying that the traditional written conference report falls far short in this regard. The findings of this and other studies regarding the importance of collegial sharing underscore the desirability of bringing teachers together to learn from one another.

Finally, fundamental change is needed in addressing the time, family, and convenience constraints that pose deterrents to teachers’ participation in continuing
professional development activities. School districts need to utilize existing and developing technologies to make real-time and off-line professional learning opportunities readily available and accessible to all teachers at times and locations convenient to them (including in their homes). Such a shift in focus requires that distance education be accepted and promoted as a viable delivery method for professional development activities, and that priority be given to the development and provision of high quality distance learning opportunities appropriate for teachers’ professional development.

**Recommendations for Future Research**

With the documentation that teachers engage in, and may prefer, informal professional development activities comes the need to scrutinize more closely these activities. Are there differences in participation in specific informal activities that are attributable to specific demographic or professional characteristics? For example, are preferences for collaborative learning attributable to distinctive approaches to knowing and learning more typical of women than of men? Despite contentions to this effect, research aimed at documenting women’s unique ways of knowing and learning has yielded inconsistent results (Belenky, Clinchy, Goldberger & Tarule, 1986; Gilligan, 1982; Goldberg, 1993; Hayes & Flannery, 1995; 1996). Although this study did not identify significant differences in discretionary participation attributable to gender, the predominance of women in the profession and the extent of continuing professional
learning ongoing within the field might prove the field to be fertile ground for exploring alternative ways of knowing and learning.

Another gender-related topic for further study was raised earlier in this chapter. The traditional imbalance toward women in the performance of primary dependent caretaker roles, and the deterrent themes implicit in female respondents’ subjective comments contributed to this study, suggest that further empirical testing is in order to establish definitively what effects, if any, gender and dependent caretaker functions exert on discretionary participation in professional development.

Do significant participation differences exist among other population subgroups with respect to specific formal and informal activities? This study found some differences between discretionary participation in formal activities, informal activities, and the total of all activities. More scrutiny of participation is needed to answer questions about whether or not participation preferences may be discerned within certain types of activities, as well as confirming the differences across activities demonstrated in this study. Research aimed at replicating this study’s findings might focus on whether significant differences in participation are attributable to more frequent participation by individuals, to greater numbers of participants per activity, or some combination thereof.

The measures of participation in this study ultimately subjected to statistical analysis were derived through data transformations. Direct measurement and equating subjects’ participation is needed to corroborate this study’s findings. While this research has, in effect, pointed the way, more attention to the details of participation is needed,
particularly as those details relate to the greater understanding of teachers’ professional development.

Defining what constitutes discretionary professional development in the context of each school district, and the ways in which local schools can expeditiously implement this concept must be explored. The implementation of Act 48 has drastically altered the professional development landscape for those teachers who hold what formerly amounted to permanent certification. For many experienced educators, what had been discretionary participation in independent, self-directed informal learning endeavors will be replaced, at least temporarily, by compulsory formal continuing education. Ironically, those who have developed their own professional learning strategies and resources may find that the most expedient means of fulfilling Act 48 mandates to be engagement in the formal credit-bearing courses that they have roundly criticized as irrelevant or worthless.

The role of others’ influence on discretionary participation needs to be investigated further. The instrumentation employed in the current study addressed only respondents’ perceptions about the relative strength of extrinsic influence by others on respondents’ participation decisions. No attempt was made to differentiate between encouragement and discouragement, or whether perceived extrinsic influence was passive or active. The current study’s failure to clearly differentiate the role of administrators’ personal influence on teachers’ discretionary professional development decisions leaves unanswered the question of how a “culture of expectation” might support, promote, and facilitate teachers’ discretionary participation in professional growth opportunities.


Parma City School District. (1993). You can be in a group and still not cooperate: Collaborative approaches and cooperative learning activities for adult learners. Parma City School District, OH ED361492


Appendix A

SURVEY OF DISCRETIONARY PROFESSIONAL DEVELOPMENT ACTIVITY

Survey of Discretionary Professional Development Activity

Continuing professional development activities can help teachers maintain and enhance their professional competencies. This survey is part of a research project that seeks a better understanding of how you and your colleagues learn and grow as you fulfill your professional responsibilities.

For this survey we are focusing only on your *discretionary participation* in continuing professional development activities, and only on the period from July 1, 1998, through June 30, 1999. *Discretionary participation refers to involvement in professional development that is not compelled by contractual obligations or Instructional II Certification requirements.*

Please do not consider any inservice staff development programs you were obligated to attend under the terms of your contract. In addition, we ask you not to count routine instructional preparation and lesson planning as continuing professional development activities.

The information you and your colleagues provide will yield important insights into current professional development practices and may help to shape future policies, programs, and professional opportunities. All information provided will be anonymous and reported only as group data.

Throughout this survey, please circle the number of your response to each question unless you are instructed to do otherwise.
I. Your Discretionary Participation in Professional Development Activities

Q-1  The first set of questions is about your participation in informal professional development activities for which no credit is awarded. For each of the activities listed below, please indicate the extent of your experience during the period from July 1, 1998, through June 30, 1999.

- NEVER  means not at all during the specified period
- YEARLY  means once or twice during the specified period
- MONTHLY  means once or twice a month during the specified period
- WEEKLY  means once or twice a week during the specified period
- DAILY  means at least once a day during the specified period

<table>
<thead>
<tr>
<th>Extent of your participation in informal professional development activities (Circle your answer)</th>
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<tbody>
<tr>
<td>NEVER  YEARLY  MONTHLY  WEEKLY  DAILY</td>
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</table>

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<thead>
<tr>
<th>1. Reading professional journals and/or trade publications</th>
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<tr>
<td>2. Participating in profession-related discussions with colleagues (includes face-to-face, e-mail, and online chat rooms)</td>
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<td>3. Learning to use new technology through self-teaching or by receiving instruction</td>
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<tr>
<td>4. Learning to use computer software related to your teaching/curriculum situation by receiving instruction or by engaging in computer-assisted self-instruction</td>
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<td>5. Conducting computer-assisted searches (Internet, database, etc.) related to your instructional or professional needs</td>
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<td>6. Serving as a mentor, model, or peer coach</td>
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<td>7. Utilizing audiocassette, videocassette, videodisc, or CD-ROM resources related to your instructional or professional needs</td>
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<td>8. Participating in profession-related noncredit correspondence course or other distance learning</td>
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<td>9. Engaging in professional leadership activity including, but not limited to, writing proposals, chairing meetings, and presenting ad hoc workshops</td>
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<td>10. Conducting or participating in action research, program review, or evaluation</td>
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<td>11. Devising, designing, piloting, or field-testing new instructional or assessment procedures, programs, or curriculum innovations</td>
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<td>12. Conducting other profession-related research, including self-observation, analysis, and evaluation</td>
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Another way teachers participate in professional development is by completing formal courses, workshops, and programs. Participants often earn credit for these experiences, but some formal courses, workshops, and programs are noncredit in nature. In addition, formal activities may be conducted in a variety of locations and formats, with instruction delivered through a variety of methods including distance education. The questions in the next section focus on your participation in formal professional growth activities, including both credit and noncredit experiences.

Q-2  During the period from July 1, 1998, through June 30, 1999, did you complete any formal courses for which you earned college or university credits?

   1  NO  (IF NO, SKIP TO Q-5)
   2  YES

Q-3  Of the formal courses for which you earned credit(s) during the specified period, how many credits did you earn through graduate-level courses conducted on college or university campuses?

   1  1 - 3 CREDITS
   2  4 - 6 CREDITS
   3  7 - 9 CREDITS
   4  10 - 12 CREDITS
   5  MORE THAN 12 CREDITS (please specify number)_______________

Q-4  Of the formal courses for which you earned credit(s) during the specified period, how many credits did you earn through graduate-level courses conducted by a college or university at an off-campus location?

   1  1 - 3 CREDITS
   2  4 - 6 CREDITS
   3  7 - 9 CREDITS
   4  10 - 12 CREDITS
   5  MORE THAN 12 CREDITS (please specify number)_______________

Q-5  During the period from July 1, 1998, through June 30, 1999, did you complete any Pennsylvania Department of Education (PDE) approved inservice or continuing education programs for credit?

   1  NO  (IF NO, SKIP TO Q-7)
   2  YES

Q-6  What was the total number of credits you earned through PDE-approved inservice or continuing education programs during the specified period?

   1  1 - 3 CREDITS
   2  4 - 6 CREDITS
   3  7 - 9 CREDITS
   4  10 - 12 CREDITS
   5  MORE THAN 12 CREDITS (please specify number)_______________

Q-7  During the period from July 1, 1998, to June 30, 1999, did you complete any formal distance education courses for which you earned college or university credits?

   1  NO  (IF NO, SKIP TO Q-10)
   2  YES
Q-8 What was the total number of credits you earned through formal distance education courses during the specified period?

1  1 - 3 CREDITS
2  4 - 6 CREDITS
3  7 - 9 CREDITS
4  10 - 12 CREDITS
5  MORE THAN 12 CREDITS (please specify number)________________________

Q-9 Through which distance education formats did you earn the credit(s) recorded in Q-8? (Circle numbers of all responses that apply)

1  VIDEOCONFERENCING
2  AUDIOCONFERENCING
3  COMPUTER CONFERENCING
4  VIDEOTAPE-BASED INDEPENDENT STUDY COURSE
5  AUDIOTAPE-BASED INDEPENDENT STUDY COURSE
6  CORRESPONDENCE-BASED INDEPENDENT STUDY COURSE
7  OTHER (please specify)__________________________________________

We are interested in your involvement in noncredit professional development programs, too. For this study, however, please exclude from consideration any staff development or inservice programs you attended as part of your contractual obligations.

Q-10 During the period from July 1, 1998, through June 30, 1999, did you complete any noncredit continuing education or PDE-approved inservice programs?

1  NO (IF NO, SKIP TO Q-12)
2  YES

Q-11 What was the total number of hours of PDE-approved inservice or continuing education programs you completed at your discretion during the specified period?

1  UNDER 1 HOUR
2  1 - 5 HOURS
3  6 - 10 HOURS
4  11 - 15 HOURS
5  MORE THAN 12 HOURS (please specify number)________________________

Q-12 During the period from July 1, 1998, through June 30, 1999, did you attend any noncredit seminars, workshops, conferences, or training sessions, including those in which you were a presenter or trainer?

1  NO (IF NO SKIP TO Q-14)
2  YES

Q-13 Please estimate the total number of hours of your discretionary participation in noncredit seminars, workshops, conferences, or training sessions during the specified period, including those in which you were a presenter or trainer.

1  UNDER 1 HOUR
2  1 - 5 HOURS
3  6 - 10 HOURS
4  11 - 15 HOURS
5  MORE THAN 15 HOURS (please specify number)________________________
II. Influences on Your Discretionary Participation in Continuing Professional Development Activities

An important part of understanding discretionary participation in continuing professional development activities has to do with the reasons why teachers choose to participate even when they are not required to do so.

Q-14 Please consider the participation reasons listed below and for each item indicate how important the reason is for you.

NONE means the reason is of no importance to you in your decision to participate
SLIGHT means the reason is of slight importance to you in your decision to participate
MODERATE means the reason is of moderate importance to you in your decision to participate
GREAT means the reason is of great importance to you in your decision to participate

| Importance as a reason for your discretionary participation in professional development activities (Circle your answer) |
|------------------|------------------|------------------|------------------|
| NONE | SLIGHT | MODERATE | GREAT |
| Feeling of professional obligation | 1 | 2 | 3 | 4 |
| Compliance with expectations of others | 1 | 2 | 3 | 4 |
| Need to keep pace with changes in my field | 1 | 2 | 3 | 4 |
| Opportunity for salary advancement or other financial incentives | 1 | 2 | 3 | 4 |
| Opportunity to acquire new knowledge, learn new skills, or practice new teaching methods | 1 | 2 | 3 | 4 |
| Opportunity to earn graduate credit | 1 | 2 | 3 | 4 |
| Desire to learn through interactions with professional colleagues | 1 | 2 | 3 | 4 |
| Personal interest in topic or program | 1 | 2 | 3 | 4 |
| Opportunity to keep abreast of new developments or advancements in my curriculum area | 1 | 2 | 3 | 4 |
| Desire to increase my teaching competence and proficiency | 1 | 2 | 3 | 4 |
| Desire to demonstrate my commitment to the teaching profession | 1 | 2 | 3 | 4 |
| Opportunity to retain independent control over my own professional learning | 1 | 2 | 3 | 4 |
Q-15 Another important aspect of understanding continuing professional development participation has to do with the reasons why teachers choose not to participate. Please consider the following reasons for not participating in continuing professional development activities and indicate how important each reason for nonparticipation is to you.

NONE means the reason is of no importance to you in your decision not to participate
SLIGHT means the reason is of slight importance to you in your decision not to participate
MODERATE means the reason is of moderate importance to you in your decision not to participate
GREAT means the reason is of great importance to you in your decision not to participate

<table>
<thead>
<tr>
<th>Importance as a reason for your discretionary nonparticipation in professional development activities (Circle your answer)</th>
<th>NONE</th>
<th>SLIGHT</th>
<th>MODERATE</th>
<th>GREAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Participation infringes on my family or leisure time</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>2 I don’t like to attend programs alone</td>
<td>. . . .</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>3 I don’t like formal courses in which I must take tests, complete research papers, or do graded work</td>
<td>. .</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>4 Programs usually are not relevant to my professional development needs</td>
<td>. . . . . . . . . .</td>
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<tr>
<td>5 I lack the energy to participate in professional development activities</td>
<td>. . . . . . . . . .</td>
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<tr>
<td>6 Professional development program locations often are inconvenient for me</td>
<td>. . . . . . . . . .</td>
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<td>2</td>
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<tr>
<td>7 Professional development programs usually are scheduled at times inconvenient for me</td>
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<tr>
<td>8 My teaching responsibilities leave little time for professional development</td>
<td>. . . . . . . . . .</td>
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<tr>
<td>9 I am unfamiliar or uncomfortable with technologies I need for self-directed professional development</td>
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<td>3</td>
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<tr>
<td>10 I am uncomfortable directing my own informal professional development efforts</td>
<td>. . . . . . . . . .</td>
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<td>3</td>
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<tr>
<td>11 I don’t have access to the resources necessary for independent and self-directed professional development</td>
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<td>3</td>
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<tr>
<td>12 There are no financial incentives or other benefits that reward my participation in professional development</td>
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</table>
Q-16 Other people may influence your participation in professional growth opportunities. In the items below, indicate the influence each person (or persons) has on your continuing professional development participation.

| Influence of others on your participation in continuing professional development activities (circle your answers) |
| STRONG | MODERATE | NONE | N/A |

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<tr>
<th></th>
<th>Spouse</th>
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<tr>
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<td>Dependents</td>
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<td></td>
<td>Teacher colleagues</td>
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<td>Immediate supervisor</td>
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<td>Assistant Superintendent</td>
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<td>Superintendent</td>
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<td>School Board members</td>
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<td>Community constituents</td>
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III. Demographic and Professional Information about You

For optimum interpretation of study data we need to know more about you. As noted earlier, all information will be anonymous.

Q-17 What is your gender?
1 FEMALE
2 MALE

Q-18 Do you possess a Pennsylvania Instructional II Certificate (permanent certification) or its equivalent?
1 NO
2 YES

Q-19 What was your teaching assignment for the 1998-1999 school year?
1 ELEMENTARY
2 MIDDLE/JUNIOR HIGH SCHOOL
3 HIGH SCHOOL
4 K-12

Q-20 At the end of the 1998-1999 school year, how many consecutive years had you completed in your most recent teaching assignment?

_______ NUMBER OF CONSECUTIVE YEARS IN MOST RECENT TEACHING ASSIGNMENT
Q-21 At the end of the 1998-1999 school year, what was the total number of years you had taught in your current school district?

TOTAL NUMBER OF YEARS IN CURRENT SCHOOL DISTRICT

Q-22 At the end of the 1998-1999 school year, what was the total number of years of teaching you had completed?

1  1 - 5
2  6 - 10
3  11 - 15
4  16 - 20
5  21 - 25
6  26 - 30
7  OVER 30 (please specify) _______________

Q-23 What was your age on 1/1/99?

1  22 - 25
2  26 - 30
3  31 - 35
4  36 - 40
5  41 - 45
6  46 - 50
7  OVER 50

Q-24 What is the highest level of formal education you have achieved?

1  BACHELOR’S DEGREE
2  BACHELOR’S DEGREE + AT LEAST 24 GRADUATE CREDITS
3  MASTER’S EQUIVALENCY
4  MASTER’S DEGREE
5  MASTER’S DEGREE + AT LEAST 24 GRADUATE CREDITS
6  DOCTORAL DEGREE

Is there any other information you wish to contribute to this survey? Please use the space below to record that information or to share comments you feel may be helpful to us.

We truly appreciate your time and effort in completing this survey. Please return it in the enclosed postage-paid reply envelope to: Professional Development Survey, Pennsylvania State Education Association, Research Division, PO Box 1724, Harrisburg, PA 17105-1724. If you wish to receive a summary of results, please print your name and mailing address on the back of the envelope, NOT on this questionnaire.

THANK YOU!
Appendix B

COVER LETTER ACCOMPANYING SURVEY
Dear PSEA Member:

As a teacher, you no doubt are aware of proposed legislation and policies that would require more continuing professional education for public school teachers. The national spotlight on school reform and our profession’s focus on competence and proficiency has made continuing professional development a priority issue for educators, legislators, and policy makers.

Most attention on professional growth has focused on college and university graduate courses and on school district staff development programs, but teachers engage in other forms of professional development, too. Surprisingly, however, there is no clear picture of what teachers do about professional growth when the choices truly are their own and not bound by contractual obligations and certification regulations. This is a matter of interest to PSEA, which is cooperating with me as I collect data for my doctoral dissertation and expects to use the study results.

As a member of PSEA you represent teachers throughout Pennsylvania. Thus I am asking you to help shape the prevailing ideas about professional development for educators. By sharing your professional growth experiences and the factors that have influenced your discretionary participation in those experiences, you can help clarify what teachers do, at their own discretion, in pursuing professional competence and proficiency.

Your participation in this study is voluntary. It will take you only about 10 minutes to complete the enclosed anonymous questionnaire and you may decline to answer specific questions. The questionnaire and envelope have no markings that would compromise your privacy as an individual or PSEA member. You may, however, want to join other education leaders, policy makers, and legislators in receiving a summary of the study’s findings by providing your name and mailing address on the outside of the response envelope; this is optional. Your completion and return of the survey questionnaire will be considered implied consent for your participation in this study.

I will gladly answer any questions you may have about this project by mail at the address above or by phone during the day at 717/633-4814 or at 717/225-0200 during evenings and weekends. I appreciate your assistance with this research and will be most grateful for your response by November 30. Thank you for your consideration.

Sincerely,

Thomas O’Connor
South Western High School Guidance Counselor
Doctoral Candidate, The Pennsylvania State University
PSEA Member

Enclosures: Survey questionnaire and postage-paid response envelope

“A good place to be.”
Appendix C

POSTCARD REMINDER/THANK-YOU
DATE, 1999

Last week you received a questionnaire about your continuing professional development participation. Because you, as a PSEA member, represent teachers throughout Pennsylvania, your responses to the Survey of Discretionary Professional Development Activity can help shape prevailing ideas about professional development for educators.

If you already returned your completed survey, please accept my sincere thanks. If you have not yet done so, please complete and return it now. If you have questions, or if you did not receive the initial mailing or need a replacement questionnaire, please call me at 717/633-4814 weekdays, or at 717/225-0200 evenings and weekends.

Sincerely,
Thomas O'Connor

PSEA
PO Box 1724
Harrisburg, PA 17105-1724

Affix
Postage
Here

<PSEA MEMBER NAME>
<ADDRESS>
<CITY, STATE ZIP+4>
Appendix D

LETTER REQUESTING ASSISTANCE FROM PSEA
September 17, 1999

Mr. David E. Helfman
Research Manager
Pennsylvania State Education Association
P.O. Box 1724
Harrisburg, PA 17105-1724

Dear Mr. Helfman:

The national spotlight on school reform has made teachers' participation in professional development activities a priority issue for educators, legislators, and policy makers. Most attention on professional growth has focused on college and university graduate courses and on school district staff development programs. Little research has been devoted to teachers' professional growth activities when the choices truly are their own and not bound by contractual obligations and certification regulations.

As a doctoral candidate at the Pennsylvania State University, I hope to address this research gap and would appreciate your assistance with the implementation of the survey portion of my dissertation research. Specifically, I would like to mail a questionnaire to a sample of PSEA members to ascertain the nature and extent of their participation in professional development activities, the motivating and deterrent factors that influence their discretionary participation in professional development activities, and the professional and demographic characteristics that may be related to their participation.

I need your assistance in selecting a 1% random sample of research subjects from the population of PSEA members who are actively employed as full time teachers, with the sample stratified on at least the following characteristics: gender, school district geographic location, and school district enrollment, and wishing to minimize any burden this request might pose to you, I hope to implement a mailing plan that conforms to sound principles of survey research without compromising the confidentiality of PSEA membership records, and without imposing any burden on you or your staff. Accordingly, I would expect to process the returned questionnaires and handle data entry tasks personally.

I will call you to discuss this request and address any questions you may have. If you wish to contact me in advance of my call to you, I can be reached during the day at 717/633-4814, and evenings and weekends at 717/225-0200. I appreciate your consideration and look forward to talking with you.

Sincerely,

Thomas O'Connor
South Western High School Guidance Counselor
Doctoral Candidate, Pennsylvania State University
Member, PSEA

"A good place to be."
Appendix E

LETTER FROM PSEA GRANTING REQUESTED ASSISTANCE
October 7, 1999

Mr. Thomas O'Connor  
South Western High School  
200 Bowman Road  
Hanover, PA 17331-4299

Dear Mr. O'Connor:

The Pennsylvania State Education Association actively supports and promotes the professional development of its members. Based on our discussions about your proposed doctoral research through the Pennsylvania State University, it appears that your project is consistent with PSEA's mission.

In consideration of your request for assistance, I am able to offer assistance and support from PSEA in several ways. Regarding the random sampling of members to be surveyed, we will attempt to provide the stratification you seek within the limits imposed by our membership database. Instead of the 1% sample you requested, however, we prefer that a larger sample of 2,500 members be drawn for your survey.

We will provide a cover letter from PSEA President Patsy Tallarico to be included in the survey mailing, and we will provide appropriate levels of assistance with materials, technical production, and mailing. You will be responsible for assembling the outgoing materials. This activity must be done on PSEA premises. That is due to our internal security requirements; we never turn member names and addresses over to others. The Research Division of PSEA will provide a secure collection point for survey responses. You will be expected to open, keypunch, and analyze the returned surveys.

If any of your committee members (or others PSU staff) need to discuss our involvement, they should contact me at 717/255-7038. Please notify me as soon as you receive final approval for your research plans; we will then proceed with implementation in a timely manner.

Sincerely,

[Signature]
David E. Helfman  
Research Manager
Appendix F

SAMPLE INTERVIEW REQUEST LETTER
Dear [School District Representative] or [PSEA Staff Member]:

The national spotlight on school reform has made teachers' participation in professional development activities a priority issue for educators, legislators, and policy makers. Most attention on professional growth has focused on college and university graduate courses and on school district staff development programs, but teachers engage in other forms of professional development, too. Surprisingly, however, there is no clear picture of what teachers do about professional growth when the choices truly are their own and not bound by contractual obligations and certification regulations.

I am collecting data for my doctoral dissertation on teachers' discretionary participation in continuing professional development activities. This research is a matter of interest to PSEA, which is cooperating with me and expects to use the study results. In addition to the data I am collecting from teachers, I would like to discuss your perceptions of teachers' participation in professional development, including the motivating and deterrent factors that influence their discretionary participation and the professional development opportunities offered or brokered by [School District or PSEA].

Your participation in this study is voluntary. I hope to take only about 10 minutes of your time for this interview, and you may decline to answer specific questions. Your agreement to be interviewed will be considered implied consent for your participation in this study. I assure you that your responses will be completely confidential and in no way compromise your privacy as an individual or a representative of [School District or PSEA]. If you wish, you may join other education leaders, policy makers, and legislators in receiving a summary of the study's findings; this is optional.

I will call you next week to conduct this brief interview or arrange a mutually agreeable time to do so. If you wish to contact me in advance of my call to you, I can be reached at 717/633-4814 between 8:00 a.m. and 3:30 p.m., and at 717/225-0200 after 4:30 p.m. I appreciate your time and your assistance with this research, and I look forward to talking with you.

Sincerely,

Thomas O'Conner
South Western High School Guidance Counselor
Doctoral Candidate, Pennsylvania State University
[Member, PSEA]

"A good place to be."
Appendix G

TELEPHONE INTERVIEW PROTOCOL FOR SCHOOL DISTRICT/ACT 178
COMMITTEE REPRESENTATIVES

“Hello, this is [interviewer] calling. Is this [Name of School District Representative]?”

“I am calling as a follow-up to the letter I sent to you seeking your help with research I am conducting on
teachers’ participation in continuing professional development activities. Did you receive my letter?” [If
no, confirm name and address to which letter was directed, then briefly describe research and purpose of
call. If yes, continue with next question.]

“Is this a convenient time for you to talk with me about your perspectives on this topic?” [If no, arrange an
agreeable time and call back. If yes, proceed with interview material and questions below.]

“I hope to take only about 10 minutes of your time for this interview and your participation is
voluntary. You may decline to answer specific questions or terminate your participation at any
time. If you should have questions at a later date, you may direct them to me by calling 717/633-
4814 weekdays between 7:30 a.m. and 3:15 p.m., or by calling me at 717/225-0200 on weekends or
after 4:00 p.m. weekdays.”

“Continuing professional development often is seen as a way to maintain and enhance the competencies
teachers are expected to possess. Your perspective on the kinds of educational activities in which teachers
engage, the extent of their involvement, and factors that influence their participation decisions may
contribute to a better understanding of the ways teachers grow professionally.”

“For this survey, we will focus on discretionary participation in continuing professional development
activities. Discretionary participation refers to involvement in professional development that is not
compelled by contractual obligations or Instructional II Certification requirements. Also excluded from
consideration are inservice staff development programs that teachers are contractually obligated to attend.
Routine instructional preparation and lesson planning are excluded as well.”

I. Teachers’ Participation in Continuing Professional Development Activities:

“One way in which teachers engage in professional development is through participation in formal courses,
workshops, and programs for which credit may or may not be earned. Consider the teachers in your district
who hold permanent certification in answering these questions.”
Q-1 During the past 12 months, how many teachers with permanent certification participated in graduate-level courses for credit conducted on college or university campuses?

- UNDER 10% 1
- ABOUT 25% 2
- ABOUT 50% 3
- ABOUT 75% 4
- OVER 90% 5

Q-2 During the past 12 months, how many teachers with permanent certification participated in graduate-level courses conducted by a college or university at an off-campus location?

- UNDER 10% 1
- ABOUT 25% 2
- ABOUT 50% 3
- ABOUT 75% 4
- OVER 90% 5

Q-3 During the past 12 months, how many teachers with permanent certification participated in Pennsylvania Department of Education (PDE) approved inservice or continuing education programs for credit?

- UNDER 10% 1
- ABOUT 25% 2
- ABOUT 50% 3
- ABOUT 75% 4
- OVER 90% 5

“The next two questions deal with professional development experiences made possible through distance education. For the purposes of this study, distance education is defined to include any formal learning experience in which most instruction occurs while the learner(s) and educator are at a distance from one another. These may be conducted as videoconferencing, audioconferencing, or computer conferencing, through videotape, audiotape, or video-based independent study courses, or by other means of correspondence instruction.”

Q-4 During the past 12 months, how many teachers with permanent certification participated in formal distance education courses for college or university credit?

- UNDER 10% 1
- ABOUT 25% 2
- ABOUT 50% 3
- ABOUT 75% 4
- OVER 90% 5

Q-5 Which of the following distance education formats did teachers utilize?

1. VIDEOCONFERENCING
2. AUDIOCONFERENCING
3. COMPUTER CONFERENCING
4. VIDEOTAPE-BASED INDEPENDENT STUDY COURSE
5. AUDIOTAPE-BASED INDEPENDENT STUDY COURSE
6. CORRESPONDENCE-BASED INDEPENDENT STUDY COURSE
7. OTHER (specify)__________________________
“Formal continuing professional development experiences do not always result in the awarding of graduate credits to participants. Consider your teachers’ involvement in noncredit professional development programs, excluding staff development or inservice programs for which attendance is a contractual obligation.”

Q-6 During the past 12 months, how many teachers with permanent certification participated in noncredit continuing education or PDE-approved inservice programs?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDER 10%</td>
<td>1</td>
</tr>
<tr>
<td>ABOUT 25%</td>
<td>2</td>
</tr>
<tr>
<td>ABOUT 50%</td>
<td>3</td>
</tr>
<tr>
<td>ABOUT 75%</td>
<td>4</td>
</tr>
<tr>
<td>OVER 90%</td>
<td>5</td>
</tr>
</tbody>
</table>

Q-7 During the past 12 months, how many teachers with permanent certification participated in noncredit seminars, workshops, conferences, or training sessions, including those in which they participated as a presenter or trainer?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDER 10%</td>
<td>1</td>
</tr>
<tr>
<td>ABOUT 25%</td>
<td>2</td>
</tr>
<tr>
<td>ABOUT 50%</td>
<td>3</td>
</tr>
<tr>
<td>ABOUT 75%</td>
<td>4</td>
</tr>
<tr>
<td>OVER 90%</td>
<td>5</td>
</tr>
</tbody>
</table>

Q-8 “Another important purpose of this study is to learn about teachers’ participation in informal professional development activities for which no credit is earned through participation. Based on your knowledge of the teachers in your district, which of the following responses best describes their participation, on average, in informal professional development activities?”

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEVER</td>
<td>1</td>
</tr>
<tr>
<td>YEARLY</td>
<td>2</td>
</tr>
<tr>
<td>MONTHLY</td>
<td>3</td>
</tr>
<tr>
<td>WEEKLY</td>
<td>4</td>
</tr>
<tr>
<td>DAILY</td>
<td>5</td>
</tr>
</tbody>
</table>

1 Reading professional journals and/or trade publications
2 Participating in profession-related discussions with colleagues (includes face-to-face, e-mail, and online chat rooms)
3 Learning to use new technology through self-teaching or by receiving instruction
4 Learning to use computer software related to your teaching/curriculum situation by receiving instruction or by engaging in computer-assisted self-instruction
5 Conducting computer-assisted searches (Internet, database, etc.) related to your instructional or professional needs
6 Serving as a mentor, model, or peer coach
NEVER means not at all  
YEARLY means once or twice per year  
MONTHLY means once or twice per month  
WEEKLY means once or twice per week  
DAILY means at least once per day  

Teachers' participation in informal professional development activities  
(Circle answer)  

<table>
<thead>
<tr>
<th>NEVER</th>
<th>YEARLY</th>
<th>MONTHLY</th>
<th>WEEKLY</th>
<th>DAILY</th>
</tr>
</thead>
</table>

7 Utilizing audiocassette, videocassette, videodisc, or cd-rom resources related to your instructional or professional needs . . . . . . . . 1 2 3 4 5

8 Participating in profession-related noncredit correspondence course or other distance learning . . . . . 1 2 3 4 5

9 Engaging in professional leadership activity including, but not limited to, writing proposals, chairing meetings, and presenting ad hoc workshops . . . . . 1 2 3 4 5

10 Conducting or participating in action research, program review, or evaluation . . . . . . . . 1 2 3 4 5

11 Devising, designing, piloting, or field-testing new instructional or assessment procedures, programs, or curriculum innovations . . . . . . . . 1 2 3 4 5

12 Conducting other profession-related research, including self-observation, analysis, and evaluation . . . . 1 2 3 4 5

Comments:
Influences on Discretionary Participation in Continuing Professional Development Activities

Q-9  “An important part of understanding discretionary participation in continuing professional development activities has to do with the reasons why teachers choose to participate even when they are not required to do so. Please consider the following participation reasons and indicate how important each reason is for teachers in general within your district.”

NONE means the reason is of no importance in the decision to participate
SLIGHT means the reason is of slight importance in the decision to participate
MODERATE means the reason is of moderate importance in the decision to participate
GREAT means the reason is of great importance in the decision to participate

<table>
<thead>
<tr>
<th>Importance as reason for teachers’ discretionary participation in professional development activities (Circle answer)</th>
<th>NONE</th>
<th>SLIGHT</th>
<th>MODERATE</th>
<th>GREAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling of professional obligation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Compliance with expectations of others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Need to keep pace with changes in the field</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Opportunity for salary advancement or other financial incentives</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Opportunity to acquire new knowledge, learn new skills, or practice new teaching methods</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Opportunity to earn graduate credit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Desire to learn through interactions with professional colleagues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Personal interest in topic or program</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Opportunity to keep abreast of new developments or advancements in their curriculum area</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Desire to increase teaching competence and proficiency</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Desire to demonstrate commitment to the teaching profession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Opportunity to retain independent control over their own professional learning</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Comments:
Q-10 “Another important aspect of understanding continuing professional development participation has to do with the reasons why teachers choose not to participate. Consider the following reasons for not participating in professional development activities and indicate how important each reason is for teachers in your district.”

NONE means the reason is of no importance in the decision not to participate
SLIGHT means the reason is of slight importance in the decision not to participate
MODERATE means the reason is of moderate importance in the decision not to participate
GREAT means the reason is of great importance in the decision not to participate

<table>
<thead>
<tr>
<th>Importance as reason for teachers’ discretionary nonparticipation in professional development activities (Circle answer)</th>
<th>NONE</th>
<th>SLIGHT</th>
<th>MODERATE</th>
<th>GREAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Participation infringes on family or leisure time</td>
<td>. .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2 Teachers don’t like to attend programs alone</td>
<td>. .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3 Teachers don’t like formal courses in which they must take tests, complete research papers, or do graded work</td>
<td>. . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4 Programs usually are not relevant to teachers’ professional development needs</td>
<td>. . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5 Teachers lack the energy to participate in professional development activities</td>
<td>. . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6 Professional development program locations often are inconvenient</td>
<td>. . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7 Professional development programs usually are scheduled at inconvenient times</td>
<td>. . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8 Teaching responsibilities leave little time for professional development</td>
<td>. . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9 Teachers are unfamiliar or uncomfortable with technologies needed for self-directed professional development</td>
<td>. . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10 Teachers are uncomfortable directing their own informal professional development efforts</td>
<td>. . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11 Teachers don’t have access to the resources necessary for independent and self-directed professional development</td>
<td>. . . . . . . .</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12 There are no financial incentives or other benefits to reward participation in professional development</td>
<td>.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Comments:
Q-11 “Other people may influence teachers’ participation in professional growth opportunities. Please indicate, in general, how much the person (or persons) influences teachers’ participation in continuing professional development activities in your district.”

STRONG means strong influence on teachers’ participation
MODERATE means moderate influence on teachers’ participation
NONE means no influence on teachers’ participation
N/A means not applicable to teachers in this district

| Influence of others on teachers’ participation in continuing professional development activities |
|--------------------------------------------------|---|---|---|---|
| STRONG                                            | MODERATE | NONE | N/A |
| Spouse                                            | 1     | 2    | 3   | 4   |
| Dependents                                        | 1     | 2    | 3   | 4   |
| Teacher colleagues                                | 1     | 2    | 3   | 4   |
| Immediate supervisor                              | 1     | 2    | 3   | 4   |
| Assistant Superintendent                          | 1     | 2    | 3   | 4   |
| Superintendent                                    | 1     | 2    | 3   | 4   |
| School Board members                              | 1     | 2    | 3   | 4   |
| Community constituents                            | 1     | 2    | 3   | 4   |

Comments:

Q-12 “Please indicate whether or not your district makes the following professional Development options available through its Act 178 plan.”

<table>
<thead>
<tr>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professionally-related graduate level coursework</td>
<td>1</td>
</tr>
<tr>
<td>2. Professionally-related Master’s Degree</td>
<td>1</td>
</tr>
<tr>
<td>3. PDE-approved inservice</td>
<td>1</td>
</tr>
<tr>
<td>4. Curriculum development work</td>
<td>1</td>
</tr>
<tr>
<td>5. Attendance at professional conferences</td>
<td>1</td>
</tr>
<tr>
<td>6. Supervised classroom observations of professional employees</td>
<td>1</td>
</tr>
<tr>
<td>7. Inservice/staff development</td>
<td>1</td>
</tr>
<tr>
<td>8. Collegial study groups</td>
<td>1</td>
</tr>
<tr>
<td>9. Community relations activities</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>NO</td>
</tr>
<tr>
<td>---</td>
<td>----</td>
</tr>
<tr>
<td>10. Grant writing</td>
<td>1</td>
</tr>
<tr>
<td>11. Induction support teacher</td>
<td>1</td>
</tr>
<tr>
<td>12. Mini-grant</td>
<td>1</td>
</tr>
<tr>
<td>13. In-district professional development presentation</td>
<td>1</td>
</tr>
<tr>
<td>14. Out-of-district professional development presentation</td>
<td>1</td>
</tr>
<tr>
<td>15. Peer interaction/coaching</td>
<td>1</td>
</tr>
<tr>
<td>16. Professional leadership</td>
<td>1</td>
</tr>
<tr>
<td>17. Professional reading</td>
<td>1</td>
</tr>
<tr>
<td>18. Publication</td>
<td>1</td>
</tr>
<tr>
<td>19. Research</td>
<td>1</td>
</tr>
<tr>
<td>20. Textbook selection</td>
<td>1</td>
</tr>
<tr>
<td>21. Independent study</td>
<td>1</td>
</tr>
<tr>
<td>22. Travel</td>
<td>1</td>
</tr>
<tr>
<td>23. Personally designed option</td>
<td>1</td>
</tr>
</tbody>
</table>

24. Of all the options offered, which do teachers utilize most frequently? _______
   
   next most frequently? _______
   
   third most often? _______

Comments:
Q-13  “How are your school district’s and individual supervisors’ expectations for teachers’ participation in continuing professional development activities communicated to teachers?”

Q-14  “What incentives does your school district provide to encourage individual teachers to participate in continuing professional development?”

Q-15  “In what ways does your school district encourage, support, or facilitate teachers’ self-directed and collegial professional growth experiences?”

Q-16  “Is there any other information you wish to contribute to this study?”

“Thank you for your time and for the contribution of this information. So that you may receive a summary of the results of this study, please confirm the spelling of your name and your mailing address with the school district.”

[End call]
Appendix H

TELEPHONE INTERVIEW PROTOCOL FOR PSEA REPRESENTATIVES

“Hello, this is [interviewer] calling. Is this [PSEA Representative]?”

I am calling as a follow-up to the letter I sent to you seeking your help with research I am conducting on teachers’ participation in continuing professional development activities. Did you receive my letter?” [If no, confirm name and address to which letter was directed, then briefly describe research and purpose of call. If yes, continue with next question.]

“Is this a convenient time for you to talk with me about your perspectives on this topic?” [If no, arrange an agreeable time and call back. If yes, proceed with interview material and questions below.]

“I hope to take only about 10 minutes of your time for this interview and your participation is voluntary. You may decline to answer specific questions or terminate your participation at any time. If you should have questions at a later date, you may direct them to me by calling 717/633-4814 weekdays between 7:30 a.m. and 3:15 p.m., or by calling me at 717/225-0200 on weekends or after 4:00 p.m. weekdays.”

“Continuing professional development often is seen as a way to maintain and enhance the competencies teachers are expected to possess. Your perspective on the kinds of educational activities in which teachers engage, the extent of their involvement, and factors that influence their participation decisions may contribute to a better understanding of the ways teachers grow professionally.”

“For this survey, we will focus on discretionary participation in continuing professional development activities. Although teachers engage in professional growth in many ways, discretionary participation refers to involvement in professional development that is not compelled by contractual obligations or by Instructional II Certification requirements. Excluded from consideration for this study are inservice staff development programs that teachers are contractually obligated to attend, as well as routine instructional preparation and lesson planning. In answering the questions in this survey from your perspective with PSEA, please consider only those member teachers who hold permanent certification.”

I. Teachers’ Participation in Continuing Professional Development Activities

Q-1 Based on your perspective with PSEA, what would be your estimate of the percentage of teachers with permanent certification who participate in formal graduate-level courses for credit conducted on college or university campuses?

- UNDER 10%  1
- ABOUT 25%  2
- ABOUT 50%  3
- ABOUT 75%  4
- OVER 90%  5
Q-2 Based on your perspective with PSEA, what would be your estimate of the percentage of teachers with permanent certification who participate in graduate level courses conducted by a colleges or universities at off-campus locations?

- UNDER 10%  1
- ABOUT 25%  2
- ABOUT 50%  3
- ABOUT 75%  4
- OVER 90%  5

Q-3 Based on your perspective with PSEA, what would be your estimate of the percentage of teachers with permanent certification who participate in Pennsylvania Department of Education (PDE) approved inservice or continuing education programs for credit?

- UNDER 10%  1
- ABOUT 25%  2
- ABOUT 50%  3
- ABOUT 75%  4
- OVER 90%  5

Q-4 Based on your perspective with PSEA, what would be your estimate of the percentage of teachers with permanent certification who participate in noncredit continuing education or PDE-approved inservice programs?

- UNDER 10%  1
- ABOUT 25%  2
- ABOUT 50%  3
- ABOUT 75%  4
- OVER 90%  5

Q-5 Based on your perspective with PSEA, what would be your estimate of the percentage of teachers with permanent certification who participate in noncredit seminars, workshops, conferences, or training sessions, including those acting in presenter or trainer participation roles?

- UNDER 10%  1
- ABOUT 25%  2
- ABOUT 50%  3
- ABOUT 75%  4
- OVER 90%  5

Q-6 Based on your perspective with PSEA, what would be your estimate of the percentage of teachers with permanent certification who participate in formal distance education courses for college or university credit? For the purposes of this study, distance education is defined to include any formal learning experience in which most instruction occurs while the learner(s) and educator are at a distance from one another.

- UNDER 10%  1
- ABOUT 25%  2
- ABOUT 50%  3
- ABOUT 75%  4
- OVER 90%  5
Q-7 Based on your perspective with PSEA, which of the following distance education formats do member teachers utilize?

1. VIDEOCONFERENCING
2. AUDIOCONFERENCING
3. COMPUTER CONFERENCING
4. VIDEOTAPE-BASED INDEPENDENT STUDY COURSE
5. AUDIOTAPE-BASED INDEPENDENT STUDY COURSE
6. CORRESPONDENCE-BASED INDEPENDENT STUDY COURSE
7. OTHER (specify)__________________________

Q-8 “Another important purpose of this study is to learn about teachers’ participation in informal professional development activities for which no credit is earned through participation. Based on your knowledge of the teachers in your district, which of the following responses best describes their participation, on average, in informal professional development activities?”

<p>| Teachers participation in informal professional development activities (Circle answer) |</p>
<table>
<thead>
<tr>
<th>NEVER</th>
<th>YEARLY</th>
<th>MONTHLY</th>
<th>WEEKLY</th>
<th>DAILY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers participate in informal professional development activities...yearly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Reading professional journals and/or trade publications...
2. Participating in profession-related discussions with colleagues (includes face-to-face, e-mail, and online chat rooms)...
3. Learning to use new technology through self-teaching or by receiving instruction...
4. Learning to use computer software related to your teaching/curriculum situation by receiving instruction or by engaging in computer-assisted self-instruction...
5. Conducting computer-assisted searches (Internet, database, etc.) related to your instructional or professional needs...
6. Serving as a mentor, model, or peer coach...
7. Utilizing audiostream, videocassette, videodisc, or cd-rom resources related to your instructional or professional needs...
8. Participating in profession-related noncredit correspondence course or other distance learning...
9. Engaging in professional leadership activity including, but not limited to, writing proposals, chairing meetings, and presenting ad hoc workshops...
10 Conducting or participating in action research, program review, or evaluation . . . . . . 1 2 3 4 5

11 Devising, designing, piloting, or field-testing new instructional or assessment procedures, programs, or curriculum innovations . . . . . . . 1 2 3 4 5

12 Conducting other profession-related research, including self-observation, analysis, and evaluation . . . 1 2 3 4 5

13. Based on your perspective with PSEA, which form of informal professional development do you think teachers utilize most frequently? _______

next most frequently? _______

II. Influences on Discretionary Participation in Continuing Professional Development Activities

Q-9 “An important part of understanding discretionary participation in continuing professional development activities has to do with the reasons why teachers choose to participate even when they are not required to do so. Please consider the following participation reasons and indicate how important each reason is for PSEA member teachers.”

<table>
<thead>
<tr>
<th>Importance as a reason for teachers’ discretionary participation in professional development activities (Circle answer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE   SLIGHT       MODERATE       GREAT</td>
</tr>
</tbody>
</table>

1 Feeling of professional obligation . . . . . 1 2 3 4

2 Compliance with expectations of others . . . . 1 2 3 4

3 Need to keep pace with changes in the field . . . 1 2 3 4

4 Opportunity for salary advancement or other financial incentives . . . . . . . . . 1 2 3 4

5 Opportunity to acquire new knowledge, learn new skills, or practice new teaching methods . . . 1 2 3 4

6 Opportunity to earn graduate credit . . . . . 1 2 3 4

7 Desire to learn through interactions with professional colleagues . . . . . . . . . 1 2 3 4

8 Personal interest in topic or program . . . 1 2 3 4

9 Opportunity to keep abreast of new developments or advancements in their curriculum area . . . . 1 2 3 4
10 Desire to increase teaching competence and proficiency . . . . . . . . . 1 2 3 4
11 Desire to demonstrate commitment to the teaching profession . . . . . . . . . 1 2 3 4
12 Opportunity to retain independent control over their own professional learning . . . . . . . . . 1 2 3 4

13. Based on your perspective with PSEA, which of these reasons for participation carries the greatest importance for teachers in general? _______
next most important? _______

Q-10 "Another important aspect of understanding continuing professional development participation has to do with the reasons why teachers choose not to participate. Consider the following reasons for not participating in continuing professional development activities and indicate how important each reason is for teachers in your district."

<table>
<thead>
<tr>
<th>Importance as a reason for teachers’ discretionary nonparticipation in professional development (Circle answer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
</tr>
</tbody>
</table>

1 Participation infringes on family or leisure time . . . . . . . . . 1 2 3 4
2 Teachers don’t like to attend programs alone . . . . . . . . . 1 2 3 4
3 Teachers don’t like formal courses in which they must take tests, complete research papers, or do graded work . . . . . . . . . . . . . . . 1 2 3 4
4 Programs usually are not relevant to teachers’ professional development needs . . . . . . . . . 1 2 3 4
5 Teachers lack the energy to participate in professional development activities . . . . . . . . . 1 2 3 4
6 Professional development program locations often are inconvenient . . . . . . . . . . . . . . . 1 2 3 4
7 Professional development programs usually are scheduled at inconvenient times . . . . . . . . . . . . . . . 1 2 3 4
8 Teaching responsibilities leave little time for professional development . . . . . . . . . . . . . . . 1 2 3 4
Teachers are unfamiliar or uncomfortable with technologies needed for self-directed professional development.

Teachers are uncomfortable directing their own informal professional development efforts.

Teachers don’t have access to the resources necessary for independent and self-directed professional development.

There are no financial incentives or other benefits to reward participation in professional development.

Based on your perspective with PSEA, which deterrent contributes most to nonparticipation in professional development teachers in general?

Which exerts the second greatest impact?

Q-11 “Other people may influence teachers’ participation in professional growth opportunities. Please indicate, in general, how much the person (or persons) influences teachers’ participation in continuing professional development activities in your district.”

| Influence of others on teachers’ participation in professional development activities (circle answers) |
|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| STRONG | MODERATE | NONE | N/A |
| Spouse | 1 | 2 | 3 | 4 |
| Dependents | 1 | 2 | 3 | 4 |
| Teacher colleagues | 1 | 2 | 3 | 4 |
| Immediate supervisor | 1 | 2 | 3 | 4 |
| Assistant Superintendent | 1 | 2 | 3 | 4 |
| Superintendent | 1 | 2 | 3 | 4 |
| School Board members | 1 | 2 | 3 | 4 |
| Community constituents | 1 | 2 | 3 | 4 |

Comments:
Q-12 Which of the following professional development options does PSEA offer, either through direct sponsorship or brokered to members in cooperation with sponsoring institutions or organizations:

<table>
<thead>
<tr>
<th>Number</th>
<th>Option</th>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Professionally-related graduate level course work</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Professionally-related Master's Degree</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>PDE-approved inservice</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Attendance at professional conferences</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Inservice/staff development</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Collegial study groups</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Community relations activities</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Grant writing</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Induction support teacher (mentor)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Mini-grant</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Professional development presentation</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>Peer interaction/coaching</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Professional leadership</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Professional reading</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>Publication</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Research</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>Independent study</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>Travel</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>Personally designed option</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

20. Of all the options offered, which do teachers utilize most frequently?  _______

next most frequently?  _______
Q-13 “How are PSEA’s expectations for teachers’ participation in continuing professional development activities communicated to member teachers?”

Q-14 “What incentives does PSEA provide to encourage individual teachers to participate in continuing professional development?”

Q-15 “In what ways not addressed in earlier questions does PSEA encourage, support, and/or Facilitate teachers’ self-directed and collegial professional growth experiences?”

Q-16 “Is there any other information you wish to contribute to this study?”

Thank you for your time and for the contribution of this information. So that you may receive a summary of the results of this study, please confirm the spelling of your name and your mailing address at PSEA.

[End call]
Appendix I

LETTER APPROVING THE USE OF HUMAN SUBJECTS IN RESEARCH
November 11, 1999

Thomas O'Connor
60 Country Manor Drive
York, PA 17404-8800

Re: Proposal for Use of Human Subjects in Research - Exemption (ORC #990978-00)
Approval Expiration Date: November 11, 2000
“Public School Teachers’ Discretionary Participation in Continuing Professional Development: Perceptions, Influences, and Action”

Dear Mr. O’Connor:

Your proposal for use of human subjects in your research has been reviewed and approved for a one-year period. Subjects in your research are at minimal risk.

By accepting this decision you agree to notify this office of (1) any additions or changes in procedures for your study that modify the subjects’ risks in any way and (2) any events that affect the safety or well-being of subjects.

The University appreciates your efforts to conduct research in compliance with the federal regulations that have been established to ensure the protection of human subjects.

Sincerely,

Karen J. English
Compliance Coordinator

KJE/slk

cc: D. Queency
E. Askov
E. Herr
VITA

Thomas W. O’Connor, Jr., was born in Lancaster, Pennsylvania, on February 13, 1951. A lifelong Pennsylvania resident, the Mount Joy native graduated from Donegal High School in 1969. He earned a Bachelor of Science degree in Psychobiology from Albright College in 1973, and a Master of Education degree in Counselor Education from Millersville University in 1976.

Mr. O’Connor began his career as an educator in 1974, teaching biology and general science in the Pequea Valley School District. In 1977 he assumed the position of Guidance Counselor in the Spring Grove Area School District, where he also coached wrestling. Accepting an offer in 1982 to become the Director of Counseling and Career Services at York College of Pennsylvania, he was promoted to the position of Director of Alumni Affairs and Development in 1985. While at York College, Mr. O’Connor’s interests in continuing education and nontraditional students led him to matriculate at the Pennsylvania State University, where he was granted candidacy in 1989 in the Doctoral Program in Adult Education.

Mr. O’Connor returned to public education in 1993, when he was offered the opportunity to work again with high school students in a counseling capacity. He has been employed since that time as a Guidance Counselor with the South Western School District, where he continues to pursue his interests in student counseling and continuing professional development for educators.