PROFESSIONAL DEVELOPMENT STANDARDS:
IMPLEMENTATION AND CHALLENGES
IN SELECTED OHIO SCHOOLS

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Professional development offers teachers the training for new instructional practices that support student learning. To assist school leaders implementing professional development programs, the *National Staff Development Council’s Standards for Staff Development* serves as a valuable guide. This study was designed to determine the number of Ohio public schools aligned with these standards using a questionnaire, alignment schema, and scoring rubric designed by the researcher. Of the 58 Ohio public schools that participated in this study, 20 were considered aligned with the National Staff Development Council’s standards. Of the schools not aligned with these standards, the family involvement standard was typically not implemented. The major challenges experienced by school leaders when implementing professional development opportunities were resources and the change process.
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CHAPTER I

Introduction

This chapter of the dissertation presents a historical perspective on effective professional development practices and a background on staff development in Ohio. The research problem, the research questions, and the significance of the study are described. The delimitations and limitations of the study, an overview of the methodology, and key terms are included.

Background on Effective Professional Development Practices

Professional development for teachers in public schools was previously framed in one-day experiences offered through the school district (National Commission on Teaching and America’s Future, 1996). Coursework taken by teachers and district-led professional development opportunities were unrelated to the classroom, reinforced practices instead of changing them, or were found by teachers to be unchallenging and tedious (Lewis, 1998). More importantly, the opportunities through courses and one-day experiences often did not transfer into changes in instructional practices in the classroom to improve student achievement.

In the report, *What Matters Most: Teaching for America’s Future*, the National Commission on Teaching and America’s Future (1996) recommended changes in teacher preparation programs, professional development opportunities of current teachers, and changes in school practices to support teacher learning. The Commission stated that most teachers could not provide the types of instructional practices demanded by the new
reforms because they did not know how to do so, and the school systems did not support them in doing so. The question became what do professional development practices need to encompass in order to support teachers in learning new instructional techniques?

A set of standards for effective professional development practices in middle schools was developed and published by the National Staff Development Council (1995). The National Staff Development Council and the National Association of Secondary School Principals (1995) published a set of standards for use in high schools. The revised set of 12 standards, published by the National Staff Development Council (NSDC) (2001) was based upon the premise that the major purpose of staff development should be to help educators at all grade levels develop the knowledge and skills needed for increased student learning. These current NSDC’s standards (2001) offered a framework for creating professional development opportunities that were responsive to the needs of teachers and students. They also provided an explanation of how to implement high quality professional development in organizations, such as schools. The staff development standards, cited as the National Staff Development Council’s (NSDC) standards (2001), were designed to build consensus of practices and literature.

The No Child Left Behind Act of 2001, Public Law 107-110, signed by President Bush on January 3rd, 2002, outlined specific requirements for the professional development activities conducted in schools. The definition of professional development within this federal legislation reinforced a focus toward ongoing, embedded professional development experiences using research based instructional practices, collaborative practices within schools, and the evaluation of professional development programs to
ensure the improvement of teacher performance, student achievement, and the quality of professional growth experiences.

Background of Professional Development Practices in Ohio

During the 1970’s and 1980’s, professional development practices in Ohio were similar to the practices across our nation (M. Troyer, Associate Superintendent, Ohio Department of Education, Center for the Teaching Profession, personal communication, December 22, 2003). One-day workshops were offered with teachers selecting from a menu of different activities. New funding opportunities were offered for the professional development of Ohio’s elementary and secondary teachers beginning in 1991. New funding was offered through the state legislature for the establishment of “regional teacher training centers for developing innovative teacher training and development methods” with a focus on providing teachers with sustained, high-quality professional development experiences (Ohio Department of Education, 1991, p. 2). These eight original centers became the predecessors to the twelve current regional professional development centers in Ohio. These regional professional development centers were designed to align professional development with statewide models, academic content standards, and assessment practices within the state (M. Troyer).

Ohio Rev. Code § 3301.079 (A-C) (1) (2001) mandated academic standards for student learning, aligned instruction for curricular practices, and initiated assessments to gather information on student progress. The Governor’s Commission on Teacher Success (2003) was established and given the responsibility to study and include recommendations for implementing teacher professional development activities and
teacher development programs. This commission also requested new professional development standards for Ohio's educators. Based upon Ohio Rev. Code §3319.60 (A) (1) (2003) the Educator Standards Board was given responsibility for developing educator standards for teachers and principals to reflect what they should know and be able to do throughout all stages of their careers. This Board was also charged with the responsibility for developing standards for educator professional development. Currently, a professional development framework has been designed using research regarding high quality professional development and embedding the definition from the No Child Left Behind Act of 2001, 20 U.S.C. 6311 § 9101 (b) (34) into the framework (C. Yoder, Director, Center for the Teaching Profession, Ohio Department of Education, personal communication, December 22, 2003).

Based upon federal mandates, the Ohio Department of Education must annually report the percentage of teachers who participated in high quality professional development (M. Troyer, personal communication, March 12, 2004). State and federal mandates have framed the professional development opportunities within Ohio public schools.

Identification of the Problem

"On the whole, the school reform movement has ignored the obvious: What teachers know and can do makes the crucial difference in what students learn" (National Commission on Teaching and America's Future, 1996, p.5). The United States Department of Education (1996) confirmed that high-quality professional development was an essential ingredient for any successful school reform program. The National
Commission on Teaching and America’s Future (2003) focused upon three strategies to promote teaching and learning success. These strategies included the organization of schools for teaching and learning success; insistence upon high quality teacher preparation; and the development of a high quality teaching profession. Professional development programs to address the current task force of teachers in public schools were emphasized. This gave new importance to the need for effective professional development within the schools. According to this commission’s report, professional development for teachers was believed to be necessary for changes in the instructional practices that would link to improved student achievement.

The revised NSDC’s standards (2001) provided a framework for implementing professional development programs in the public schools. These standards emphasized the content of professional learning, the processes for teachers to benefit most from the learning experiences, and the context in which professional development occurs. The purpose of the standards was to promote high-quality professional development opportunities by offering educators who plan, create, and implement activities a framework for the professional development experiences that would positively impact student achievement.

The National Staff Development Council (2001, p.vi) asked, “Will policy makers and educators use the standards to reshape their understanding and expectations of staff development?” This intriguing question became the basis for this research study as it was unknown whether professional development practices in Ohio public schools followed the framework from the NSDC’s standards (2001). The purpose of this study was to determine whether the professional development practices in Ohio public schools aligned
with the NSDC’s standards (2001). A second purpose of this study was to examine the
types of challenges experienced by practitioners as they planned, designed, and
implemented professional development programs in the public schools. To study these
two problems, three research questions were posed: (a) Were the actual practices,
designed by Ohio public school administrators for teachers’ professional development
activities, aligned with the National Staff Development Council’s standards?; (b) Were
the ratings by two panelists on the alignment of Ohio public schools with the National
Staff Development Council’s standards statistically different?; and (c) In cases when
actual practices did not align with the National Staff Development Council’s standards,
what types of challenges to implementing professional development activities did
administrators in Ohio public schools experience?

Significance of the Study

The No Child Left Behind Act of 2001, 20 U.S.C. 6311 § 9101 (b) (34) mandated
effective professional development programs that promoted ongoing, embedded learning
experiences for teachers, which would support the transfer of knowledge and skills into
classroom practices to increase student achievement. A study by Wenglinski (2002)
found that teachers who receive sustained professional development within their specific
content areas were more likely to engage in classroom practices associated with improved
student achievement. A quasi-experimental research study by Lane (2003) reflected a
similar conclusion that on-going staff development focused on the specific content area
of math resulted in higher student performance in comparison to students whose teachers
did not participate in staff development. In Lowden’s (2003) study effective professional
development as evaluated by the impact on teacher change, was cited as critical for
teacher growth and student achievement. Furthermore, Lowden noted a strong correlation
between teachers’ implementation of new knowledge and skills in the classroom and the
impact on student learning outcomes. Killon (2002b) supported this view:

>We know that ongoing professional learning is a critical leverage point for
influencing the quality of teaching....Our challenge is to use what we know to
make sound decisions about the design, implementation, and evaluation of
professional development so that we can improve student and teacher learning in
every school. (p. 18)

The NSDC’s standards (2001) were developed as a guide for administrators
toward planning, designing, and implementing effective professional development
practices. The National Commission on Teaching and America’s Future in their report,
No Dream Denied: A Pledge to America’s Children (2003) promoted the use of these
standards, which were aligned with the definition of professional development from the
No Child Left Behind Act of 2001. This research study was designed to determine
whether the actual professional development practices in Ohio public schools aligned
with the NSDC’s standards (2001). In addition, the participants in this study described
the types of challenges faced when planning, designing, and implementing high-quality
professional development.

From a review of the research, no other study has been located which focused on
whether professional development practices in Ohio public schools were aligned with
these standards. Six researchers have utilized a set of the NSDC’s standards (1995, 2001)
or a set of staff development standards published by the National Staff Development
Council and the National Association of Secondary School Principals (1995) in their dissertations. One study of Catholic high schools in the state of California found that these schools were partially aligned with six of the standards (Phelps, 2003). In the literature study described further in Chapter II, common obstacles experienced by administrators designing professional development opportunities included the lack of funding, time constraints, and the lack of follow-up opportunities. A recent study by Zimmerman (2001) indicated that school principals in Ohio faced the constraints of time and funding when offering professional development opportunities for teachers. Additional studies were noted within the literature review in Chapter II regarding constraints and challenges to implementing professional development opportunities, along with alternative strategies utilized to overcome these issues.

The NSDC’s standards (2001) provided a framework to guide the implementation of professional development programs. Based upon a description of the alignment of actual practices designed by Ohio public school administrators, the conclusions from this study will inform educational practices. An understanding of the standards most often practiced and those that were limited in use will assist in defining the knowledge needed by our school leaders regarding professional development. Administrators must recognize their responsibility to foster teacher professional development necessary to improve student performance in the public schools. In designing future college courses for administrators, strategies may be indicated from the conclusions of this study to enhance the knowledge and skills necessary to facilitate effective professional development programs. Strategies such as how to facilitate study groups, collaborative practices, teacher leadership, coherent planning for professional development, and how to provide
the support necessary for staff development may be recognized as critical practices in future coursework for educators. To support public school leaders, implications for future educational programs and training experiences as well as resources to promote these practices may be clarified.

Policies and decisions for effective professional development experiences, especially in regard to the allocation of time, funding, and human resources, may be impacted by the conclusions in this study. The results may guide administrators, boards of education, and policy-makers when providing resources and designing future staff development programs. As Phelps (2003) stated, “It is critical that school leaders from board members to department chairs, possess the required levels of knowledge and skill to lead and provide staff development that achieves school goals” (p. 157). From an analysis of the challenges experienced by participants, a better understanding of the issues confronted when implementing effective professional development experiences can be recognized. Potentially the factors impacting these issues can be reconstructed in the future to ensure effective professional development practices were actualized for all educators, thereby improving student achievement.

Overview of the Methodology

This study utilized a questionnaire sent to a purposive sample (Merriam, 2001) of 165 professional development coordinators and directors of curriculum and instruction throughout the state of Ohio. The questionnaire was designed as a self-report approach to identify the use of the NSDC’s standards (2001) and types of challenges experienced when implementing professional development programs. A total of 25 questions were
correlated to the NSDC’s standards (2001) using checklists and categorical responses for quantitative data analysis and unstructured responses or open-ended questions for qualitative data analysis (Tuckman, 1999). An additional 13 questions solicited background information about the administrator completing the survey.

In order to answer the first research question, data were examined using a mixed methods approach in which concurrent procedures joined both qualitative and quantitative methodologies (Creswell, 2003). Using this research design, both forms of data were collected and then integrated in order to interpret the results. This method of analyzing the data permitted the strengths of one data collection form to complement the other. A decision for whether the schools were aligned with the NSDC’s standards (2001) was based on the ratings of two panelists. These panelists rated each of the schools for alignment with the 12 standards based upon both the quantitative data and qualitative responses collected from the questionnaire. Each individual school that indicated the use of all 12 standards was considered as aligned with the NSDC’s standards (2001). An inter-reliability procedure was used to compare the two sets of ratings from the two panelists (Tuckman, 1999). This statistical method confirmed the procedures used to determine the alignment of schools with the standards and lent credibility to the questionnaire. A chi-square procedure was used to determine whether the ratings by the panelists of the individual schools were statistically different in order to answer research question two.

Once the schools were separated into groups of either aligned or not aligned with the NSDC’s standards (2001), the third research question could be answered. A qualitative analysis of the responses, using only the two unstructured questions in the
questionnaire, was completed from the schools that were considered to be not aligned. Using a peer review process, an independent expert and I coded responses and constructed categories, which were then stated as themes (Merriam, 2001). The themes agreed upon by the independent expert and myself were reported in Chapter IV.

Limitations of the Study

The number of individuals selected for the study was limited to the 165 curriculum and instruction directors or professional development coordinators selected from a total population of 350 school districts. These schools identified one of these two positions in the Ohio Educational Directory for the 2002-03 school year (2002). Fifty-eight individuals returned a completed questionnaire that was analyzed in the findings. This self-report questionnaire revealed participants’ perceptions of professional development activities occurring in their individual public school. A triangulation of their perceptions using documents or interviews was not obtained due to limitations in time and potential travel arrangements. The focus of this study did not include teacher perceptions of professional development activities.

The study was designed to determine the number of Ohio public schools from the purposive sample that aligned their professional development practices with the NSDC’s standards (2001). It was also designed to provide a descriptive report on the types of challenges commonly experienced when implementing professional development activities based upon the responses by participants in schools not aligned with these standards. Due to the limited number of responses, the results cannot be generalized to a larger population of administrators.
Key Terms

*Professional development* – Professional development for this study was described as a systemic approach that engaged teachers in improving their professional knowledge, skills, and practices in the classroom. The purpose of professional development was to assist all students in achieving mastery of the academic content standards adopted by the Ohio Board of Education. The activities defined as professional development include opportunities, such as teams of teachers learning together, study groups, workshops with follow-up activities, and embedded practices designed for teachers to apply new strategies into their daily practices. School districts, the Ohio Department of Education, and regional professional development centers sponsor activities for teachers’ professional growth. *Professional development, staff development, professional growth, and professional learning* were used interchangeably in the context of this study. *Effective professional development* and *high-quality professional development* were synonymous terms used within this research study.

*Context* - The context of professional development focused on the school and/or school district, organization policies, resources, and the culture in which the learning by educators was implemented.

*Process* - The processes of professional development described the learning processes and designs used for the acquisition of new knowledge and skills. These included such factors as the use of student learning data, evaluations of previous professional development experiences, research-based techniques for the improvement of teaching practices, adult learning strategies, and the various designs used for staff development opportunities.
Content - The content of professional development articulated the knowledge and skills needed to effect change in teaching practices. The content includes an understanding of the academic content standards for what students must know and be able to do as well as the instructional strategies and assessment techniques to ensure student success.

National Staff Development Council's Standards - The National Staff Development Council (2001) published a set of twelve standards for effective professional development practices as a framework for individuals to utilize when planning, designing, and implementing staff development. These 12 standards were categorized into the content, process, and context of professional development noted by Sparks (1983). The literature review in the next chapter identified these 12 standards and developed the ideas within each standard. Appendix A included a listing of these standards.

Aligned - The term aligned was used to reference whether an individual Ohio school district’s professional development practices incorporated all 12 National Staff Development Council’s standards (2001).

Not aligned – Ohio school districts that did not incorporate all 12 National Staff Development Council’s standards (2001) were identified as not aligned. The terms not aligned, unaligned, and non-aligned meant the same for this study.

Mixed methods approach - The mixed methods approach (Creswell, 2003) described the methodological practices used in this study, using unstructured and categorical survey questions to acquire qualitative and quantitative data for analysis. This
approach permitted both types of data to be used for providing a more thorough understanding of the research problem to address the first research question.

*Constant comparison method* – Glaser and Strauss (1967) used the *constant comparison method* as a strategy for analyzing qualitative data to support a grounded theory. Merriam (2001) defined the method as a comparison of data to determine the similarities and differences in order to form categories. The categories were then grouped into patterns and presented as themes. The constant comparison method was utilized in this study to present the themes that emerged from the two unstructured questions in the survey. The themes defined the commonly experienced challenges by participants in Ohio school districts that were not aligned with the National Staff Development Council’s standards (2001).

**Summary**

Professional development practices for teachers have traditionally been designed as one-day workshops (National Commission on Teaching and America’s Future, 1996). Federal and state initiatives have provided the impetus to reform these types of staff development programs. The National Staff Development Council (2001) published a set of 12 standards to guide effective professional development practices. This descriptive research study utilized a mixed methods approach with both qualitative and quantitative data to describe whether the actual professional development practices in Ohio public schools align with the National Staff Development Council’s standards (2001). The study also described the types of challenges faced by participants in Ohio schools demonstrating a lack of alignment with these standards when implementing staff
development programs. The results of the study can be used to inform educators, policymakers, and legislators about future professional development needs in Ohio.
CHAPTER II

Introduction

Chapter II presents a review of the literature relevant to the research questions posed in Chapter I, including an historical view of professional development practices and the federal mandates impacting staff development within the public schools. A synthesis of the literature forms the basis for effective professional development practices. This synthesis is followed by a discussion of the 12 standards from the National Staff Development Council’s publication (2001) with reference to the pertinent research and comments from practicing educators. The historical and current professional development practices in Ohio public schools conclude this chapter.

Literature Review

Historically, professional development for teachers has been offered via one-day workshops that held limited value to changes for instructional practices in the classroom (Darling-Hammond, 1997). Momentum has grown in the last decade to ensure that professional development activities offered to teachers were tied to school improvement goals that impacted student achievement. Research on effective staff development practices emphasized the need for on-going, meaningful professional learning experiences that link to classroom instruction to ensure student learning. Mandates from the federal government and initiatives from the Ohio Department of Education and the Ohio General Assembly have produced an impetus for practices to be aligned with a framework offered for high-quality professional development. Complementing these
mandates and the research on high-quality professional development, a set of 12 standards for effective staff development practices was published by the National Staff Development Council (2001).

Effective Professional Development

Throughout the literature, several features of effective professional development practices were defined. The Eisenhower Professional Development Program has been the United States Department of Education’s single largest investment for teacher professional development (Birman, Reeve, & Sattler, 1998). Based upon a three-year evaluation of the Eisenhower Professional Development Program, these authors presented themes that emerged from their research and corresponded to characteristics of high-quality professional development practices. The authors utilized a framework similar to the Building Bridges: The Mission and Principles of High-Quality Professional Development (United States Department of Education, 1994) to define these characteristics. The framework emphasized the use of a vision to guide the content and approaches used for staff development. It placed an emphasis on specific content knowledge along with the selected teaching strategies for each of the content area disciplines. Another strategy in the framework included the utilization of approaches to professional learning experiences that promote learning for adults and suggest the use of substantial time and resources to embed teacher experiences into the daily life of schools. An expansion of the role for teachers to work collaboratively with other educators, support leadership opportunities, and align academic content standards, curriculum, and assessments found in state or federal initiatives was posed within the framework. The last
element defined was the need for accountability of results to evaluate the impact of professional development on teacher practice and student learning.

Loucks-Horsley, Hewson, Love, and Stiles (1998) defined seven principles for effective staff development through their research on teacher development programs in science and mathematics. The seven features for effective professional development experiences included (a) an understanding of what effective classroom teaching and learning looks like, (b) opportunities for teachers to develop knowledge and skills in specific content areas, (c) strategies offered for student learning, (d) a community of learners, (e) teachers in leadership roles, (f) links to district and state practices, and (g) assessments for improvement efforts.

Case studies of eight schools that won the United States Department of Education National Award for Model Professional Development provided insights for effective professional development practices (Western Regional Educational Laboratory, 2000). Several principles were defined from these case studies. The focus on student learning and the development of a long-term plan for professional development that focused upon individual and organizational improvements were two key principles. Affirmation was given for the United States Department of Education’s (1996) stance that teachers were central to student learning and must hold the expertise to teach a content area. The utilization of current research on best practices and embedded professional development experiences were two additional features promoted. Collaborative planning by educators encouraged their participation in professional development activities. These practices were encouraged as they reflected leadership opportunities for teachers. An acknowledgement of the substantial time investment and resources necessary for
professional development programs was given. Accountability efforts to evaluate the impact of practices on teacher effectiveness and student learning to guide future professional development efforts were included within the principles.

Historical Perspectives on Federal Mandates

The GOALS 2000: Education America Act, Pub. L. No. 103-227, § 102, 108 Stat. 125 (1994), included Goal 4 - Teacher Professional Development. High-quality professional development was noted to be an essential ingredient for any successful school reform program, with teachers defined as the core component. An expectation by the federal department of education was that teachers be committed to their profession and prepared to deliver instruction linked to content standards to a diverse population of students. Professional development was noted as a means to assist teachers in acquiring the new knowledge and skills for this delivery of new instructional practices.

In the report, What Matters Most: Teaching for America’s Future, the National Commission on Teaching and America’s Future (NCTAF) (1996) stated

After a decade of reform, we have finally learned in hindsight what should have been clear from the start: most schools and teachers cannot produce the kind of learning demanded by the new reforms - not because they do not want to, but because they do not know how, and the systems in which they work do not support them in doing so. (p.5)

This report (NCTAF, 1996) conveyed the idea that rather than mandates and directives, public school systems need policies and working conditions that support the professional development of teachers and reward them for their excellent work with students. The
commission emphasized three basic premises: the importance of teacher knowledge, the need to prepare and keep good teachers, and the imperative to create schools that support learning.

The National Commission on Teaching and America’s Future (2003) stated that the No Child Left Behind Act of 2001, Public Law 107-110, signed by President Bush on January 3rd, 2002, reaffirmed the need for quality teachers for every child in the United States. In its report, No Dream Denied: A Pledge to America’s Children (2003) the commission built a set of strategies based upon their three earlier premises. The three strategies were to promote teaching and learning success by organizing schools around theories of teacher development, require high quality teacher preparation to promote teacher retention and good teaching practice, and develop a high quality teaching profession through sponsoring career path teacher growth. To address each of these strategies meant offering effective professional development within the schools.

The No Child Left Behind Act of 2001, 20 U.S.C. 6311 § 9101 (34) outlined specific requirements for the professional development activities conducted in schools. The definition of professional development within this federal legislation reinforced a focus toward ongoing, embedded professional development experiences. The definition of professional development in this federal mandate stated that activities were to utilize the following practices (a) improve and increase teachers’ knowledge of academic subjects; (b) integrally link to the school and district education improvement plans; (c) provide educators with the knowledge and skills to ensure students meet state defined academic content standards and achievement standards; (d) improve classroom management skills; (e) offer high quality, sustained, intensive, and classroom-focused
opportunities that have an impact on classroom instruction and teacher’s performance and do not include short-term workshops or conferences; (f) support the training of highly qualified teachers; (g) advance teacher understanding of effective instructional strategies based upon scientifically-based research and strategies for improving student academic achievement; (h) align with state academic content standards, achievement standards, and assessments; (i) permit active participation of teachers, principals, parents, and administrators of the school; (j) give teachers and staff of limited English proficient children the knowledge and skills to provide instruction as well as support to these children; (k) provide training for educators in the use of technology and its integration into classroom practices; (l) utilize evaluations on a regular basis to determine the impact on improved teacher effectiveness and improved student achievement in order to improve the quality of professional development experiences, (m) provide instruction for strategies of teaching children with special needs, (n) include instruction in the use of data and assessments to impact classroom practices; and (o) include instruction in ways that all educators may work effectively with parents.

In the report by the National Commission on Teaching and America’s Future (2003), the commission emphasized the need to provide high-quality professional development embedded into the daily lives of teachers. According to the research cited by the commission, high-quality professional development practices focused upon student needs and engaged teachers in analyzing their professional practices. Effective staff development also offered opportunities for teachers to observe experts, be observed by experts, and receive feedback from experts. This report referenced the National Staff Development Council’s standards (NSDC) (2001) for effective staff development when
they stated the need to follow research practices that produced significant changes in
teacher classroom practices.

Professional Development and Student Achievement

The ultimate goal of the professional learning experiences of educators is to
improve student achievement. Killion (2002b) wrote

Although this connection may seem obvious, the proof that staff development
leads to increased student achievement eludes evaluators. While demonstrating
the link between staff development and student achievement is methodologically
challenging, it is possible and is increasingly essential to do. (p. 21)

Many research studies have been completed to substantiate the link between professional
development and student learning; yet, doubt exists as to any conclusive proof that staff
development increases student achievement (Killion, 1999, 2002b, 2002c). Staff
development was necessary for increasing student performance but professional learning
by itself cannot be successful unless the school system in which it occurred supported
learning for educators and for students. Multiple factors contributed to increased student
learning including (a) content standards, (b) high expectations for student performance,
(c) improved curriculum frameworks, (d) assessment practices, and (e) new approaches
to instructional strategies. But in the complex world of schools, it was nearly impossible
to determine if one particular factor such as professional development was exclusively
responsible for student learning. Killion (2002b, p. 22) stated, “Therefore, staff
development leaders and decision makers need to acknowledge the relationship of many
factors rather than to attempt to show that staff development is a single cause of increased
student achievement.” When identifying schools at varying grade levels that demonstrated evidence of increased student achievement, each program confirmed that a positive correlational relationship existed between staff development and student achievement (Killion, 1999, 2002b, 2002c).

Three recent research studies reported a correlation between teacher growth from professional development programs and student achievement. Lowden (2003) examined the impact of professional development utilizing Guskey’s (2000, 2002) models for teacher change based upon an evaluation of professional development. Using a researcher-designed survey, a strong correlation between teachers’ implementation of new knowledge and skills in the classroom and the impact on student achievement was found. In a quasi-experimental research study, students whose teachers participated in ongoing staff development demonstrated higher achievement results in comparison to students whose teachers did not participate in staff development activities (Lane, 2003). This study was reflective of the results from Wenglinsky (2002) who reported that teachers who had sustained professional development within a specific content were more likely to engage in classroom practices associated with improved student achievement.

A study conducted by the Council for School Performance (Harkreader & Weathersby, 1998) examined the differences in higher achieving and lower achieving schools in Georgia. The results indicated that teachers in both groups of schools participated in professional development having similar content and offered by similar sources throughout the school year. The staff development programs in higher achieving schools included greater collaboration between administrators and teachers on decisions
about professional development, a greater focus on students and classroom practices, more training processes used, and more direction and support given by leadership. The higher achieving schools approached staff development collectively and professionally and these factors related to the context schema defined within the NSDC's standards (2001) described later in this chapter.

National Staff Development Council’s Standards

The National Staff Development Council’s Standards for Staff Development, Revised (2001) was the document produced by a “collaboration with more than 25 educators and policy makers from more than 15 professional education organizations, the standards represent remarkable consensus about the prerequisites of context, process, and content for staff development that results in higher levels of learning” (Mizell, 2001, p. 19). These 12 standards for effective staff development were “the product of research, hard thinking, discussion, and debate among educators grounded in the realities of school systems’ and schools’ operations” (Mizell, 2001, p. 19). The standards included the principles, attributes, and features described by the United States Department of Education (1994), Loucks-Horsley, et al., (1998), and the Western Regional Educational Laboratory (2000). They were also conceptually tied to the definition of professional development from the No Child Left Behind Act of 2001 and offered administrators designing professional development activities with a framework for their decisions.

The NSDC's standards (2001) were designed to assist educators in developing the “insights, knowledge, and skills they need to become effective classroom and school leaders, better able to increase student learning” (p. vi). The standards were grounded in
the belief that students and educators would benefit from effective professional
development practices; therefore improved teacher performance in the classroom and
ultimately improved student achievement would be achieved. The National Staff
Development Council (2001) noted that all 12 standards must be used together, as the
results for improvement were regarded as less likely if even one standard was missing.
Each of these standards is described in the following sections, along with relevant
research utilizing the framework of context, process, and content standards (Sparks,
1983). Appendix A includes a complete listing of the 12 standards.

Six research studies utilized the standards published by the National Staff
Development Council (1995; 2001) or the standards published by the National Staff
Development Council and the National Association of Secondary School Principals
examined the relationship between teaching practice, student achievement, and the degree
that professional development practices within one low-achievement elementary school
in a suburban Virginia school met the NSDC standards (2001). Teacher interviews, an
analysis of student achievement scores, and the NSDC (2001) self-assessment survey,
were used to conduct the research. Based upon the survey results, teachers agreed that the
NSDC's standards (2001) were reflected with their professional development activities,
with the standards for equity and quality teaching implemented the most, and the standard
of resources implemented the least. A correlation between the level of implementation of
the standards and student achievement was not found to be significant.

Sissel (2003) identified whether professional development in rural Nebraska
schools aligned with the identified effective components from three national networks,
one of which was the NSDC’s standards (2001). Using a survey designed by the researcher, a significant difference between the perceptions of administrators and teachers about the professional development practices in the schools was noted. Based upon the findings, Sissel suggested improved communication between the two groups surveyed and setting goals that reflect effective staff development standards to increase teacher commitment to learning. Sissel concluded that hindrances to providing effective staff development practices included (a) the issue of time constraints, (b) lack of funding, (c) lack of ongoing follow-up, (d) inconsistency in planning, and (e) the lack of teacher involvement in the process of planning.

Parker (2003) evaluated the perceptions of administrators and teachers in a school district in Mississippi on effective staff development practices using the self-assessment tool by the NSDC (2001). Parker found no significant difference between the perceptions of these two groups and concluded that a learning community was organized within the school and the professional development goals were aligned with the NSDC’s standards (2001).

Wilkinson (2003) investigated the effect of two different approaches to professional development on student achievement in two middle schools in Delaware. A causal comparative study examined whether the teacher perceptions differed between the school that used a systemic approach to staff development and the school that used a more traditional approach to staff development. A difference in perceptions was noted between the two schools. The staff that participated in the systemic professional development activities reported stronger alignment with the standards (NSDC, 1995) than teachers who participated in more traditional activities.
Del Farver (2003) examined the extent that context, process, and content standards influenced student performance on the New York Regents tests. Principals completed a self-assessment survey (National Staff Development Council and National Association of Secondary School Principals, 1995) and the responses were used to measure the extent that the standards existed within the participants’ schools. Based upon the results of a series of multiple linear regression analyses, high expectations for students was the only significant predictor variable of student performance.

A study of Catholic secondary schools in California was conducted by Phelps (2003), which most closely modeled this research study. Phelps used a modified version of the NSDC (2001) self-assessment tool to investigate the perceptions of teachers and administrators on the professional development programs and practices within their schools. The findings indicated that the participating secondary schools did not possess sufficient knowledge, organizational structures, and expertise to meet all of the NSDC’s standards (2001). Although the large majority of the school leaders valued staff development, these schools did not meet six of the 12 standards. Obstacles to professional development included (a) the lack of time, (b) past experiences with staff development programs, (c) the absence of learning teams, (d) the absence of an effective evaluation system, (e) the lack of resources, (f) the lack of understanding of adult and student learning, and (g) the mediocrity tolerated by administrators in curriculum and instructional practices. The strategies suggested by participants for overcoming obstacles were (a) collaboration with colleagues, (b) support and leadership, (c) salary incentives for educators, (d) schedule changes to provide time for learning and planning by teachers, and (e) the promotion of a culture of continual adult learning.
The NSDC conducted a survey in the fall of 2000 of their members whose job titles included “staff development” (Sparks, 2001). Of the 1,100 surveys sent to members, 212 were returned. When describing the implementation of the NSDC’s standards, 12% of the responding members indicated that they fully implemented the standards, 58% partially implemented the standards, and 16% were unfamiliar with the standards. The NSDC encouraged schools to integrate professional development planning into school improvement plans with 85% of the respondents indicating this integration. Workshops were the most popular form of staff development with 95% of the respondents utilizing this staff development design. Other methods included curriculum development (85%); mentoring (83%); team planning (67%); study groups (61%); coaching (56%); networking (46%); and action research (43%). The percentage of district funding devoted to staff development was up to 5% for 51% of the respondents while 28% indicated that the budgets reflected an increase from the previous year. The amount of time allocated for professional learning opportunities was less than 5% during a teachers’ workweek for 81% of the respondents. Thirty eight percent of the responding members reported that their districts set aside less than 3 days in a school year for staff development and 30% indicated that more than six days each year were set aside. The findings from these recent research studies on the use of the NSDC’s standards (2001) and the results from the NSDC survey (2001) were included in this literature review as they may have relevance to the findings from this study.
Context Standards

Professional development “should be conceived as ongoing and embedded in the process of developing and evaluating curriculum, instruction, and assessment” (Darling-Hammond, 1995, p. 173). Furthermore, the resources of time, information, and expertise needed to be offered for teachers to work together on improving teaching and learning. Elmore (1997) stated, “professional development permeates the work of the organization, and the organization of the work” (p. 15). According to Elmore, professional development occurred in several ways throughout a school day and assimilated itself into classroom practices and the relationships between teachers and principals. The premise was “that changes in instruction occur only when teachers receive more or less continuous oversight and support focused on the practical details of what it means to teach effectively” (Elmore, 1997, p. 15). Both of these authors described the context of the school environment including the learning communities, the leadership, and the resources that must be in place for successful learning to occur. These practices were placed into the context standards, which describe the organization, system, and culture of the school where new learning takes place (NSDC, 2001).

Learning Communities

The National Staff Development Council (2001, p.8) asserted that “Staff development that improves the learning of all students organizes adults into learning communities whose goals are aligned with those of the school and district.” A professional community of learners was defined as teachers and administrators in schools who continuously learn and act upon their learning to improve their effectiveness toward
increased student performance (Hord, 1997). The National Commission on Teaching and America’s Future (1996, p.9) stated, “Successful schools have found that they need to create communities that work toward shared standards....” Shared standards, a shared vision, shared goals, or a shared purpose all encompassed the focus on student learning being a critical aspect of a learning community (DuFour & Eaker, 1998; King & Newmann, 2001; Lambert, 2003; Leithwood, Leonard, & Sharratt, 1998; Newmann & Wehlage, 1997).

Lambert (2003) commented, “the commitment to a shared vision provides coherence to programs and learning practices” (p. 6). Through their research, Newmann and Wehlage (1997) found in schools with strong professional communities that a clear, commonly shared purpose for student learning was apparent. Teachers collaborated and assisted each other to achieve the purpose of promoting student achievement through collective responsibility for student learning. The findings by Shiu (2003) suggested that a learning community for teacher professional development could be created through school reform that included designated facilitators and regular meeting times for professional learning. Parker (2003) indicated that districts need a clear vision regarding their goals toward effective staff development. This vision was crucial to increased teacher commitment toward learning and focusing on student achievement.

The goals of professional development need to be aligned with the goal of student learning and incorporated into a long-term school improvement plan (Abdal-Haqq, 1995; Marshall, Gunderson, & Prichard, 2001; Renyi, 1996; Richardson, 1998). Sparks and Hirsh (1997) explained that by utilizing a comprehensive plan for staff development, all aspects of the school system including the content standards, the criteria for achievement,
assessment practices, and curriculum were closely linked. Previous professional learning opportunities focused upon teachers' perceptions of their needs; whereas the new paradigm focused upon student learning and the goals toward improving student achievement. Teachers who participated in systemic staff development programs reported a stronger alignment with the NSDC's standards (2001) than teachers who participated in traditional programs such as workshops, conferences, and coursework (Wilkinson, 2003).

Learning teams included teachers who were involved in a variety of professional experiences to improve their teaching and learning to form an aspect of a learning community. These teams included grade level teams, teachers serving specific groups of students, department teams, interdisciplinary teams, or study groups. They met on a regular basis for the intention of learning about teaching practices, planning joint lessons, and solving classroom related problems (Corcoran, 1995). Furthermore, teams of teachers working together within learning communities broke down the physical isolation teachers typically faced in their schools. Common planning time positively affected the culture of one school and collegiality among teams promoted high levels of cooperative work, therefore reducing teacher isolation (Rice, 2003). Murphy and Lick (2001) promoted study groups as one form of learning team. The study group of teachers investigated curricular practices, developed an understanding of academic content, targeted a school wide problem for analysis, or promoted the learning of new instructional practices. Upon reflection, teachers in learning teams discussed their learning for application into school or classroom practices. Beyond the use of learning teams, schools were encouraged to assist teachers in improving their skills through a variety of practices such as teacher leadership and joint decision-making in order to strive toward the shared vision of student
achievement (Renyi, 1996). What does this type of leadership or decision-making look like in the public schools?

**Leadership**

According to the National Staff Development Council (2001, p.10) “Staff development that improves the learning of all students requires skillful school and district leaders who guide continuous instructional improvement.” The NSDC (2001) emphasized that leaders must understand the link between professional learning of teachers and improved student achievement and articulate the importance of this linkage to all school partners. Joyce and Showers (2002) stated that, “not all of what is called staff development will directly improve student achievement…. However, staff development can be designed that *will* affect student learning, and not a little - large changes can be made” (p. 35). One strategy described within the instructional improvement process of Community School District #2 in New York City was the management of resources to support instructional improvement while professional development became the vehicle (Elmore, 1997).

Emphasis on building a clear focus on learning and the learners was the first principle of leadership defined by Guskey (1995, 1997). Site-based professional development, which supported a vision for student learning, and balanced the needs of the school district with the priorities of individuals was encouraged by Abdal-Haqqi, (1995), DuFour and Eaker, (1998), Renyi, (1996), and Sparks and Hirsh (1997). Regardless of the school leadership team, “Leadership needs to keep the school focused on shared purpose, continuous improvement and collaboration” (Kruse, Louis, & Bryk,
1994, p. 5). Consistency of focus on a few important instructional priorities over time was key to the instructional improvement noted by Elmore (1997).

A second strategy critical for the school leader was the use of a vision to address the small changes needed to support sustained efforts toward student learning. Leaders were expected to: (a) develop a plan for accomplishing the goals set for professional development programs; (b) help design the action plan to implement the processes; (c) acquire resources; (d) ensure uninterrupted time for staff development; and (e) monitor progress, while continually offering assistance during the implementation of new practices (Barth, 1990; Renyi, 1996; Southwest Educational Development Laboratory, 2000).

Haslam (1998) emphasized the importance district leaders’ understanding of professional development as a process in adult learning and professional growth that was most successful when embedded within the daily practices of the school day. Providing incentives to encourage teacher participation in professional development practices and designing programs based upon individual school structures and policies were noted to be imperative. Teacher empowerment, rewards, and professional development contributed to teacher commitment in Park’s (2003) research. Renyi (1996) commented that professional development leaders found ways to reward educators in becoming future leaders, which can become a major motivation for all teachers to incorporate demanding learning into their daily school practices. The principal’s leadership role had considerable influence on building the capacity of teachers as they changed instructional practices and created a supportive collaborative culture with a focus on data (Tanner, 2003). DuFour and Berkey (1995) noted that principals must model a commitment to their professional
growth in order to convince other educators to commit to continual professional learning. When principals attend professional development programs with teachers, the practice reinforced the continuous learning values of the school (Fink & Resnick, 2001).

Staff development must shift its focus from a select group being responsible to being a concerted effort by administrators and teacher leaders according to Sparks and Hirsh (1997). Although principals or central office administrators often held a primary role in designing and implementing the professional development programs in schools, leaders within learning communities promoted shared leadership for participation in decision-making practices (DuFour & Eaker, 1998; Lambert, 2002). Hord (1997) considered the new relationship fostered between administrators and teachers led to collegial leadership in schools so that everyone could grow professionally. Zemelman, Daniels, and Hyde (1998) promoted the involvement of teachers in decision-making practices. They noted reasons for teacher involvement in decisions, which complemented the reasons found initially by Garet, Birman, Porter, Desimone, and Herman (1999), as noted below.

When teachers participated in the planning of activities, noted within opportunities through the Eisenhower Professional Development Program, more activities for active leaning occurred (Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet, et al., 1999). Additionally, teacher participation in staff development planning was associated with positive aspects of professional development programs. Teacher planning assisted in ensuring that activities focused upon techniques teachers believed to be important. Sharing authority for decisions with teachers who are closest to the task of improving student learning gave teachers responsibility for identifying and solving their
own problems as well as their responsibility for student achievement (DuFour & Eaker, 1998; Kruse, et al., 1994).

Blended with leadership practices of empowering teachers, Kouzes and Posner (1995) described five principles. These principles included (a) challenging the process to seek opportunities for growth and learn from mistakes; (b) inspiring a shared vision for describing a future and enlist others toward common values and goals; (c) enabling others to act through collaborative practices, developing competence, and offering support; (d) modeling the way by setting an example and promoting consistent progress; and (e) encouraging the heart through recognition of contributions and celebrating accomplishments.

Within strong professional communities in schools examined by Newmann and Wehlage (1997), leadership from principals and staff capitalized on available resources by strengthening a sense of support, offering respect for teachers’ work, and engaging in the redesign of the curriculum, assessment and instructional innovations. In a study of 14 schools, qualitative data indicated that leadership proved to be very adept at securing resources to aid professional development, enforcing respect for individual staff members and expressing concern for teachers’ professional needs (Leithwood, et al., 1998). The importance of a visible, supportive principal, who provided the time, resources, and expectation for collaborative work was found to be critical to a job-embedded model for professional development (Ireland, 2003). An important responsibility of leadership personnel involved the sustaining of professional communities of learners, the establishment of school policies to address school goals, and the distribution of resources to promote ongoing professional development practices (Darling-Hammond &
McLaughlin, 1996; NSDC, 2001). The next section expanded upon the use of resources to support professional development activities.

Resources

The National Staff Development Council (2001, p.12) stated that “Staff development that improves the learning of all students requires resources to support adult learning and collaboration.” Time for professional learning, funding for programs, policy statements, and purchases of professional materials were described within this standard. The NSDC (2001) advocated that 25 percent of a teacher’s work time be devoted to learning and collaboration with colleagues. In order to commit funds for professional development, school districts may choose to use various sources of funding including local funding, federal and state grant funds, and local private grant funds.

As professional development administrators have attempted to promote effective practices for teacher growth linked to improved student performance, the policies established within the school as well as the mandates from state and federal legislatures must be considered (Darling-Hammond & McLaughlin, 1996). Furthermore these authors stated that it was necessary for policies to foster new structures, institutional provisions, incentives, and supports for the professional growth of teachers as they expanded their professional roles. Policies to permit administrators to rethink schedules, staffing patterns, budgets, and strategies for providing teams of teachers to share responsibilities for their teaching practices and have opportunities for ongoing professional learning were necessary according to Darling-Hammond (1995).
Providing teachers with sufficient time and continuous support to master the content of new standards and instructional strategies was noted as a guiding principle for professional development programs to ensure full integration into their practices (Corcoran, 1995; Covert, 2003; Haslam, 1998; Kruse, et al., 1994). A report by the Kentucky Education Association and Appalachia Educational Laboratory (1993) indicated that when teachers were afforded opportunities to observe other classrooms through release time and substitute teachers, had common planning time, and were offered collaborative time with teaching teams or full faculties, they gathered new insights about school restructuring and instructional techniques. The long-term focus for instructional improvement noted by Elmore (1997) depended upon involving teachers in their classrooms through a consulting model of professional development. This intensive professional development process demanded time in order to change the teaching practices as well as time for new leaning and adaptation by teachers to the new expectations.

The greatest obstacle to school reform has consistently been the lack of time for professional development opportunities to learn new skills, ensure collaborative planning, discuss student learning needs, implement new practices, assess the changes designed, and integrate new approaches into the daily teaching practices (Adelman, Haslem, & Pringle, 1996; Conley, 1999; Lieberman, 1995; Phelps, 2003; Purnell & Hill, 1992; Sidler, 1993; Sissel, 2003; Smith, 1998; Teberg, 1999). In a recent report of the working conditions of schools across the state of North Carolina (Easley and North Carolina Professional Teaching Standards Commission, 2002), the lack of adequate time for
teachers to complete their daily responsibilities, to plan, and to collaborate with their colleagues was noted as a major concern.

Corcoran (1995) commented, “There is a great deal for teachers to learn (and unlearn) and they must do it while working full time” (p. 32). Several general approaches were suggested in research studies in the early 1990’s on how to create time for teachers’ professional learning during the school day. The first approach was to reassign personnel, reschedule duties, hire substitute teachers, and utilize volunteers or university personnel to provide short and infrequent periods of time for teachers to meet and plan instruction (Purnell & Hill, 1992; Raywid, 1993; Watts & Castle, 1993). Related strategies found by these authors were (a) the use of teaching assistants, team teachers, or administrators to cover classes; (b) offering special event programs; and (c) the supervision of community service projects. Adjusting of teachers’ preparation and planning times so that teachers at a given grade level or within a specific department had the same common planning time created time for collaborative discussions or study groups relevant to professional development practices. Other methods to acquire time for professional learning included (a) the rescheduling of the school day; (b) extending a typical school day or restructuring the current daily schedule permitted teachers to bank time for early dismissals or late starts on selected dates throughout the school year; (c) increasing the amount of time in a school calendar year by adding professional development days through supplemental contracts, stipend pay, converting instructional days into professional development days through waiver requests; and (d) increased contract days were common means for creating time (Purnell & Hill, 1992; Raywid, 1993; Watts & Castle, 1993).
When time from staff meetings or other scheduled meetings was revised to offer opportunities for professional development (Purnell & Hill, 1992; Watts & Castle, 1993), other forms of communication such as electronic mail systems, staff memorandums or bulletins were developed to ensure teachers receive information (Kruse, et al., 1994; Richardson, 2002a). Other strategies for creating time were the promotion of more efficient time use by reducing paperwork through technology support, keeping meetings focused, and specifying time limits for meetings (Purnell & Hill, 1992). Time for learning and applying new technological advances was deemed necessary for full integration of management strategies and classroom instruction (Abdal-Haqq, 1995; Renyi, 1996).

Trickling into the literature on providing sufficient time for professional development was the aspect of accountability. As early as 1993 Watts and Castle commented that time alone was not sufficient for school reform measures. It was the proper use of time that was important not the amount of professional development time (Guskey, 1999). Public schools have reallocated their resources to support professional development time for teachers, yet a concern was raised that this support for time does not guarantee any improvement in teaching practices (Kennedy, 1998; Wenglinsky, 2002). When time was allocated during the school day, the concern was that time might not be used to support professional development opportunities or the changes in teaching practices that promote student learning (National Partnership for Excellence and Accountability in Teaching, 1999) (NPEAT). Planning for team time needed to be considered carefully and school leaders needed to ensure that teachers used the resource of time, as intended, for professional growth and learning (Hirsh, 2002c). Examples of
study groups formed to account for the time given for professional development
opportunities were found in the literature (Munger, 1995; Murphy & Lick, 2001).

Funding required to support a commitment for professional development has
often been difficult to obtain and policy makers and administrators often view
professional learning as an expendable budget item rather than a necessary ingredient
toward improving the performance of teachers and students (Elmore, 1997). Phelps
(2003) and Sissel (2003) both found the lack of funding or resources to be obstacles
against implementing effective professional development programs. Sparks and Hirsh
(1997) emphasized the importance of professional development being seen as an
indispensable practice when funding to schools was cut or reduced. The question often
asked was what constitutes professional development and the funding related to it? It was
difficult for some schools to agree upon what constitutes professional development
opportunities (Richardson, 1997). The NSDC (2001) recommended that 10 percent of a
school district’s budget and 30 percent of the technology budget be allocated for
professional development. Miles and Hornbeck (2000) conducted an analysis of
professional development spending in four urban school districts. Spending across these
four districts ranged from 1.8% to 4.3% of total operating funds. The district leaders
typically spent more than they realized on professional development because the days
provided for teachers for planning and professional development opportunities cost 18%
to 55% of the total staff development spending. In Elmore’s research (1997), more
money was spent per capita on staff development in the school district studied than other
New York school districts, although many activities that occur informally may not be
captured in the reported budgets. Richardson (1997, p. 47) asserted, “If time is money,
then supporters of staff development will ultimately have to translate any changes in
school schedules into dollars and cents and show the connection to student learning.”
Unfortunately, Miles and Hornbeck’s (2000) study revealed there was little guidance for
how teachers used their time or the allocated funding. No accountability measures were
in place to link activities to student performance.

Process Standards

The process standards referred to the “how” of staff development experiences and
described the “learning processes used in the acquisition of new knowledge and skills”
(NSDC, 2001, p. 2). These six standards (NSDC, 2001, p. 5) included: (a) data-driven
decisions using disaggregated student data, (b) evaluation practices from multiple sources
to guide improvement and demonstrate the impact of improvement efforts, (c) research-
based knowledge which means the educators are given the knowledge base to apply
research toward decisions, (d) design approaches for using learning strategies appropriate
to the goal of the staff development experience, (e) learning strategies for the application
of knowledge from human learning theories and the change process, and (f) collaboration
in order for educators to have the knowledge and skills necessary to collaborate with each
other.

Data-driven

According to the National Staff Development Council (2001, p.16), “Staff
development that improves the learning of all students uses disaggregated student data to
determine adult learning priorities, monitor progress, and help sustain continuous
improvement.” Student data can be obtained from standardized tests, formative school
assessments, student portfolios, and other sources to provide input toward the selection of school goals, and ultimately, the focus for professional development efforts. To ensure data was effectively used, teachers and leaders needed to understand how to analyze data and use it to inform practices.

Careful analysis of data on student outcomes from a variety of sources can guide examinations of curriculum and instructional practices (Kaufman, 1996; Richardson, 1998). Schmoker (2003) suggested the use of data collection to provide the impetus for improvement efforts and recommended simplicity and economy when analyzing data. In addition, two key questions were suggested, which included a reflection on how many students succeeded in a subject area and what areas defined the strengths and weaknesses within this subject area.

Bernhardt (2003) suggested schools gather and analyze four kinds of data including: demographic data, student learning data, perceptions data, and school processes data such as the operation of special programs. These four types of data can be obtained from disaggregating information readily available in the schools, such as norm-referenced and criterion referenced tests, standards assessments, questionnaires, and classroom practices. After organizing the data into categories, Bernhardt suggested reviewing two categories of data to obtain a clearer picture of developing trends within the school. A review of the categories of student learning and school processes may reveal information on student achievement within selected programs. This type of data analysis may be valuable for reports and to show historical perspectives of student progress. The key to data collection was for teachers to study the results to understand
what students know at the beginning of the school year as well as give ongoing assessments to measure progress throughout the school year.

Schmoker (2003) warned educators that extended studies often distract from the real issue of improving instruction for greater student achievement. Formative or classroom assessment data collected within the classroom enables teachers to monitor their success and adjust their instruction based upon these short-term results (Guskey, 2003a; Schmoker, 2003; Stiggins, 2001). When designing professional development programs, Guskey (2000) suggested gathering information from observations of classrooms, formative assessment results, and school-wide and classroom data to identify needs. Although information from teachers about current problems or issues they are facing can be valuable, often this information may not be the same as determining the needs of educators for professional development activities. A further analysis of the problems educators identified could clarify other conditions of need in the school that are outside the realm of the professional development.

Evaluation

The National Staff Development Council (2001, p. 18) stated that “Staff development that improves the learning of all students uses multiple sources of information to guide improvement and demonstrate its impact.” Effective evaluation began with the planning of the professional development experience and focused on the linkage to school goals, the adult learning processes to be utilized, and the evidence to be collected to guide further decisions.
Guskey (1998, 2000, 2002) stated that the evaluation of professional development needed to be an intentional process in order to determine its value. Professional development leaders need to adequately define the staff development program goals, the actions to address the goals, and the resources necessary to implement the program plan before being able to evaluate the process (Killion, 2002a). Furthermore, formative and summative evaluations must guide the improvement of professional development.

To demonstrate the impact of professional development activities, collecting evidence of the following can be useful: (a) educators’ reaction to the experiences, (b) their learning, (c) the organizational support, (d) educators’ use of new knowledge and skills, and (e) student learning outcomes (Guskey, 1998, 2000). These five critical levels of professional development evaluation were arranged from simple to complex with each level requiring additional time and resources to complete. Assessment of teachers’ reactions to the professional development activities was the most common form of evaluation with the easiest type of information to gather and evaluate. The second level of teachers’ learning typically measured the knowledge and skills gained through the learning experiences. Information for evaluating both of these levels was done through evaluation forms and conversations with teachers. The third level of evaluation, according to Guskey (1998, 2000), was the information gathered regarding improvements in the capacity of the school to change and support educators’ and students’ learning through policy changes, use of resources, leadership practices, collaboration, and recognition of success. The information at this level of evaluation can be gathered through school records, interviews with teachers, observations of practices, evaluation forms, meeting notes, and student portfolios. The fourth level of evaluation was the use
of new knowledge and skills by educators who participated in effective staff development activities and measured through several approaches previously noted. The critical issue for professional development evaluators was to determine the time necessary for successful implementation of new practices before success could become evident. The most complex level of evaluation was determining the impact of professional development programs for teachers on the achievement levels of students. A combination of methods can be used to evaluate the stated goals of the staff learning activities.

Hassel (1999) emphasized the criteria of narrowing the student achievement gaps as a process for evaluating professional development. The evaluation of professional development needed to be linked to the improvement of student learning and use accountability measures for the professional learning experiences offered to educators (Guskey, 2000, 2002; Kelleher, 2003; Killion, 2002a). Kelleher (2003) suggested a six-stage cycle for teacher professional development that began with setting goals for student achievement and ended with multiple measurements of both student and adult learning. Teachers would be at different stages in this cycle depending upon their professional pursuits. A professional development administrator, mentor, or coach could be critical for providing feedback and guiding the adult learning process defined within the cycle.

Research-based

According to the national Staff Development Council (2001, p. 20), “Staff development that improves the learning of all students prepares educators to apply research to decision making” (NSDC, 2001, p. 20). Examining research to determine the effectiveness of practices within an individual school was promoted. Educators need to
understand research methodology, compare the student population in a given study to their student population, and determine if the findings of a study are consistent with the evidence.

The No Child Left Behind Act of 2001, 20 U.S.C. 6311 § 9101 (37) stated that the term scientifically based research meant research involving the application of rigorous, systematic, and objective procedures that obtain reliable and valid information pertinent to educational programs. Research studies based upon randomized clinical trials, experimental designs, or quasi-experimental designs that can be replicated and are published in peer-reviewed journals were noted to be the scientific based research proposed within this law. Schools have often based their instructional and professional development practices on past traditions, while the federal government’s emphasis has shifted toward educational practices having a scientific basis (Richardson, 2002b).

Additionally, educators needed to understand the sample size, context of the research, and the type of research conducted to be able to determine if the program or practices would yield similar results in their particular school. Examples of research-based programs included the Baldrige Education Criteria for Performance Excellence (Baldrige National Quality Program, 2002), the Tripod Project (Ferguson, 2002), and the Pathwise program based on Danielson’s (1996) research.

The Institute of Education Sciences (2003) designed a guide to provide educational practitioners with a user-friendly tool to identify research-based intervention practices supported by rigorous evidence. The premise for this guide was that the implementation of evidence-based interventions in education improved the educational outcomes for children served in the schools. Three steps were included within the guide
to determine whether evidence of effectiveness existed within the research practices. If the research did not show either strong evidence or possible evidence toward effectiveness, then the intervention was not confirmed by research. The guide provided examples and explanations for school practitioners on how to identify and utilize scientifically based research practices, following the definition within the No Child Left Behind Act of 2001.

O'Kelly (2003) described the results from sustained efforts in six rural schools in Ohio that utilized scientifically based research for four years. As teachers used the scientifically based methods of instruction, they changed their instructional practices and their beliefs about students' potential, which promoted higher expectations for student learning. Summer workshops followed by several in-service seminars and teacher collaboration teams were used. According to the results of the study, the school districts have realized gains in the percentage of students passing the state proficiency tests.

Hirsh (2002a) stated that considering the research base for a strategy gave decision-makers more confidence that the strategy led to the intended goal. Decisions based upon good research provided justification for a recommendation posed within a school district. By reviewing reports, school personnel determined whether their school was similar to the specific school districts researched. Examples of strategies utilized in similar schools provided impetus for recommendations. Hirsh recommended the following steps when considering the use of educational research: (a) read articles carefully to understand their research basis, (b) ask researchers to explain their study and its relevance to a particular school, (c) validate the claims of researchers by talking with
schools identified in the study, and (d) compare student populations from the research to a particular school implementing specific strategies.

Carnahan and Fitzpatrick (2003) stated that when reviewing literature claiming to provide research-based evidence, educators needed to determine the type of document being read. They stated that three categories of documents may be reviewed, including those describing the process for implementing a strategy or program; descriptive documents relating the success of a program, method, or initiative; and research studies providing literature reviews, results of the studies and data supporting the research performed. A key to judging the effectiveness of research was whether evidence could be transferred to a specific classroom or school. According to these authors, these processes take time and commitment by professional development administrators and school staff but they may assist leaders in becoming informed consumers of educational research.

Design

The National Staff Development Council (2001, p. 22) stated that “Staff development that improves the learning of all students uses learning strategies appropriate to the intended goal” (NSDC, 2001, p. 22). The emphasis on a new view of professional development for teachers was suggested in the report of the National Partnership for Excellence and Accountability in Teaching (1999). A workshop continued to be the most common form of professional development in 1995 (NCTAF, 1996; Sparks, 2001). Workshops did not produce a change in teachers’ practices but offered awareness for a new knowledge base (Fullan, 1991; Little, 1993).
To improve teaching, schools needed to cease the practice of offering “quick-fix workshops” (Goldenberg & Gallimore, 1991, p. 69) and create staff development providing intellectual stimulation and opportunities for the integration of new knowledge and skills. Teberg’s (1999) concluding comments stressed the need to provide a variety of activities that may not be currently viewed as professional development. Teberg likened the necessity of providing a variety of approaches to meet teachers’ varying levels of understanding of curriculum, assessment, and instructional strategies to the need that educators have to meet the diverse needs of individual students in their classrooms.

Teachers needed to be “engaged in professional learning every day, all day long” (NPEAT, 1999, p.2). Providing continuous, intensive professional development woven into the daily practices of professional life in the school and aligned with student content standards was noted to be critical for school improvement efforts and gains in student achievement (Darling-Hammond & McLaughlin, 1996; King & Newmann, 2001; Lieberman, 1995; Little, 1993; National Foundation for the Improvement of Education, 1996; U.S. Department of Education, 1996). Renyi (1996) commented that the integration of teachers’ continuous learning into the daily practices of teaching laid the groundwork for significant improvement in student achievement.

Five models have been used to provide professional development opportunities for educators (Sparks & Loucks-Horsley, 1990). Individually guided development, observation of a teacher with accompanying feedback, involvement in a school improvement process, training designs, and inquiry practices were noted to be effective models. These various models included professional development opportunities such as workshops, collaborative team planning, action research, reading professional materials,
curriculum planning committees, mentoring, coaching, and study groups (Calhoun, 2002; Loucks-Horsley, et al., 1998; Murphy & Lick, 2001; Richardson, 1998; Sagor, 2000). These activities were utilized depending upon the professional development goals, teachers’ learning experiences, and teachers’ prior knowledge. Smith (2003) found that the most helpful professional development opportunities were individually guided staff development, followed by observation, training, inquiry, and involvement in the improvement process. A combination of learning strategies was promoted as the most powerful form of professional development (NSDC, 2001).

Based upon a longitudinal study of Eisenhower programs (Garet, et al., 1999), these authors found that the professional development activities focused on specific, higher-order instructional strategies increased teachers’ use of those strategies in the classroom. Furthermore, the effect was stronger when activities contained features of active learning, coherence, collective participation, and used reform type activities such as study groups, action research, or networking collaborative groups. These reform types of professional development designs lasted for longer time periods and had greater numbers of contact hours. Often these activities occurred during the regular school day, during the process of classroom instruction or during teacher planning time and included mentoring, study groups, or teacher networks. According to the research, these activities had a positive influence on teachers’ opportunities for active learning, connections to teachers’ goals, and the alignment with standards. Teachers were more likely to report enhanced knowledge and skills and changes in their teaching practices based upon their participation in reform type activities.
Harkreader and Weathersby (1998) examined the linkages between professional development and student achievement in 60 Georgia schools. Teachers who reported a greater variety of staff development techniques reported a higher level of use of the skills and knowledge learned in the training programs. The techniques utilized within the activities were representative of the staff development strategies Joyce and Showers (2002) described as important for teachers in learning new skills and instructional methods for their classroom practices. These strategies included the understanding of theory for new knowledge and skills, demonstrations, practice of new skills in a simulated setting, feedback about performance in the simulated setting, and follow-up attention or support for implementing the skills.

Learning

According to the National Staff Development Council (2001, p. 24) "Staff development that improves the learning of all students applies knowledge about human learning and change.” The NSDC promoted the understanding of a content area along with multiple opportunities to practice new skills with accompanying feedback for effective learning by educators.

Lewis (2002) provided a commentary on school reform and resources for professional development. Her perspective was that traditional types of one-shot workshops tend to continue in public schools with teachers deciding upon a class from a district-designed catalog of activities. Lewis quoted Hirsh, the deputy executive director of the National Staff Development Council, by stating “only 10% of what teachers learn in traditional professional development activities is ever used in the classroom” (Lewis,
2002, p. 488). Between 50 – 79 hours were required for teachers to learn a new instructional strategy based upon the time to understand the practice in theory, model from demonstrations, and utilize the strategy successfully in the classroom (Purnell & Hill, 1992). Therefore, multiple opportunities to learn the strategies that will later be used in the classroom were needed by teachers (Holm & Horn, 2003).

Adult learning theory emphasized that adults bring a wide variety of previous learning experiences and knowledge to professional development activities (Knowles, 1978; Loucks-Horsley, et al., 1998; Smylie, 1995). The Northwest Regional Educational Laboratory (NWREL) (1998) found that effective professional development incorporated the previous experiences of teachers along with a variety of activities to address individual learning modalities. Active participation balanced within the limits of time, application of learning to the classroom, and well planned, efficiently delivered professional development experiences effectively addressed adult learners’ needs.

Independent learning opportunities, social learning opportunities, and the sharing of decisions by teachers were critical factors in professional development (Abdal-Haqq, 1995; Renyi, 1996). Teachers needed to work with and learn from others, collaborate within group work to examine beliefs about teaching, and distribute the power within the workplace to learn from individuals in different positions (Darling-Hammond, 1998; Smylie, 1995). Darling-Hammond (1998) found that professional development experiences became meaningful for educators when the processes of collaboration with others, examination of student work, discussions, and sharing of ideas were used.

These ideas on different learning opportunities blended with the research on the professional development needs of teachers in different career stages. A discussion of
teacher career stages was relevant prior to looking at the recommendations on professional development for the career stages of teachers. Krupp (1986) suggested prescribed periods of time or age stages in her description of teacher career stages. She defined her work into the early adult years, age 30 transition, settling down stage, midlife transition, and the later adult years. Each age span had specific pressures, feelings and attitudes typical of that stage. Criticism of the age stage theories were (a) the emphasis on chronological ages that may mask the variations in the development of an individual, (b) the lack of clarity of specific ages to define the beginning and ending periods for a stage and the assumption that stages are built upon each other, and (c) the issue that conventional stage models do not take into account the social and historical contexts of a person’s life (Lemme, 2002).

Burke, Christensen, and Fessler (1984) proposed a Teacher Career Cycle model that conceptualized a teacher’s career as a cycle influenced by personal and organizational factors. The personal environment of a teacher included categories such as family interactions, positive personal events, life crises, life experiences, interests, and individual dispositions. The organizational environment included key components of school regulations, management style of the administrator, public trust, societal expectations, professional organizations, and teacher unions. Steffy (1989) presented the Teacher Career Stages model based upon attitude and competence, which had an age component blended into it. Another model presented by Steffy, Wolfe, Pasch, and Enz (2000) was a developmental model entitled the Life Cycle of the Career Teacher. This model contained six progressive stages with growth dependent upon the interactions of teachers and their environments in a sequential pattern. The model noted that individual
teachers moved through the stages at different rates and were active participants throughout their development. A teacher's personal reflection and renewal was a critical aspect of this model.

Fessler (1995, p. 179) stated, "A supportive, nurturing, reinforcing environment can assist a teacher in the pursuit of a rewarding, positive career progression." In addition, teachers were continually influenced by their working environment, personal needs, and career stage. Therefore, understanding the various stages of teachers' careers and providing support for addressing personal problems were noted as necessary for the success of the professional development process. Steffy et al. (2000) suggested that teachers should have influence on the decisions about curriculum, professional development activities, and school goals through a shared decision-making process. This meant that teachers would assume collaborative responsibility and growth would be encouraged throughout the phases of their career. These authors also suggested that the social context beyond the classroom and school needed to be considered to support the professional growth of teachers. Support groups within a school, partnerships with universities, and policies were context variables that influenced a teacher's professional growth process.

Six stages within the Life Cycle of the Career Teacher were identified: novice; apprentice; professional; expert; distinguished; and emeritus (Steffy, et al., 2000). Several authors made the following suggestions regarding the professional development needs of teachers in the various career stages. Novice teachers required professional development activities to develop their skills and confidence to succeed in the beginning stages of their career (Berson & Breault, 2000). Apprentice teachers needed support to become
acquainted with the school community, learn how to access materials and curriculum, and work within their classrooms and with their mentors (Clement, Enz, & Pawlas, 2000). Professional development programs needed to be content specific to address the concerns of the apprentice teacher, such as: classroom management; lesson planning; parent conferences; and documentation of student progress. The learning needs of the professional teacher involved the facilitation of new ideas regarding the teaching and learning processes prior to reconstructing new ways of teaching (Wolfe, Murphy, Phelps, & McGrath, 2000). The school professional development plans for these teachers needed to address the goals for student learning and the growth needs of teachers through leadership roles. The expert teachers were often leaders within the school community who shared their expertise through mentorship opportunities, presentations, and publications (Bray, Kramer, & LePage, 2000). The distinguished teachers (Enz, Weber, & Campopiano, 2000) needed professional challenges while emeritus teachers (Dagenais, Steffy, & Enz, 2000) often served as supervisors for student teachers as they prepared for the challenges of the teaching profession.

Pasch, Wolfe, Steffy, and Enz (2000) suggested that administrators utilize the following practices to support teacher career growth: (a) share a vision of excellence along with factors supporting growth, (b) provide mentoring and coaching programs, (c) encourage teachers to continually grow in their professional career, (d) celebrate achievements within all career stages, (e) adapt workloads, (f) offer opportunities to build professional cultures of learning for all school members, (g) develop school partnerships with universities and community agencies to foster collaboration, and (h) redesign the time for professional learning. Furthermore, program development for administrators
must address how to accomplish items such as: (a) facilitate teacher professional growth plans, (b) create structures that permit time for professional learning, (c) enhance collegiality and collaboration, (d) provide opportunities for teacher leadership, and (e) recognize teacher withdrawal in order to scaffold activities for support.

Throughout their careers, teachers bring personal knowledge bases and perspectives that intermix with the environmental factors needed to define the types of designs for effective professional development activities. Guskey (1995) stressed the importance of the individual development of teachers while attending to organizational features. Guskey (1995, p. 119) stated that “The key is to find the optimal mix of individual and organizational processes that contribute to success in a particular context.” One aspect of an optimal learning environment was teacher collaboration crossing grade level teams, subject-area departments, and career stages (Smylie, 1995).

Supovitz and Zief (2000) explained that teachers’ age and experiences were not related to their decisions to participate in staff development opportunities. These researchers identified family commitments as obstacles and many teachers preferred workshops that occurred during release days rather than to commit additional time to professional learning. The structure of the professional development program often influenced teachers. Some teachers believed that workshops needed to disseminate information. Other teachers were opposed to programs that encouraged them to address specific content knowledge and instructional techniques, as potential weaknesses in their personal practices could be identified. General areas such as technology practices or language arts instruction tended to be chosen by teachers as they were motivated by personal interests. Some teachers tended to resist areas such as science that they were not
confident in teaching. Other factors that influenced teachers’ resistance were the lack of coherence in professional development programs or topics and fragmented district reforms.

Joyce and Showers (2002) studied five training components to determine the impact each had on the acquisition of teacher knowledge, their use of skills, and the transfer of knowledge and skills into the classroom. These five features included the presentation of theory, demonstration of the new strategy, practice of the strategy in a simulated setting, structured feedback on the performance of the practiced strategy, and coaching. The presentation of theory provided an understanding of the concept relevant to a skill or strategy. The demonstration of a skill gave a model for actual classroom practices that facilitated the understanding of the concept. Practice of the skill occurred in two situations, one in the training setting and one with practice followed by feedback. Peer coaching provided the support for mastering new skills, as well as for the planning and developing of classroom lessons. Peer coaching also promoted collaborative work by teachers to address problems and concerns noted within the implementation and transfer of new skills into the classroom setting.

Each element was individually analyzed for its effect on teacher learning and transfer to classroom practices (Joyce & Showers, 2002). Teachers’ knowledge and skill levels were improved as the various features were combined in the professional development training sessions. The combination of all five features was found to have the greatest impact on teachers’ transfer of knowledge and skills. In fact, only when coaching was added to the staff development opportunities did a significant increase in the transfer of training to the classroom occur, defined by an effect size of 1.42. The effect size of a
finding in quantitative research defines its magnitude, typically regarded as an indicator of practical significance or importance to educational problems (Tuckman, 1999). Effect sizes of .8 were considered to be large and as the effect size increases, the effect of an intervention or difference between the treatment group and control group was more easily established.

One study (Bush, as cited in Hord, 1994) found that when all five of these components were utilized, up to 95% of the educators transferred newly acquired skills into classroom practice. The coaching process was determined to be a critical aspect of the process toward ensuring professional development programs linked to a change in classroom instruction that would positively impact student achievement. In Gigliotti’s (2003) research, teachers were trained as tutors to instruct other teachers and provide support, advice, modeling of strategies, and training sessions as they implemented literacy practices in their classrooms. The ongoing dialogue about teaching and learning promoted new knowledge and skills which affected student learning.

When addressing the learning needs of adults in an organization such as a school, the principles of the change process needed to be acknowledged for improvement efforts to be successful (Hall & Hord, 2001). These authors stated, “Change is highly complex, multivariate, and dynamic” (2001, p.4). Understanding how the change process worked and how to influence and facilitate the process were the key aspects of their book. A few of the 12 principles on the change process included: (a) change is a process, not an event; (b) an organization does not change until the individuals within it change; (c) administrative leadership is essential to long-term change success; (d) mandates can
work; (e) facilitating change is a team effort; and (f) the context of the school influences the process of change.

Collaboration

The National Staff Development Council (2001, p. 26) stated, “Staff development that improves the learning of all students provides educators with the knowledge and skills to collaborate.” Providing educators with the knowledge and skills to collaborate meant offering organized groups the opportunity to promote social interaction for learning, interpersonal support, and creative problem solving opportunities. Collaborative learning was noted as a means toward encouraging school cultures to take on collective responsibility for student learning (Newmann & Wehlage, 1997).

Collaboration was another practice promoted within learning communities both within and outside of the school (King & Newmann, 2001; Kruse, et al., 1994; Newmann & Wehlage, 1997; Richardson, 1998; Smylie, 1995). Collaboration promoted observations within classrooms, discussion and sharing of ideas, and the development of assessments for improving professional practices (Darling-Hammond, 1998; Kruse, et al., 1994; Richardson, 1998). Collaboration engaged teachers in joint planning for the development of curriculum and assessment practices, therefore decreasing the teacher isolation most common in many schools (DuFour & Eaker, 1998; Kruse, et al., 1994; Loucks-Horsley, Stiles, & Hewson, 1996; Newmann & Wehlage, 1997). J. Killion, Director of Special Projects for the National Staff Development Council, stated that “If teachers are working together successfully in professional learning communities or teams, they are practicing and honing their skills to collaborate, so they would be meeting
the standard” of learning communities (personal communication, March 9, 2004). Furthermore, Killion stated that the teachers would need to be completing “real rather than pseudo work, having candid conversations, challenging each others’ assumptions, making decisions” in order for the collaboration to be considered a part of a learning community.

Cooperative, collegial groups provided teachers with opportunities to discuss their teaching practices; expanded their level of expertise with others; reduced their fear of risk-taking through the encouragement and support given by colleagues; and promoted teacher ownership for collective problem-solving (Dufour, 1991). Teachers demonstrating collaboration met regularly, planned their own meetings, maintained records and minutes, produced timelines, shared information, and made recommendations for practice (Pardini, 2001). Newmann (1994) noted that teachers who collaborate with their peers might be more effective with students because of the benefits derived from expanded resources and ideas.

As educators became involved with colleagues, a culture of trust and willingness to ask for assistance from others was created according to Calderwood (2000). This author noted that the social relations within a learning community were fragile and needed continual nurturing to ensure the development of a learning community within schools. Transformations into learning communities took time and energy with disagreements between educators as a potential part of the process. Hirsh (2003) commented that embracing conflict offered an opportunity to pursue solutions and persuaded colleagues that daily collegial learning was necessary for promoting the performance of both educators and students.
Utilizing sample survey data from the 1998 Teacher Survey on Professional Development and Training, one study noted the various perspectives on the use of professional development practices in public schools (Lewis, Parsad, Carey, Bartfai, Farris, & Smerdon, 1999). Ninety-five percent of the teachers who participated in professional development activities had been involved in at least one collaborative activity. These professional development activities typically lasted from one to eight hours and emphasized the implementation of state or district curriculum, performance standards, the utilization of student assessment techniques, and the integration of technology. Increased time spent in professional development and collaborative activities was linked with the teachers’ perceptions of improvements in their teaching practice. Fifty-two percent of the teachers who participated in common planning times with other teachers on a weekly basis reported that this involvement improved their teaching. This data was in comparison to the 13 percent of teachers who had common planning time a few times a year. Sixty-three percent of the teachers on the 1998 survey reported that sharing ideas with other teachers was helpful to their work, suggesting that teachers perceived collegial support was helpful to their teaching profession.

Content Standards

The content standards focus upon the “what” of staff development programs with an examination of the content areas expected by students as the first step (NSDC, 2001). Holding high expectations for all students formed the first standard on equity. The quality teaching standard was designed to “prepare teachers to deeply understand their content area and to enhance their content-specific pedagogy” (Killion, 2002c, p. 211). The
involvement of families and community members as contributors to educational practices was the basis for the *family involvement* standard.

**Equity**

"Staff development that improves the learning of all students prepares educators to understand and appreciate all students, create safe, orderly, and supportive learning environments, and hold high expectations for their academic achievement" (NSDC, 2001, p. 30). Understanding the cognitive and social characteristics of students to provide instructional strategies for addressing students' learning strengths, interest levels, and backgrounds was stated as a critical component of professional development.

In schools with diverse student populations, teachers reported that an understanding of the social ideas, family values, and behavioral standards of the home shaped approaches to education (Trumbull, Rothstein-Fisch, & Greenfield, 2001). Differences in a student's independence, personal achievement, and self-expression were noted in the classroom depending upon the culture of the home and the community. It was important for teachers to understand the cultural values they established in the classroom as an environment for students to express their personal differences and choices and as a climate to facilitate individual learner success (Hirsh, 2002b; Trumbull, et al., 2001).

Professional development offered opportunities for educators to examine their own attitudes, beliefs, and behaviors about diverse learners (Elliott & Schiff, 2001; Hirsh, 2002b). When using class data, teachers noted discrepancies between students and modified their instruction to address learner needs. Discussions of the data led to the
examination of personal attitudes and an understanding of how instructional or
assessment practices, such as role-playing strategies or rubrics, penalized some students.
To fully address the specific knowledge and attitudes of limited English proficient
students, the importance of understanding bilingualism, the role of the first language, and
the difficulties of the mainstream placements needed to be addressed (Clair & Adger,
1999).

Teachers were believed to need specific training to understand and teach to the
individual needs of students with disabilities, which was defined as another diverse group
of learners. Professional development to support successful inclusion practices included
the following practices: (a) encompassing a knowledge base of the different types of
disabilities, (b) understanding the expectations to hold for individual students, (c)
offering diverse instructional techniques, and (d) explaining how to encourage students
toward success (Malarz, 1996). Four suggestions for professional learning experiences
were offered by Beninghof (1996) to support teachers in working with students with
disabilities. The first included the acknowledgement of the different stages in teacher
readiness to accept changes toward inclusion practices. The second was to involve
teachers in planning professional development activities in order to gain their
commitment. The last two activities included offering teachers a variety of choices and
learning activities to use with diverse learners, and ensuring that classified staff were
offered learning opportunities to address diverse learners. For any diverse learning group
of students, the desired outcome of the professional development experiences was to
equip teachers with strategies they could use for facilitating individual student learning
and success (Hirsh, 2002b).
Quality Teaching

"Staff development that improves the learning of students deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately" (NSDC, 2001, p. 32). Attending to both the content of subject matter and how students learn the specific subject matter was reported to be important for the professional development experiences of teachers (Borko & Putnam, 1995; Kennedy, 1999).

Borko and Putnam (1995) defined pedagogical content knowledge as understanding of a content area, such as science, so it was well organized when presented as lessons. The teacher's task was to take specific content knowledge and utilize the demonstrations, models, graphic organizers, and other types of instructional representations to ensure teaching was tied to learners' specific needs. The teacher's knowledge of content was critical to helping the students define their knowledge and link ideas to other subject areas (Darling-Hammond, 1998; Stronge, 2002). Yet, content knowledge was not noted to be sufficient without having knowledge of how to teach students at various grades based upon their learning needs (1998). Professional development activities focused on the facilitation of many types of learning experiences in order to impact the pedagogical knowledge for teachers fresh out of college and veteran staff members were encouraged.

One measure of effective professional development was whether teachers know more about content area curriculum, their students, instructional and assessment practices, and the use of these practices in the classroom after the experiences were
completed (Northwest Regional Educational Laboratory, 1998). Looking at the content component, professional development focused on teachers using hands-on activities to demonstrate concepts in mathematics, science, and higher-order thinking skills was linked to improved student performance in the classroom (Wenglinsky, 2000). This study analyzed a select sample of data from National Assessment of Educational Progress to identify the factors impacting students’ achievement. Although the sample set was limited, a linkage between the content of professional development programs to student achievement was identified. A second study by Wenglinsky (2002) focused upon one grade level of teachers for the subject area of science. The results of this study indicated that the more professional development teachers received in hands-on learning, the more likely they were to practice those types of activities in the classroom, which were associated with student performance growth. One of the important interrelationships was that professional development did seem to influence science teachers’ classroom practices. In a quasi-experimental design, Lane (2003) reported that students whose teachers participated in on-going staff development for mathematical concepts demonstrated higher achievement results in comparison to students whose teachers did not participate in staff development activities. Reed (2003) found that reading teachers who participated in professional development opportunities through a Reading Excellence Act grant added a larger number of instructional strategies to their repertoire.

After a decade of research on middle grade schools, Jackson and Davis (2000) recommended teaching curriculum content based upon academic standards for what students were expected to master, focused upon relevant issues of concern to adolescents, and based upon students learning needs using a variety of assessment methods. In order
to promote this focus for middle grade schools, teachers were expected to participate in ongoing professional development activities to acquire the specific training necessary for teaching young adolescent students. These authors also encouraged the use of learning teams, teacher leadership toward decision-making practices, supportive school environments, and the involvement of parents to support student learning.

Marzano, Pickering, and Pollock (2001) analyzed selected research studies on instructional strategies and performed a research technique called meta-analysis. The meta-analysis combined the results from numerous studies to determine the average effect of a given technique. The results of their study were translated into a unit of measurement known as an effect size, which identified the increase or decrease in achievement of an experimental group in standard deviation units. Nine categories of instructional strategies were identified as having a strong effect on student achievement. Six strategies demonstrating average effect sizes over .70 were reviewed within this literature survey. The effect size of a finding in quantitative research defined its magnitude, typically regarded as an indicator of practical significance or importance to educational problems (Tuckman, 1999). Effect sizes of .8 are considered to be large while a medium effect size is .5.

Identifying similarities and differences was the first strategy utilized to enhance students’ understanding and knowledge (Marzano, Pickering, & Pollock, 2001). Teachers or students identified the similarities and differences of a concept then used graphic or symbolic representations to deepen their knowledge base. Summarizing information gained during instruction by deleting, substituting, and keeping specific aspects of information was the second strategy. These authors noted that students often reword
information or fail to synthesize relevant information into a summarized format. The third strategy of reinforcing effort and giving recognition did not directly enhance students’ cognitive skills; rather it addressed the importance of believing in one’s own efforts to accomplish a task. Homework as a means of practicing a skill provided students with opportunities to improve their learning and understanding. Although the amount and type of homework changed for students during the course of their school career, the use of homework continued to be an effective instructional technique according to their research. The fifth strategy used nonlinguistic representations such as mental pictures, graphic representations, physical models, or drawing pictures for learning information. When both the linguistic and nonlinguistic systems of representation were used, students were better able to recall knowledge. The sixth strategy was the use of cooperative learning, which utilized interdependence, interactions between students, accountability measures, problem solving skills, and interpersonal and small group skills. The authors cautioned teachers to use instructional strategies based upon their knowledge of students’ needs, individual content area, and those that reflect the classroom situation, as any one strategy does not work equally well in all situations.

Teachers who used assessments to determine what students know and can do, were better able to diagnose their needs and pace instruction (Stiggins, 2001). Teachers need to design appropriate classroom assessments with the understanding that they study the results from both formative and summative assessments to measure student progress throughout the school year. Stiggins (2001) suggested that it was important that professional development activities prepare teachers to design these types of assessments to utilize data for classroom instructional purposes.
Family Involvement

“Staff development that improves the learning of all students provides educators with knowledge and skills to involve families and other stakeholders” (NSDC, 2001, p. 34). Family involvement in a student’s education reaped benefits in improved academic achievement that held across economic, racial/ethnic, and education backgrounds of the families (Henderson & Mapp, 2002). To contribute to a family’s ability to influence their child’s success, schools have done the following: (a) encouraged families to work with their children at home, (b) offered meaningful educational activities during the school day for families to be involved with, and (c) provided information and skills on how various activities promote a child’s success in school (Ames, de Stefano, Watkins, & Sheldon, 1995; Dorfman & Fisher, 2002).

Professional preparation for building partnerships with families and the larger community was noted to be important for the development of school programs according to Epstein (2002). To build school, family, and community partnership programs, educators needed an understanding of the types of involvement practices and frameworks for developing partnerships and collaboration. Epstein (1995) framed six types of parent involvement including (a) establishing home environments to support children, (b) communicating about school programs and children’s progress, (c) involving parents in volunteer programs, (d) learning activities at home, (e) decision-making practices, and (f) integrating community resources to strengthen school programs and family practices. Each of these aspects of parent partnerships promoted involvement in the educational system. School-family-community partnerships as a collaborative relationship were
designed to promote positive educational and social outcomes for students while mutually benefiting everyone who was involved (Ellis & Hughes, 2002).

Dorfman and Fisher (2002) provided examples of family involvement practices. These authors explained one example of how the parents of bilingual children wrote familiar stories in their native language and their child wrote an English version of the story. The parents and children presented the story in class to discuss the different cultures of students. Teachers noted that this type of project required additional time and effort on their part due to the additional planning, but they also felt that parents assisted with the learning process and the children learned both at home and at school. Other examples included learning fairs and lending libraries, sometimes offered during school breakfast programs to encourage family involvement in the school programs. These programs helped parents to better understand how to assist their child in reaching academic benchmarks.

Dodd (1996) focused upon the dialogue encouraged between educators, parents, and community members to address the changes in education. New standards for student learning and new classroom instructional approaches were discussed based upon the expectations everyone held for pupils. The conversations assisted parents in understanding the innovative instructional techniques used to address new content standards and the problems faced by educators. Forming partnerships with parents and community members was encouraged.

Common communication strategies used by teachers with families included (a) offering information and strategies to support education in the home, (b) explaining the curriculum and expectations to parents, (c) involving parents in classroom activities, and
(d) communicating with parents about students’ progress (Ames et al., 1995). These authors found that parent involvement was likely to increase when school-to-home communications increased in frequency and quality by the teacher. They also found that children reported greater interest in learning and a greater use of learning strategies when teachers communicated more effectively with their parents.

Relevant to the topic of communication, Davern (1996) emphasized the importance of consistent messages from school personnel that a child with a disability was accepted as a member of the classroom and that everyone held high expectations for the child’s success. Other strategies included the sharing of information about a child, the building of partnerships for long-term relationships, creating school wide plans for the inclusion of students with disabilities in programs, and designing meetings for problem-solving strategies to occur on behalf of the student.

Professional Development Practices in Ohio Schools

Historical Perspective

In Ohio, professional development practices were similar to the practices across our nation in the 1970’s and 1980’s (M. Troyer, Ohio Department of Education, Associate Superintendent, Center for the Teaching Profession, personal communication, December 22, 2003). One-day workshops were offered with teachers selecting from a menu of different activities. New funding opportunities for the professional development of Ohio’s elementary and secondary teachers have been provided through legislative acts in the early 1990’s. The funding was used for the establishment of "regional teacher
training centers for developing innovative teacher training and development methods” (Ohio Department of Education, 1991, p. 2). Within the overview section of the plan presented for the establishment of these centers, it stated, “Professional development of teachers forms the centerpiece of improvements in curriculum and instruction. Continuing the process of improving what students are taught and how they are taught requires an investment in professional development for teachers” (Ohio Department of Education, 1991, p.2).

Eight regions were established throughout the state in 1991 with funding offered through a competitive process to public school districts, institutions of higher education, nonprofit educational organizations, or consortia of these agencies (Ohio Department of Education, 1991). The funded regional center was to be a delivery structure for teacher-centered professional development based upon the objectives identified within each region by a planning committee. This committee, comprised of a majority of teachers, had representatives from school districts, the business community, institutions of higher education, and other groups that held an active interest in teacher training and development.

The focus of the regional teacher training centers was the provision of opportunities for teachers to have sustained, high-quality professional development experiences (Ohio Department of Education, 1991). These eight original centers became the predecessor to the twelve current regional professional development centers in Ohio. According to M. Troyer, Associate Superintendent, Ohio Department of Education, Center for the Teaching Profession, the early emphasis for the current regional centers changed from an emphasis on teacher professional development to professional learning
opportunities for all educators (personal communication, December 22, 2003). The Ohio Department of Education found these regional training centers an effective structure for disseminating information on a statewide basis regarding professional learning opportunities. She also stated, “I would view the regional professional development centers as the first real major step that the state took in terms of really trying to fund and organize in a systematic way for professional development.” The impetus behind the development of these regional professional development centers was to align statewide models, academic content standards, and assessment practices with professional development.

Professional development was noted as “one approach to improving the instructional capabilities of both new and experienced teachers” as stated in the Legislative Office of Education Oversight (LOEO) report (2001, p. i). The LOEO report studied the funding, delivery, and effectiveness of professional development practices for teachers in Ohio. A review of literature on teacher professional development, interviews, surveys, and case studies were utilized to collect information for this report. An assortment of effective and ineffective practices were offered by schools and regional service providers, “despite educators’ clear understanding of what constitutes effective professional development” (LOEO, 2001, p. iii). The challenges for providing effective staff development included a lack of time, discretionary funding, and evaluation efforts.

School districts often accessed different funding sources from the 30 state options, more than 100 federal grant programs, and private funds supporting teacher professional development (LOEO, 2001). These funding sources were typically restricted to specific content areas, groups of teachers, or reform efforts. Therefore, the lack of discretionary
funds was noted as a limitation for a school district's ability to focus staff development on the needs identified as most effective.

The delivery of teacher professional development was provided through individual school districts, regional service providers, the Ohio Department of Education, and contracted outside agencies (LOEO, 2001). State policies changes such as academic content standards, continuous improvement plans, and the transition of educators from teaching certification to teacher licensure, have impacted the delivery of staff development. Alignment of the school district’s professional development activities with the goals from the continuous improvement plan was prompted through the necessity for teachers’ Individual Professional Development Plans to reflect goals from these plans prior to approval by an individual school’s Local Professional Development Committee.

When defining characteristics of effective teacher professional development practices, the LOEO referenced the standards set by the National Staff Development Council, the North Central Regional Educational Laboratory, and other literature (LOEO, 2001). The three primary barriers for offering effective professional development in the case study schools were lack of time, lack of adequate funding, and lack of systematic evaluation of knowing whether the activities offered to staff were effective in changing classroom instruction. The time offered for professional learning was fragmented and did not encourage opportunities for team planning and collaboration. Many school districts focused upon whether teachers attended professional development activities rather than whether teachers learned new knowledge and skills.

Ohio Rev. Code § 3301.079 (A-C) (2001) mandated academic standards for student learning, aligned instruction for curricular practices, and assessments to gather
information on student progress. The Governor’s Commission on Teacher Success (2003) was given the responsibility to study and include recommendations for implementing teacher professional development activities and teacher development programs.

Based upon Ohio Rev. Code §3319.61 (A) (1) (2003), the Educator Standards Board was given responsibility for developing educator standards for teachers and principals to reflect what they should know and be able to do throughout all stages of their careers. The Educator Standards Board was also charged with the responsibility for developing standards for educator professional development in ORC §3319.61 (A) (3). The definition of a Highly Qualified Teacher, adopted by the State Board of Education, was codified into ORC §3319.074 (A) (3) (2003) in order to comply with the No Child Left Behind Act of 2001.

Based upon the mandates of the Ohio General Assembly, a systemic plan has begun for the development of professional development standards in Ohio. According to C. Yoder, Director, Center for the Teaching Profession, Ohio Department of Education, the process for developing professional development standards began with the development of academic content standards to define the expectations for student learning (personal communication, December 22, 2003). The Governor’s Commission on Teacher Success (2003) gave recommendations for professional development practices in their report. The members of this commission wrote that professional development programs needed to be provided through a system focused upon giving educators the knowledge, skills, and resources to assist students in attaining the Ohio academic standards. This commission also requested new professional development standards for Ohio’s educators.
From the report by the Governor’s Commission on Teacher Success (2003) 15 recommendations were made, with those regarding professional development included in this literature study. Recommendation six focused on improving teacher retention by creating school environments exemplifying a supportive professional culture, shared leadership, and time in the school day and school year for ongoing, job-embedded professional development and planning. This recommendation referenced the three standards within the context schema of the National Staff Development Council’s standards (2001), described within this chapter. Recommendation 12 supported the notion that Ohio’s professional development standards needed to be consistent with the definition of high-quality professional development contained within the No Child Left Behind Act of 2001. This definition drew references to the NSDC’s standards (2001) as cited in the report by the National Commission on Teaching and America’s Future (2003). Recommendation 12 called for the adoption of statewide standards for professional development, which will be developed in the future (C. Yoder, personal communication, December 22, 2003). Recommendation 13 focused upon the importance that professional development be based upon the analysis and use of data to improve student achievement as well as the funding for this type of professional learning. The report from the Governor’s Commission on Teaching Success (2003) stated,

There are no statewide standards for professional development. There is no systematic effort or established mechanism to ensure that professional development is properly aligned with state and local education objectives. As a result, teachers and principals in Ohio are not receiving enough high-quality professional development throughout their careers. (p. 35)
The Governor’s Commission on Teaching Success (2003) further defined the problem as structural since “the design and delivery of professional development is highly fragmented and uncoordinated” (p. 35). Funding was also fragmented with at least 30 sources of discretionary state funding and over 100 federal grant programs available for professional development, most having restrictions for the use of the available money. The Commission restated the conclusions from the Legislative Office of Education Oversight report (2001). This Commission reiterated their conviction that the obstacles of lack of time, lack of funding, and lack of a systematic way to evaluate the effectiveness of professional development resources would be overcome through incentives and a commitment toward aligning staff development with performance standards and evaluations. A need for standards-based, job-embedded, results-driven professional development practices was stated. This Commission recommended state funding through a variety of initiatives. State funding was recommended for “an amount equivalent to five additional professional development days” in order to offer additional days through flexibility in structuring and delivering of staff development “to develop sustained, job-embedded professional development” (Governor’s Commission on Teaching Success, 2003, p. 38).

Current Practices Impacting Professional Development

According to C. Yoder (personal communication, December 22, 2003), the process for having a systematic approach to professional development began with the adoption of the academic standards, and continues with the development of performance standards for assessment. The development of teacher standards and professional
development standards will be completed in the future. She also stated that when all these practices were in place, “then we will have an entire aligned system with what we expect students to be able to know and do, teachers to know and do, and professional development then to guide people to that deep capacity building.”

A professional development framework was designed by the Ohio Department of Education using research regarding high quality professional development and embedding the definition from the No Child Left Behind Act of 2001 into the framework (C. Yoder, personal communication, December 22, 2003). This framework contains content, process, and context standards and is currently being field-tested in schools with Reading First Grants. The process standards focused upon an educator selecting a professional development activity based upon the goals of a continuous improvement plan or student data driving that plan. The content standards incorporated activities for teaching the academic content standards, improving classroom management, using research-based strategies, and involving parents in educational programs. The context standards applied the content of the professional development activity into the job-embedded situation, where it becomes specific to an educator’s needs. According to C. Yoder (personal communication, December 22, 2003),

Through the content piece you are working with other teachers, to take what you learned over here [content] and tailor it to what that specific job or site needs to do....It’s the context piece that brings it back to the individual level.

Yoder continued her thought as she stated that the context piece was often missing for effective professional development because professional development providers offered an experience and then left the school. Providers needed to have some
kind of structure to permit the content, process, and context standards to be met in order to have high quality professional development in the public schools.

Federal reporting requirements mandated the Ohio Department of Education to annually report the percentage of teachers who participated in high quality professional development described within the No Child Left Behind Act of 2001 (M. Troyer, personal communication, March 12, 2004). Each teacher within a school district was expected to complete a questionnaire and certify whether they participated in a high quality professional development activity during the summer prior to the current school year or during the current school year. The questionnaire provided three evaluation questions to help the teacher determine whether the professional development activity meets the federal definition. Principals were expected to report the results of the teacher questionnaires to the Ohio Department of Education prior to end of the current school year.

The mandates from the Ohio General Assembly and the No Child Left Behind Act of 2001 have impacted the framework for professional development opportunities within Ohio public schools. The personnel from the Ohio Department of Education developed a draft framework for professional development that will lead to a set of standards (C. Yoder, personal communication, December 22, 2003). The National Staff Development Council’s standards (2001) were referenced within the federal mandate and used as guidelines for effective professional development.
Summary

This chapter identified the significant federal and state mandates, including the No Child Left Behind Act of 2001 and various state legislative acts influencing the current professional development practices in the state of Ohio. Based upon these initiatives, personnel at the Ohio Department of Education are developing a framework for professional development and ultimately will establish a set of standards. Based upon the federal mandate, personnel in Ohio school districts must determine whether the professional development activities provided to teachers are of high quality and report this information to the state department.

The effective professional development practices providing the framework for the National Staff Development Council’s standards (2001) were described. These standards were created as a guideline for practitioners. A description of the National Staff Development Council’s 12 standards (2001) was written, along with relevant research studies and insights from practitioners. These standards form the framework used by educators to plan, design, and implement professional development activities in public schools. Within the last few years, six dissertation studies utilized a set of standards from the National Staff Development Council (1995, 2001) or the National Staff Development Council and the National Association of Secondary School Principals (1995). One study of a sample set of Catholic schools in California utilized a survey to determine the degree to which professional development practices met the NSDC’s standards (2001).

The literature reviewed in this chapter formed the basis for the questionnaire designed for this research study and sent to public school administrators in Ohio. The
literature reviewed within this chapter also provided a reference for the alignment process posed within the research question and described in the next chapter.
CHAPTER III

Introduction

This chapter presents the design of the study, including the processes for selecting the participants; the methodology for answering the three research questions; and the procedures for analyzing data. The questionnaire design, types of questions, and credibility of this instrument are explained. A scoring rubric was designed to determine which of the public schools in this study were aligned with the National Staff Development Council’s standards (2001). To identify the types of challenges experienced by professional development administrators when implementing professional development activities, the qualitative data from the questionnaires were analyzed using a peer review process. Within this chapter, procedures for examining the data in this study and the reliability of the process to determine districts aligned with the standards are explained.

Participants

Utilizing the Ohio Educational Directory, 2002-03 School Year (Ohio Department of Education, 2002), public school districts that listed more positions than a superintendent, treasurer, and principals were selected for review. Next, the districts that only named additional positions for directors or supervisors for such services as transportation or technology were excluded from further review. From this systematic sampling (Creswell, 2002) of Ohio public school districts, the positions for staff development directors and curriculum and instruction directors were identified in 350 school districts. To complete this study, the role of staff development director was
selected because of the responsibility for teacher professional growth typically assigned within this role. The curriculum and instruction directors were identified because they often held responsibility for professional development activities in the absence of a staff development director. When a school district listed both positions, the staff development director was selected for use in this study.

To verify the names of these two types of administrators in the 350 districts, contact with a consultant at the Ohio Department of Education Center for School Reform and Options and the 12 Regional Professional Development Directors was made via electronic mail. In addition, an Internet search of the professional development directors in school districts noted in the Ohio Educational Directory, 2002-03 School Year (Ohio Department of Education, 2002) was conducted.

The Ohio Department of Education consultant provided the names and electronic mail addresses for the 14 federal program consultants across the state. In the communication to these 14 individuals, a request was made for names and electronic mail addresses for the Title I and Title II directors in Ohio school districts. A listing of all directors for Title I Targeted Assistance, Title I School-Wide, Title I School Improvement, and Title II-A, Improving Teacher Quality Funds programs was acquired.

Electronic communication was sent to the 12 directors for regional professional development centers to request the names and electronic mail addresses of curriculum and instruction directors and professional development directors in their regions, along with the Ohio school districts they served. Four of these directors sent additional names and electronic mail addresses for the administrators within their region to be added to the database.
Twenty-one school districts listed the name of a professional development
director in the Ohio Educational Directory, 2002-03 School Year (Ohio Department of
Education, 2002). An Internet search of these 21 school districts was conducted to
acquire the correct names and addresses for contacting these individuals.

Individuals holding titles of professional development directors or curriculum and
instruction directors were often responsible for federal funding, Title II-A, Improving
Teacher Quality Funds. Because these funds were available for staff development
programs, the directors of this specific federal program were included for this study. To
begin the process of cross-referencing all the individuals holding titles as professional
development directors, federal programs directors for the Title II-A grants, and/or
curriculum and instruction directors in the school districts, the original database of 350
schools was utilized. A new database was created, containing 165 names of Ohio
administrators in these roles. These administrators were believed to be responsible for
professional development activities in the Ohio public school they represented. The final
database included the names, school districts, and electronic mail addresses or United
States mail addresses for these administrators. The United States mail addresses came
from the Ohio Educational Directory, 2002-03 School Year (Ohio Department of
Education, 2002). The names of these participants became the purposeful sample for this
study (Merriam, 2001).

Twenty-one directors of staff development and 144 curriculum and instruction
directors were selected for the sample set. According to the information gathered from
the final database of individuals selected for the study, six professional development
administrators were responsible for Title II-A, Improving Teacher Quality Funds and 15
professional development administrators did not have this responsibility. Ninety-one curriculum and instruction directors had responsibility for Title II-A, Improving Teacher Quality Funds for their school district, while 53 did not have this responsibility. Two questions posed in the demographic portion of the survey clarified the responsibilities for Title II-A, Improving Teacher Quality State Funds and the utilization of these funds for professional development activities.

Participant Consent

A letter was sent to participants requesting their support for this research study as evidenced by the completion and return of the questionnaire, described later in this chapter. Within this letter, the purpose of the study was given. Statements regarding the voluntary participation without any identified risks and return of the questionnaire indicating informed consent to participate in the study were included in the letter.

The confidentiality of the participants was assured within the scope of the letter (see Appendix B) and written onto the questionnaire (see Appendix C) sent as an attachment to the letter. Participants were asked to reply to the questionnaire and return it as an attachment through electronic mail. The same letter and questionnaire with modified directions for returning it to me were sent to 40 participants through the United States Postal Service.

Design

To gain a perspective on how the practices relevant to staff development have changed, the literature review originally began with issues related to school reform and the focus on staff development necessary for school reform. As the research questions
became clearly defined and reference to the National Staff Development Council’s standards (NSDC) (2001) were linked to the research questions, the search for relevant literature was narrowed. Various databases available through the Ashland University library were utilized to find research studies, dissertations, and journal articles from practitioners in the field of professional development. The website for the National Staff Development Council offered a bibliography of resources for articles, web sites, and books corresponding to the standards. Internet searches of web sites for the federal government, regional educational laboratories, and state education departments also proved to be valuable in gathering information on the historical perspective for effective professional development programs and studies conducted on a national basis.

A review of the relevant literature on professional development was completed to define the concepts, terminology, and descriptions of the National Staff Development Council’s standards (2001). After professional development experts completed the development of these standards, the question was posed, “Will policy makers and educators use the standards to reshape their understanding and expectations of staff development?” (NSDC, 2001, p. vi). The research problems in this study were framed based upon this question and my personal experiences as a public school administrator. The problems reflected the knowledge of various challenges impacting effective professional development practices in public schools. The purpose of this study was to determine whether the professional development practices in Ohio public schools aligned with the NSDC’s standards (2001). A second purpose of this study was to examine the types of challenges to implementing professional development activities commonly experienced by Ohio practitioners in the public schools. The information gathered from
the purposive sample (Merriam, 2001) of participants in this study will contribute to an expanding knowledge base for understanding professional development practices in Ohio public schools.

Three research questions were posed for this study.

1. Were the actual practices, designed by Ohio public school administrators for teachers’ professional development activities, aligned with the National Staff Development Council’s standards?

2. Were the ratings by two panelists on the alignment of Ohio public schools with the National Staff Development Council’s standards statistically different?

3. In cases when actual practices did not align with the National Staff Development Council’s standards, what types of challenges to implementing professional development activities did administrators in Ohio public schools experience?

Instrumentation

To acquire information regarding professional development practices in Ohio public schools and the types of challenges encountered when implementing professional development activities, I designed a questionnaire, entitled *Professional Development Practices in Public Schools*. Surveys or questionnaires have often been used to determine the incidence and relationships of behaviors, attitudes, and opinions of individuals in a population (Kerlinger, 1992). This author indicated that an important aspect of the investigator’s role was to specify the research problem of a study along with the specific questions to be asked in the survey.
Two reasons for the survey design were to offer the ability to acquire both quantitative and qualitative responses for analysis and the rapid turnaround expected from participants (Creswell, 2003). Tuckman (1999) described surveys or questionnaires as a means of collecting data about people by asking them questions rather than interviewing or observing them. Tuckman also indicated that responses to a self-report approach were limited due to these facts: (a) participants must respond to the questionnaire presented to them, (b) participants must identify events that are occurring rather than what they believe the researcher wants to hear or what they believe should be occurring, and (c) participants need to have a knowledge base of their feelings and beliefs prior to responding to questions. Recommendations for the development of a questionnaire included the creation of questions that would not influence respondents or pose information they may not know. To address these issues care was taken to design questions that asked about information regarding actual practices relevant to the NSDC’s standards (2001).

An application to the Ashland University Human Subjects Review Board was submitted to assure compliance with university regulations to protect the participants in any research study. After approval from the Ashland University Human Subjects Review Board, the questionnaire was sent to a purposive sample of 165 public school leaders in Ohio typically responsible for professional development activities. All initial letters and questionnaires were sent in mid-November 2003, with a request for completion and return by the first week in December. A follow-up letter, along with a questionnaire, was sent to administrators in early December to request that they complete and return the
questionnaire within 10 days. These procedures yielded a 35% return rate, which was considered satisfactory for this study.

*Questionnaire Design*

To guide the development of the questionnaire, the NSDC Self-Assessment form (NSDC, 2001) was referenced. Individuals or groups within an organization, such as public schools, have used this assessment form to determine their perception of professional development practices within their systems. This form was used to determine the perceptions of teachers and administrators regarding professional development practices in their respective school systems by several researchers (Del Farvero, 2003; Krickovic, 2002; Parker, 2003; Phelps, 2003). In addition to the NSDC Self-Assessment form, the information from the literature review provided a reference for the specific survey questions used in this study that link to the NSDC’s standards (2001). Questions from the Schools and Staffing Survey (SASS), designed by the U.S. Department of Education (2000) were also referenced when developing specific questions. The SASS provided information regarding characteristics and conditions of America’s public and private schools. The survey also collected information from administrators and teachers regarding professional development.

*Question Types*

The questionnaire was composed of a total of 40 questions based upon guidelines set by Thomas (1999) for the construction of surveys. Thirteen questions were included in the demographic portion of the questionnaire as to the professional backgrounds of the administrators, their responsibilities for Title II-A, Improving Teacher Quality Funds and
each administrator’s school demographic information. These questions sought background information on each individual completing the questionnaire to establish certifications, work experiences, job title within the district, experiences toward their development as participants designing professional development for teachers, and the percentage of time they spent on the responsibilities for their position.

Twenty-five fixed-response questions (Thomas, 1999) were designed to provide the quantitative data to answer the first research question regarding the alignment of the actual professional development practices in Ohio public schools with the NSDC’s standards (2001). Fifteen of the fixed-response questions posed categorical responses, (Tuckman, 1999) which included yes, no, and not sure. Nine checklist response questions permitted the participants to select all responses that applied to their public school setting. One question required the participants to rank order the primary influence on the content for professional development programs from a choice of federal initiatives, state initiatives, district/school improvement plans, and teacher preferences.

Three unstructured response questions were used to solicit comments and information (Tuckman, 1999). Two of these questions were integrated with the responses from the fixed response questions that formed the mixed methods approach used within this study (Creswell, 2003; Tuckman, 1999). The integration of these two types of data was used to determine if the individual schools were aligned with the NSDC’s standards (2001). One of the unstructured response questions solicited written comments on information regarding a specific decision about professional development in the participant’s Ohio school district. The second unstructured response solicited a reply regarding the challenges experienced when designing, implementing, or evaluating
professional development activities. A third, unstructured, response question solicited comments regarding reasons respondents participated in professional development activities with their teachers. It was included as an extension to a fixed-response question. However, it was not analyzed separately because it did not relate directly to the three research questions.

*Credibility of the Questionnaire*

Kerlinger (1992) recommended that an investigator have specific questions aimed at the various facets of the research problem built into the interview or questionnaire. Kerlinger also recommended the use of a chart designed to guide the construction of the questions contained in the questionnaire. Table 1 demonstrated the linkage between specific questions used, each of the 12 NSDC's standards (2001), and the literature references supporting each question found in the study. Based upon the information contained in Table 1, credibility or face validity was established for the questionnaire. Creswell (2002) stated that face validity refers to the superficial examination of the tasks on a test. For the purpose of this study, the items on the questionnaire, “appear to be a reasonable measure” (Creswell, 2002, p. 52). A pilot study of the questionnaire was not conducted. This was due to the possibility that the qualitative aspect of the research study could be compromised through the pre-release of the unstructured response questions (H. Walters, personal communication, October 15, 2003).
### Table 1

**Correlation of Literature References to Support the Questionnaire**

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<th>Standard</th>
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Methodology

The demographic information obtained from the questionnaire was presented to describe the participants in this study. The percentage of time spent by the participants to support professional development activities, their backgrounds, and experiences for understanding professional learning were provided based upon the responses to selected questions. Qualitative and quantitative data were collected through a questionnaire designed by the researcher to identify the participants' perspectives on their use of the National Staff Development Council's standards (2001).

The first two research questions were answered based upon an analysis of quantitative and qualitative data in a mixed methods approach (Creswell, 2003). Two panelists analyzed the data collected from the unstructured questions and the fixed-response questions on the questionnaire to determine if each individual school in the study was aligned with the NSDC's standards (2001). Their responses were used to answer the first research question. An inter-rater reliability procedure (Cohen, 1960) provided a measure of correlation among the panelists' ratings to determine the reliability of the procedure for evaluating the alignment of the schools. This procedure provided credibility to the instrument. A chi-square procedure (Tuckman, 1999) was used to determine whether the ratings by the panelists of the individual schools were statistically different in order to answer research question two.

To answer the third research question, a qualitative research approach was utilized. Merriam (2001) described the common characteristics of qualitative research, which included: (a) the insider's perspective to construct understanding of a phenomenon; (b) the researcher serving as the primary method for collecting and
analyzing data; (c) fieldwork to observe behavior in a naturalistic setting; (d) inductive
technique to describe concepts, hypothesis, or theories; and (e) a focus on process,
meaning, and understanding to produce a richly, descriptive product. Professional
development has been a personal focus through the doctoral program. The design and
implementation of professional development activities have been included in my role as
building level principal for several years. Planning professional learning with teachers
has been incorporated into my school building plans and implemented through the
management of resources reflective of the activities consistent with the plan. Evaluations
of professional development practices have offered an impetus for future programs and
the needs of the educators. Observations of teachers and other educators, including
professional development consultants and facilitators have offered a frame of reference
for the types of behaviors viewed when professional learning activities were presented.

Using a qualitative approach, the analysis of the data regarding the types of
challenges when implementing professional development activities, as expressed by
participants, followed an inductive process (Merriam, 2001). The qualitative data were
analyzed into categories or themes using a constant comparison method (Glaser &
Strauss, 1967; Merriam, 2001). The credibility of the themes was established with an
independent expert reviewing the responses to the questionnaire through a peer review
process (2001). After the two raters completed the data analysis, consensus was built for
the themes that emerged from the qualitative data. The themes produced a richly
descriptive report framed by the meaning and processes explained by the participants.
These themes presenting the types of challenges when implementing professional
development were conveyed in Chapter IV.
Analysis of Data

To protect the anonymity of the participants, each returned questionnaire was assigned a number. The responses from the participants in Chapter IV were based upon these numbers. The responses from the initial 13 questions in the questionnaire, which solicited information relevant to the school district and the participants in this study, were tabulated. Based upon the responses, an analysis of the personnel serving as public school administrators in this study charged with professional development programs and their responsibilities for Title II-A, Improving Teacher Quality Funds was completed. The types of activities preparing these individuals and the percentage of time they spent on professional development responsibilities within their job title were described.

Research Question One

To answer research question one, quantitative data were integrated with qualitative data to determine the actual alignment of the professional development practices in the public schools with the NSDC’s standards (2001). An alignment schema and the specific criteria placed onto a scoring rubric were designed to answer this research question. Each of these was described in this section.

Alignment Schema

An alignment schema was developed for determining whether an individual Ohio public school in this study was aligned with the NSDC’s standards (2001). Reference was made to the program reviews completed by Killion (1999, 2002b, 2002c) to lend credibility to the development of the alignment schema. In Killion’s works, outstanding staff development programs were evaluated based upon criteria provided by the National
Advisory Council, which placed a strong emphasis on student achievement. When programs were reviewed, the primary conditions included the six process standards along with content specific teaching and content pedagogical teaching methods. The context standards of learning communities, leadership, and resources were not evaluated because these components of the contextual framework varied across schools and what worked in one culture would not necessarily work in another culture. The standards of family involvement and equity were not specifically targeted within the criteria for inclusion of these outstanding staff development programs.

Based upon the factors used to identify outstanding staff development programs, consideration was given to designing an alignment schema that used criteria for full alignment, moderate alignment, and minimal alignment. After further reflection on the NSDC’s standards (2001) and the re-examination of the research questions, the decision was made to have the alignment schema reflect all 12 NSDC’s standards. Emphasizing this position, the National Staff Development Council stated specifically, “Context, process, and content standards are all necessary to ensure that staff development improves student learning. If one dimension is ignored, the intended results are far less likely to be achieved” (NSDC, 2001, p. 2). Therefore for the purpose of this study, the alignment schema indicated that alignment must reflect the implementation of all 12 of the NSDC’s standards (2001).

A second panelist and I rated each of the 12 NSDC’s standards (2001) to determine those met by the individual schools. A scoring rubric (presented in the next section) was used for this rating process. After each standard was rated on the scoring rubric, each panelist made a decision of whether the individual Ohio school was aligned
or not aligned with all 12 of the NSDC’s standards (2001). Those schools incorporating all 12 National Staff Development Council’s standards were aligned with the standards. The schools that incorporated less than all 12 NSDC’s standards were not aligned. Once the ratings of the questionnaires were completed, the schools were separated into three groups: a) those that were aligned with the NSDC’s standards (2001), b) those that were not aligned with the standards, and c) those that the panelists did not agree upon as either aligned or not aligned.

*Scoring Rubric*

The questionnaire contained several types of responses which had to be sorted to determine which Ohio schools in this study aligned with the NSDC’s standards (2001). A scoring rubric was designed by the researcher to indicate the questions correlated to each of these standards. Two panelists used the scoring rubric to rate the responses from individual questions on the questionnaire. The responses from the quantitative and qualitative data were evaluated to indicate support for an individual standard, therefore defining whether or not the standard was met. The quantitative data were represented through responses to questions 1 – 25; the qualitative data were identified from the responses to questions 26 and 27. Based upon the panelists’ ratings of each of the 12 NSDC’s standards (2001), the Ohio public schools in this study aligned with these standards were determined.

The scoring rubric contained each standard with the actual statement describing the standard quoted from the NSDC’s standards (2001). For each of the 12 standards, the relevant survey question and response choices were included on the rubric. For the
 qualitative data, the types of statements to indicate evidence in support of an individual standard were given on the scoring rubric. These comments were words or short phrases that could be interpreted by the panelists as responses for meeting an individual standard. In addition, a space was provided for the panelists to rate whether the qualitative data from the open-ended responses met the standard. After each panelist scored both the quantitative and qualitative data, she had to make a decision regarding whether the standard was met based upon both quantitative and qualitative data. For each standard, a summary area was provided to indicate the rating as to whether the standard was met or not. One page of the scoring rubric appears in Figure 1 and a full copy of the rubric is found in Appendix D.

To meet an individual standard, specific criteria were developed by the researcher. Based upon the quantitative data and the qualitative data, at least two pieces of evidence were necessary for an individual standard to be met, except for three specific standards. A piece of evidence typically meant a yes response to the fixed response question or it meant an activity used by the school in regard to a checklist response question. A piece of evidence could also mean a response within the qualitative data from questions 26 or 27. An example of two pieces of evidence was an affirmative response to two fixed response questions within a given standard or an affirmative response to a fixed response question and one piece of qualitative data. Any miscellaneous comments by participants, which were written next to the fixed response questions, were not included as a form of evidence.
**Rubric for Scoring the Alignment Schema**

<table>
<thead>
<tr>
<th>Standard 1</th>
<th>Evidence in Support</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Communities</strong>&lt;br&gt;Staff development that improves the learning of all students organizes adults into learning communities whose goals are aligned with those of the school and district.</td>
<td>Teamwork, work together, team planning, improvement plans, professional development goals district/building plans, building goal, grade level goal, committee, team participation, teachers together, collaboration, groups of adults for professional conversations</td>
<td>Yes</td>
</tr>
<tr>
<td>(Only use marked items, not written qualifying comments)</td>
<td>(Use responses from Q 26 &amp; 27)</td>
<td>(2 or more pieces of evidence)</td>
</tr>
<tr>
<td>Question 1  Yes   No      Not sure</td>
<td>Qualitative data  Yes   No</td>
<td></td>
</tr>
<tr>
<td>Question 2  Yes   No      Not sure</td>
<td>(Each &quot;Yes&quot; response counts as 1 piece of evidence)</td>
<td></td>
</tr>
</tbody>
</table>
The two content standards, research-based and equity, only needed to have one piece of evidence from either the quantitative or qualitative data because only one fixed-response question within the questionnaire was used. This was deemed appropriate because the other 10 standards had at least two fixed-response questions or two possible responses to a single fixed-response question. The process standard, collaboration, was indicated as met whenever the use of learning teams or collaborative work was indicated through either the quantitative or qualitative data. The collaboration standard was scored as met if the standard for learning communities was met.

At the top of each page of the scoring rubric was the school’s assigned number. To ensure consistency in ratings on the scoring rubric, comments were typed to clarify the scoring rubric, such as those comments in the footer section. Ensuring that the scoring guide was easy to use and contained all necessary information for the panelists to rate the schools was deemed critical for consistency of the rating process.

Training Session

In order to properly utilize the scoring rubric designed for this study, training with the two panelists was completed. The training procedures were similar to instructions given for a standardized testing procedure. The scoring rubric was described in detail during the training session. Each question from the questionnaire was reviewed and the scoring of each piece of evidence scrutinized carefully.

The training was scheduled for a full day on a Saturday in March 2004. Six questionnaires were randomly selected as samples to be discussed and analyzed during the training process. The training process lasted over two hours including short breaks.
and three of the sample schools were rated to ensure consistency with the rating process. These three schools were not included in the inter-rater reliability process. Once consistency between the panelists was ensured, the panelists were given the responses for all 27 questions from each returned questionnaire along with a scoring guide for each school. The protocol for the training session was included in Appendix E.

Reliability of the Procedures

After all questionnaires from the participating Ohio schools were rated to determine if they were aligned with the criteria established on the scoring rubric, the ratings from each panelist were placed onto a scoring sheet. From this scoring sheet, a contingency table was created. The reliability of the procedures to determine the alignment of schools in this study with the NSDC’s standards (2001) was demonstrated through an inter-rater reliability procedure using a contingency table (Cohen, 1960). This statistical method, using nominal data, was used to establish the reliability of the procedure to give consistent results. The method has the advantage of collecting scores from two or more individuals so that any bias that might be brought by one of the individuals can be negated (Creswell, 2002). A correlation of .70 or better “usually indicates that individual differences in rater perceptions are within tolerable limits, thus reducing potential internal invalidity based upon instrumentation” (Tuckman, 1999, p. 224). The results of the inter-rater reliability procedure and the percentage of schools that were aligned with the NSDC’s standards (2001) were discussed in Chapter IV.
Research Question Two

A chi-square statistical procedure (Tuckman, 1999) was done to answer the second research question. The question posed: Were the ratings by two panelists on the alignment of Ohio public schools with the National Staff Development Council’s standards statistically different? The hypothesis for this research question was: The ratings of the two panelists do not differ. The null hypothesis stated: The ratings of the two panelists do differ. The chi-square test was used to answer these hypotheses. The sample schools were not included in this statistical procedure.

To set up the chi-square test, the data for the two nominal variables were placed into a contingency table. The numbers in the contingency table represent the frequencies for the schools that satisfy a set of conditions. For this study, the panelists were one variable and the determination of whether the schools were aligned, using a yes or no response, became the second variable. The chi-square test showed whether the ratings between the two panelists were statistically different. With an alpha level of .01 and the degree of freedom set at one, the critical point was determined using a critical value of 6.64 based upon the table for chi-square testing (Tuckman, 1999). The results of this statistical procedure were presented in Chapter IV.

Research Question Three

The Ohio public schools in this study not meeting the alignment schema of implementing all 12 NSDC’s standards (2001) were selected for further analysis. The responses from two open-response questions were examined through a peer review process (Merriam, 2001). These two questions solicited comments on a decision made for
professional development and challenges experienced when planning, designing, and implementing staff development activities. The peer review process was used for this study to enhance internal validity by having an independent expert analyze the data separately from the researcher. Consensus for the emerging themes was established through discussion between the researcher and the independent expert.

To support the utilization of this qualitative analysis technique in this study, reference was made to Glaser and Strauss’ (1967) grounded theory. These researchers stated that grounded theory was “the discovery of theory from data” (p.1) and “illustrated by characteristic examples of data” (p.5). The focus of this research was not on developing a grounded theory but on the analysis of data for organizing into themes with no attempt to form a conceptual scheme. The method of constant comparative analysis was suggested as a means for furthering the discovery of grounded theory (Glaser & Strauss, 1967). Merriam (2001) described the constant comparison analysis as a “method of data analysis widely used in all kinds of qualitative studies, whether or not the researcher is building a grounded theory” (p. 18). This constant comparison method involved examining the individual pieces of data or information to identify the similarities and differences and then categorizing the data for presentation as themes. The dependability or accuracy (Guba & Lincoln, 1989) of the placement of data into themes was confirmed through a common set of procedures for coding the data (Tuckman, 1999).

A description of the study, its purpose and research questions, and the methodology, including the coding process, was explained during a brief training with the independent expert. The independent expert and I separately completed the data analysis
of the two open-response questions. Then they met to discuss the categories and themes they found within the qualitative data. Following Merriam’s (2001) description on writing qualitative research reports, a brief overview of the findings followed by a rich description of each finding was presented in Chapter IV. The findings were supported with quotes from the participants. A judgment was made by me regarding the amount of data to include in support of a theme.

Summary

This chapter defined the research design, including the participants, questionnaire, methodology, and data analysis used to conduct this study. Responses from the demographic portion of the questionnaire were tabulated to describe the participants in this study, the percentage of time supporting professional development activities, and their backgrounds and experiences for understanding professional learning. A mixed methods approach permitted an integration of quantitative and qualitative data to describe whether the actual practices for professional development activities in selected Ohio public schools aligned with the National Staff Development Council’s standards (2001). One panelist and I coded the qualitative data and integrated the quantitative data to determine schools in alignment with the standards. An inter-rater reliability procedure was used to test the reliability of the judgments of the panelists and describe the reliability of the procedures designed for this study. Based upon public schools that were not aligned with the standards, the types of challenges encountered when implementing professional development activities were defined through themes agreed upon with the independent expert. The results of the alignment of selected public
schools in Ohio with the NSDC's standards, the inter-rater reliability procedure and chi-square test, a description of the professional development practices within the public schools in this study, and the themes defining the types of challenges when implementing professional development activities are presented in Chapter IV.
CHAPTER IV

Introduction

This chapter reports the number of Ohio schools responding to the survey questionnaire. Three sets of schools are described: (a) the number aligned with the National Staff Development Council’s standards (2001), (b) the number not aligned with these standards, and (c) the number of schools that the panelists did not agree upon as aligned or not aligned. Results of the inter-rater reliability procedure are described to support the reliability of the processes used to determine the public schools aligned with these standards. The result of the chi-square test used to answer the second research question is reported. Based upon a peer review process, the themes defining the types of challenges when implementing professional development activities are presented. The two major themes emerging from the peer review process include resources for professional development, and the change process occurring in the public schools from internal and external practices. Unanticipated outcomes are described for selected professional development practices occurring in Ohio public schools, based upon responses from participants in this study.

Responding Participants

A questionnaire was sent to 165 public school administrators, which included 21 directors of staff development and 144 curriculum and instruction directors. A total of 58 administrators returned the questionnaire, yielding a 35% return rate. This return rate was determined to be satisfactory by the Dissertation Committee for the purpose of this study.
A description of the demographic information on the participants was based upon the entire sampling set of 58 participants.

Fifty of the administrative participants supervised all teachers in grades kindergarten through grade 12, ranging from a low of 25 at the elementary school to approximately 4000 teachers at a district level. Six participants in the study supervised pre-kindergarten through grade 12 teachers. One administrator served only an elementary school with 25 kindergarten through grade six teachers. One director of curriculum and instruction served 328 teachers in grades seven through twelve within a school district.

For each area of demographic information below, a description of the findings for schools aligned with the NSDC's standards (2001) and those not aligned were discussed. The participating schools were separated into two groups based upon characteristics that were aligned with these standards or not aligned. Due to the fact that the panelists lacked agreement on the alignment for one school, all analysis shown below contained only 57 participants. The schools for these 57 participants were considered to be aligned or not aligned with the NSDC's standards.

*Professional Activities for Participants*

This section describes relevant types of activities utilized by the participants in this study, as they prepared to implement professional development programs for teachers. Six types of activities were listed in the questionnaire for implementing the NSDC's standards (2001) and the federal mandate, No Child Left Behind Act of 2001. These activities included: coursework, newsletters, articles or other literature sources,
mentoring experiences, workshops or conferences. Participants were provided a space to write other activities they used to prepare themselves to implement these standards.

*National Staff Development Council’s Standards*

Participants identified activities that prepared them to implement the National Staff Development Council’s standards (2001). The responses indicated a higher percentage of participants from schools aligned with these standards or that were involved in all or some combination of activities to implement these standards than participants from non-aligned schools. Table 2 presented the training activities used by the respondents.

**Table 2**

*Comparison of Training Activities Used by Participants to Implement the NSDC’s Standards.*

<table>
<thead>
<tr>
<th>Response Option</th>
<th>Aligned School</th>
<th>Not Aligned Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=20</td>
<td>N=37</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Coursework</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>35%</td>
<td>19%</td>
</tr>
<tr>
<td>Newsletters</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>60%</td>
<td>35%</td>
</tr>
<tr>
<td>Articles, books, other literature</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>85%</td>
<td>65%</td>
</tr>
<tr>
<td>Mentoring experience</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>40%</td>
<td>11%</td>
</tr>
<tr>
<td>Workshops or conferences</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>75%</td>
<td>68%</td>
</tr>
</tbody>
</table>
In preparation for implementing the No Child Left Behind Act of 2001, a higher percentage of participants from aligned schools used each type of professional learning activity listed in the questionnaire than participants from non-aligned schools. See Table 3 for the comparison of training activities.

### Table 3

<table>
<thead>
<tr>
<th>Response Option</th>
<th>Aligned School</th>
<th>Not_aligned Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=20</td>
<td>N=37</td>
</tr>
<tr>
<td>Coursework</td>
<td>14 70%</td>
<td>16 43%</td>
</tr>
<tr>
<td>Newsletters</td>
<td>14 70%</td>
<td>23 62%</td>
</tr>
<tr>
<td>Articles, books, other literature</td>
<td>19 95%</td>
<td>31 84%</td>
</tr>
<tr>
<td>Mentoring experience</td>
<td>13 65%</td>
<td>11 30%</td>
</tr>
<tr>
<td>Workshops or conferences</td>
<td>19 95%</td>
<td>33 89%</td>
</tr>
</tbody>
</table>

### Time Allocations

A question was posed to the participants requesting categories of work responsibilities and percentages of time spent for individual categories. A second related question requested a response from participants about how they would re-allocate their own time in terms of the importance for specific tasks, if they could do so. When looking specifically at the percentage of time allocated for professional development activities,
participants listed a wide variety of time allocations. The types of activities included within the professional development category were: organizing, coordinating, or planning activities; conducting or implementing activities; and serving as a facilitator. Mentor programs, local professional development committee work, and professional development programs for classified staff members were other activities noted by these individuals and included within the time allocations given by participants. The minimal amount of time allocated by participants for work responsibilities relevant to professional development was 5% and the maximum amount noted was 100%. The time allocations were provided according to whether the participant’s school was aligned or not aligned with the NSDC’s standards (2001).

*Aligned Schools*

Two of the 20 participants whose schools aligned with the NSDC’s standards (2001) did not list any time allocations in response to the question requesting categories and related percentages of time. One participant stated that professional development was included in their responsibilities but did not provide a time allocation. Various time allocations spent on professional development included: one participant at 5%; two participants at 10%; nine between 20% to 30%; and five between 50% and 75%. Eight of the 11 participants who gave time re-allocations wanted to increase their time for professional development by 10 to 50% with a maximum allocation of 90%. Several participants wrote comments onto the questionnaire regarding time allocations. Selected comments that exemplify the need for time within job responsibilities included:

- Respondent 5: More time to think
• Respondent 16: Eliminate testing and add to professional development

Not Aligned Schools

Of the 37 schools that were not aligned with the NSDC’s standards (2001), 12 participants did not provide any categories or time allocations. One participant indicated that time for professional development was totally allocated. Two individuals stated staff development time was allocated, but did not give a time amount. Various time allocations spent on professional development included: two participants at 5%; seventeen participants from 6% and 25%; three participants at 50% and 100%. Eleven of the 16 participants who provided time re-allocations wanted to increase their time for professional development activities by 5 to 40% with a maximum allocation of 60%. Selected comments from this subset of participants that exemplified the issue of time allocations included:

• Respondent 31: Same as above but would love to reduce some of the paperwork associated with Personnel Responsibilities to allow more time for Professional Development

• Respondent 45: Make more of it for all categories

• Respondent 51: Never enough time to read what I need to read. Train the trainer sessions often hit highlights – rely on us to find – fine tune & develop – need time to do this.

In summary, the respondents indicated a variety of activities to address their personal professional growth with workshops, conferences, and meetings being utilized the most by participants from schools aligned with the NSDC’s standards (2001) and
those not aligned. Participants whose schools were aligned with these standards indicated a greater involvement in all types of professional learning experiences for the implementation of both the No Child Left Behind Act of 2001 and the NSDC’s standards (2001). The demographic information for the administrators participating in this study revealed varying time allocations for professional development activities within their work responsibilities.

Research Question One

Research question 1 stated: Were the actual practices, designed by Ohio public school administrators for teachers’ professional development activities, aligned with the National Staff Development Council’s standards? To answer this question, two panelists rated the responses on the questionnaire to determine the number of Ohio public schools in this study whose professional development activities were aligned with the National Staff Development Council’s standards (2001). After the panelists identified the schools in alignment with these standards, an inter-rater reliability procedure was conducted to determine the agreement between the ratings of the two panelists. The inter-rater reliability procedure yielded a .98 coefficient of agreement (Cohen, 1960). When considering Tuckman’s (1999) criteria that a correlation of .70 or better “indicates that individual differences in rater perceptions are within tolerable limits” (p. 224), this coefficient represented a high level of agreement. Of the 55 schools that were rated by the two panelists, 18 schools were rated as aligned with the NSDC standards (2001). Thirty-six schools were not aligned and the panelists disagreed upon the rating of one school. Three schools were not included in the inter-rater reliability procedure as they were
randomly selected as sample schools for training procedures on the scoring rubric.

Two of these sample schools were aligned with the standards and one was not aligned. The data from these three schools were included within the analysis described in the remainder of this chapter. Responses from the one school whose rating was not agreed upon by the panelists were not discussed in this chapter.

*Standards Not Met*

To determine the specific standards not met, further analysis of the schools in this study was performed. This analysis regarding which standards were not met provided insights as to the reasons a school was not aligned with the NSDC's standards (2001). The ratings of both panelists were used for the decision on whether a school met individual standards. Only schools that the panelists agreed did not meet a specific standard are included within this discussion. Of the 37 schools not aligned with these standards, the panelists agreed that 35 schools failed to meet the criteria set for the family involvement standard. In 26 of these 35 schools, only the family involvement standard was not met. In nine of these 35 schools, this standard was not met in combination with another standard. The following data involving schools that were not aligned with the NSDC's standards (2001) indicated the standards not met:

- 2 Schools did not meet the family involvement and data-driven standards.
- 1 School did not meet the family involvement, data-driven, and research-based standards.
- 1 School did not meet the family involvement, data-driven, and equity standards.
• 1 School did not meet the family involvement and learning standards.

• 1 School did not meet the family involvement, data-driven, research-based, and learning standards.

• 2 Schools did not meet the family involvement and research-based standards.

• 1 School did not meet the family involvement, evaluation, and research-based standards.

• 1 School did not meet the data-driven standard.

• 1 School did not meet the research-based standard.

Research Question Two

The second research question asked: Were the ratings by two panelists on the alignment of Ohio public schools with the National Staff Development Council’s standards statistically different? To answer this question, a chi-square test was used. The number of degrees of freedom was one with an alpha level of .01 giving the critical value of 6.64 used for this study. The probability for the chi-square value of .042 was .84, which meant that the null hypothesis, stating that the ratings by the two panelists did not differ, was accepted. Therefore, the ratings of the first panelist were not statistically different from the ratings of the second panelist. Based upon this statistical procedure, the ratings of the two panelists were in agreement regarding the Ohio public schools aligned with the NSDC’s standards (2001).

Research Question Three

The third research question posed: In cases when actual practices did not align with the National Staff Development Council’s standards, what types of challenges to
implement professional development activities did administrators in Ohio public schools experience? The 37 schools that were not aligned with the NSDC's standards (2001) were selected to answer this third question. The independent expert and researcher agreed that resources and the change process were major challenges to professional development impacting the Ohio public schools in this study. These primary challenges were further clarified in sub-themes in this section. The researcher valued and honored the comments of the respondents as important qualitative data to answer the research questions and describe their experiences. Therefore, the comments used to describe the various professional development activities were taken directly from the questionnaire without editing. The only changes made in the original text were to ensure confidentiality.

**Resources**

Three key resource factors emerged as challenges to impact professional development activities: (a) time constraints; (b) budget issues; and (c) human resources, which included difficulties with the utilization of substitute teachers.

**Time Constraints**

Time restrictions were mentioned by 26 of the 37 participants whose schools were not aligned with the NSDC’s standards (2001). Eight participants simply stated, “time” when asked for challenges they experienced when implementing professional development activities. Nineteen participants commented on the time constraints to complete tasks. Selected comments which evidence the time constraints experienced by participants included:
• Respondent 7: Time management strategies to provide time for follow-up.
  Time management to research best practice and new programs.
• Respondent 10: Time to plan, time to prepare, time to meet, time to follow-up.
• Respondent 24: Too little time built into the day.
• Respondent 31: Time is always an issue.
• Respondent 35: Taking much time to review other programs, visit schools,
  arrange local training, attend related conferences, etc.
• Respondent 39: Not enough time. There are so many new ideas/items to be
  taught and not enough time to teach them all to teachers.
• Respondent 55: Enough time for PD.
• Respondent 57: The shortage of available time – either during the school day
  or beyond.

Not only was the time to complete tasks a concern but also the time to provide
quality training for adult learning was a concern. Eight participants reported on the time
constraints toward offering quality training. Specific comments in evidence of this time
constraint included:

• Respondent 3: Time. It takes a lot of time to provide quality training needed
  for staff…. Too much to learn too quickly for elementary teachers who are not
  content specialists.
• Respondent 6: The primary challenge is finding time for indepth training
  initiatives.
• Respondent 10: We opted for an all day in-service...2 hr delay not adequate for complete understanding, discussion of implementation ideas, and teacher time to make individual plans for implementation.

• Respondent 34: Time is also an issue because learning for teachers is no different than learning for school age children. It does not occur in a brief period of time based on a speaker ‘telling them what to do’. Teachers need to be introduced to concepts then given time to apply and experiment in the classroom. In order to do this effectively, guidance usually needs to be given intermittently. Like students, teachers also grasp concepts at differing rates.

• Respondent 52: Providing quality time for effective thought/work & collaboration.

• Respondent 53: Time to process newly learned info so that it can be applied is not adequate.

Related to the issue of time for quality training was the time for follow-up once the initial professional development activity was offered. Of the seven participants who provided comments, these gave evidence in support of this time constraint.

• Respondent 10: Time to follow-up. Staff need to learn how to implement them into their teaching day, how to use the results of the assessments, what the assessments look like, which State standards were linked to the assessments.

• Respondent 15: Being able to continue, provide the follow-up necessary to bring about change in the classroom.

• Respondents 26: Time for follow up.

• Respondent 29: Providing enough follow-up to make the PD lasting.
• Respondent 34: The next issue will be finding effective ways to carry
learning to the remaining staff.

The time for quality training and follow-up practices was extended to the time
needed for teachers to work together and collaborate to complete tasks. Five comments
included:

• Respondent 10: Time to meet.

• Respondent 14: Find the time to in-service elementary teachers on giving state
diagnostic tests – prefer trying to get all district grade level teachers together
at the same time.

• Respondent 29: Finding the time to get everyone together who needs to work
on a topic.

• Respondent 39: Finding a time that all teachers could have the inservice at the
same time.

• Respondent 42: Impractical to get everyone present and get work done in a
timely fashion.

Not only was finding the time to offer professional development activities noted
as a challenge but also participants were concerned with taking away from instructional
time, when these experiences were offered during the school day. Seven participants
reported on this challenge.

• Respondent 7: Ways to evaluate which do not tax the teachers and take away
from instruction time.

• Respondent 8: PD during school hrs requires substitute & much out-of-class
time.
• Respondent 31: Time: we promised building administrators that they would miss no more than one day each quarter from the classroom.

• Respondent 34: Because teaching staff usually engaged in teaching, it has been necessary to creatively find ways to bring people together without overly disrupting classroom instruction…. Team members will be out of the classroom for 7 workshop days plus approximately 3 meeting days. This is cost not only for subs, but also in lost instructional time.

• Respondent 36: Finding time to get teachers together while minimizing time out of the classroom.

• Respondent 39: We run out of time to take teachers out of the classroom.

• Respondent 53: Release time for teachers was handled by a building assembly or grade level assembly at the elementaries.

The last challenge created by the constraint of time was the conflict with commitments and priorities for participants and the teachers supervised. Nine comments were made regarding this issue.

• Respondent 6: Many of our teachers are very young. They have many family obligations and are working on their Master’s degree after school.

• Respondent 10: Young staff with young families who need to be with their families.

• Respondent 10: How to address everything that needs to be addressed and how to include everything that is addressed.

• Respondent 23: Time to do. 7-12 teachers do not like after school P.D. due to coaching, etc. Want embedded in contracted day.
• Respondent 35: Too many other areas of concern in my job description!
  Unable to focus on prof. dev. as much as I would like to.

• Respondent 36: Conflicting priorities. Have to constantly juggle priorities.
  Select those priorities that focus on student achievement and on the goals in
  the district’s strategic plan.

• Respondent 42: Expecting teachers to stay after school or doing work only in
  summer.

• Respondent 51: I have worked hard developing a rapport w/the teachers – I
  am always rushed being in charge of 2 districts.

• Respondent 53: Some teachers want it taught after school and some want it
  during the day.

Related to the issue of time constraints was the challenge of the change processes
expected within the public schools in this study. Although the change process became a
second major theme for the challenges experienced by participants when implementing
professional development activities, two final quotes emphasized the relationship
between time and the change process.

• Respondent 18: It takes time for change and to move folks to a new
  instructional practice.

• Respondent 31: Time is always an issue. Multiple initiatives running
  concurrently.

The two other resource challenges of budget and human resources were discussed
prior to a description of the challenges created by the change process.
Budget Constraints

The resource of funding was addressed by ten of the 37 schools whose professional development practices were not aligned with the NSDC’s standards (2001). Five participants simply stated “Funding” or “Money” to describe challenges relevant to the budget constraints in public schools. Other comments that exemplify the budget issues were:

- Respondent 3: Cost may become an issue but not as of now. We dedicate $220,000 dollars per year to staff development.
- Respondent 14: Finding resources to cover subs for common in-service time on implementation of State diagnostic tests.
- Respondent 34: The greatest difficulty is, again, time and money. Team members will be out of the classroom for 7 workshop days plus approximately 3 meeting days. This is cost not only for subs, but also in lost instructional time. The expense of workshop fees and substitute costs are being covered through federal professional development dollars…. Bringing staff together during the summer becomes expensive beyond what limited school budgets can support…. Costs for subs.
- Respondent 36: Had to make decisions regarding priorities for staff development in view of limited funds and limited time.
- Respondent 57: Limitation of available dollars – SD is usually one of the first areas cut by the state.
Limitations of Human Resources

Beyond the time and budget constraints, the limitations of human resources was a challenge for four participants. The costs for substitute teachers were a challenge relevant to the funding constraints. A related challenge was the difficulty of acquiring substitute teachers as noted in the comments of these four participants.

- Respondent 8: PD during school hrs. requires substitute
- Respondent 29: Providing substitutes for during-the-school-day PD.
- Respondent 55: Subs to cover classes while teachers are attending PD activities. Providing the PD during the school day was considered but we could not get enough subs to cover classes so that a large number of teachers could participate.
- Respondent 57: Limitation of time, subs, money.

Change Process

The public schools have been impacted by federal and state requirements or mandates imposed upon them as evidenced through the participants’ comments. These initiatives changed the goals or vision for professional development programs to include new instructional strategies, assessment practices, and curriculum programs. A lack of clarity for the goals of professional learning appeared to be related not only to these externally imposed mandates but to internal processes such as: the teacher reluctance to changing practices, the lack of buy-in from teachers, and the lack of administrative support for professional development programs. A concern on how to address the diverse learning needs of adults in schools was another related issue to the change process.
Clarity of Goals

The challenge of defining a vision or goal for professional development was emphasized by 10 participants. Four specific comments by these participants presented the concerns with the clarity of goals. Seven participants stated the difficulties experienced due to multiple initiatives occurring at the same time that impact the difficulty in developing selected goals.

- Respondent 4: Teachers want a very clear purpose and a tangible outcome of professional development. We have been aligning curricula, assessments, etc. and collecting student achievement data for a few years, but it seemed that no one, especially the teachers, were using the data to make instructional decisions. I recently implemented an action plan process where teachers must, as a department or grade level, analyze data, determine the greatest areas of need based upon the assessment data and develop a short term plan for addressing the need. This has really driven the idea of improvement in the classroom.

- Respondent 21: The biggest challenge is staying up on State and Federal Requirements. Our focus should constantly be on District, Building, and student needs. Continuous changes in proficiency, achievement tests, and diagnostics are a struggle.

- Respondent 32: Need for vision, support, funding, and opportunities, these are met in this district.
- Respondent 38: Organizing offerings into a coherent pattern. Fortunately, the introduction of the State’s Core Academic Content standards has helped us focus.

- Respondent 10: Materials did not arrive in a timely manner. Each grade level assessment had some differences. Some grade levels not doing State assessments this school year.

- Respondent 31: Multiple initiatives running concurrently.

- Respondent 36: Many efforts on too many “fronts” happening at the same time due to new state content standards and new state testing program.

- Respondent 53: Teachers are busy and most won’t open a new book from the state, just because it came in their mailbox. I thought it was necessary to show that the administration valued the new information and that there were expectations to implement them.

- Respondent 57: Shortage of timeline…Initiated plan, then had to stop because State Dept. changed timeline for implementation.

The changes demanded in the public schools impact teachers and the resources of time and money discussed previously. With or without clarity of goals for professional development, school personnel noted the reluctance of teachers to buy-in to the new practices mandated through state and federal initiatives. Participants also wrote about the lack of participation by some teachers when professional development activities were voluntary.
Teacher Reluctance

Whether a goal or vision for professional development was written or not, school personnel faced the challenge of teacher reluctance toward the changes occurring in their work environment. Eight participants commented upon the challenge of teacher reluctance. The variety of comments by these participants included:

- Respondent 1: Change in thinking.
- Respondent 7: Overcoming teacher reluctance to change or try something new.
- Respondent 8: Tradition/mindset “this too shall pass”/previous training.
- Respondent 18: Change is hard. Most elementary teachers are more comfortable with language arts. It takes time to change and to move folks to a new instructional practice.
- Respondent 35: “Convincing” staff members that changes are needed.
- Respondent 42: Willingness to accept the fact something could be done with the results. Building belief that teachers can help one another get better student results
- Respondent 42: Teachers need to proactively work together.
- Working/teaching in isolation wasn’t getting desired results.
- Respondent 46: Some teachers are “old school” and refuse change.
- Respondent 57: Reluctance by some staff to address needed changes.
Lack of Ownership

Teacher ownership of the new initiatives and goals developed for professional development was a related challenge to teacher reluctance. Five participants presented teacher buy-in as a challenge.

- Respondent 1: Getting people to take ownership.
- Respondent 25: The only difficulty involved would be making certain that every teacher is following up with using the strategies in their classroom. They have been asked to implement at least one strategy and then discuss the results at their next department meeting.
- Respondent 27: Buy-in from staff.
- Respondent 39: Teacher buy in is always difficult.
- Respondent 53: Teacher buy-in was another difficulty – principals are asking during evaluations how their lessons support the new state standards.

Lack of Administrative Knowledge

Administrators may address teacher reluctance and teacher buy-in, but two participants found the lack of administrative support for implementing professional development activities to be a challenge.

- Respondent 21: It is important that our Instructional Leaders (Building Principals) have a good “knowledge base” of the standards in order to be effective leaders. Not all of our administrators have a good understanding. More training is needed.
• Respondent 54: Lack of administrative support. Lack of willingness to utilize flexible scheduling to provide opportunities for teachers.

**Participation by All Teachers**

Five respondents commented on the challenge of full teacher participation in professional development activities when teachers were not required to attend. When the activities were not embedded during the school day, teachers might choose not to participate.

• Respondent 7: The decision was not difficult to make------the difficulty lay in getting the teachers who really needed to hear the information to participate

• Respondent 15: Because a lot of our staff development is voluntary, dealing with those who need, but do not, participate in professional growth

• Respondent 55: Since the PD will take place in the summer it will be difficult to get all teachers to participate on a voluntary basis. Those teachers most in need might choose not to attend.

• Respondent 8: Logistical/not all teachers are available or willing to participate in off school hours.

• Respondent 6: Getting more high school teachers to attend training sessions.

**Diversity of Learning Needs**

A challenge expressed by 11 participants was the concern of addressing the diverse learning needs of all adults in the schools in this study. Not only was the large number of teachers a challenge for some participants but addressing the diversity of needs was a challenge. Comments included:
• Respondent 7: Finding activities which will be valuable to as many teachers as possible in a small district.

• Respondent 10: Making it meaningful for all staff.

• Respondent 18: There are 260 teachers and to meet the needs of all is difficult. We do best with classroom teachers and rather poorly with support staff personnel such as art, PE, and foreign language teachers.

• Respondent 24: 9 buildings – extremely large with different needs.

• Respondent 26: Meeting the needs of a diverse teaching staff.

• Respondent 31: Resources: providing differentiated PD as needs arise. (Our training staff is limited.)

• Respondent 35: I am always concerned about meeting the needs of all teachers when we are using release time or waiver days.

• Respondent 36: Diversity of needs of teachers at various stages of adult development

• Respondent 47: Getting to everyone (370 teachers)

• Respondent 49: Meeting the needs of 500 certified staff members.

• Respondent 52: Differentiating to meet the various needs of teachers.

Providing pd activities for all employees – aides, librarians, speech pathologists, secretaries, etc.

The challenges when implementing professional development activities in the public schools in this study incorporated two main themes: resources and the change process, which demanded new practices within the public schools. Time constraints were the greatest challenge faced by the largest number of participants in this study whose
schools were not aligned with the NSDC’s standards (2001). Other resource challenges included budget constraints along with limitations in human resources. The change process from federal and state mandates imposed upon the public schools impacted the clarity of goals for professional development. Teacher reluctance and the lack of teacher buy-in were challenges from the change process. The lack of teacher participation in professional development activities, the lack of administrative support, and the difficulty with addressing diverse learning needs of all staff members were challenges faced by participants when experiencing change in the public schools.

Unanticipated Outcomes

Selected professional development practices were identified for further analysis because they emphasized differences between the public schools in this study that were aligned with the NSDC’s standards (2001) and those determined to not be aligned. A comparison between the two sets of schools was made for four separate questions from the questionnaire. The aligned schools utilized the following practices to a greater degree than the unaligned schools in order to support professional development: (a) incorporated teacher leadership for decision-making and utilized policy changes; (b) used volunteers, gave stipend pay, and reconstructed faculty meetings; (c) utilized a larger number of design options; and (d) considered teacher career stages when designing activities. The researcher did not anticipate the differences between the two sets of schools. Appendix A included all 12 NSDC’s standards (2001) and a description of each standard to clarify the practices compared in this section.
The six standards met by all 57 schools included: learning communities, leadership, resources, design, collaboration, and quality teaching. The two panelists disagreed on the standard of learning communities for one school and the collaboration standard for another school. This disagreement in the ratings did not affect the final ratings of these schools toward alignment as each had other unmet standards.

The three standards: learning communities, leadership, and resources, formed the context schema within the framework for the NSDC’s standards (2001). All 57 schools analyzed within the study met these three standards. These context standards addressed the organization within a school system where professional development will occur. With these context standards met by the schools in this study, the structures for professional development were put into place through teamwork, goal setting, leadership, and the management of available resources.

The process standards of design and collaboration were two of the six learning practices used as teachers acquired new knowledge and skills through the implementation of professional development programs. The quality teaching standard was one of the three content standards describing what teachers need to know to ensure student achievement. The other process and content standards were partially met by all public schools in this study.

Four questions, two from the context standards and two from the process standards, were selected for further examination. Analysis of the practices by schools aligned with the NSDC’s standards (2001) and schools not aligned revealed specific differences.
Survey Question 7

Question 7 asked: In your role, what resources do you incorporate into the professional development activities for teachers? Table 4 listed the total number of responses to the question 7 along with the percentage for both aligned schools and not aligned schools.

Table 4

Comparison of Responses to Question 7 Between the Set of Aligned Schools and Schools Not Aligned With the NSDC’s Standards

<table>
<thead>
<tr>
<th>Response Option</th>
<th>Aligned School</th>
<th>Not Aligned Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=20</td>
<td>N=37</td>
</tr>
<tr>
<td>Incorporate time during the school day</td>
<td>19</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>95%</td>
<td>97%</td>
</tr>
<tr>
<td>Incorporate funding to support meetings, conferences, workshops</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>Incorporate professional development materials, resources, books, etc.</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>Incorporate teacher leadership development for decision-making, mentoring, etc.</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td>Incorporate policy changes to support professional development.</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>
A true comparison between the aligned and unaligned schools cannot be accomplished without completing a statistical procedure to determine if the differences were meaningful. In general, both sets of schools utilized time during the school day, funding options, and professional development literature to support professional development. The set of aligned schools incorporated teacher leadership development for decision-making and utilized policy changes to support professional development to a greater degree than the set of schools that are not aligned.

Survey Question 8

A second question on resources for professional development was posed to the participants. Question 8 asked: What opportunities are used to provide teachers with time for professional development during the school year and regular contact hours? Table 5 provided the fixed-response responses for this question for the set of schools aligned with the NSDC 's standards (2001) and the set of schools not aligned.
Table 5

Comparison of Responses to Question 8 Between the Set of Aligned Schools and Schools Not Aligned With the NSDC’s Standards

<table>
<thead>
<tr>
<th>Response Option</th>
<th>Aligned School</th>
<th>Not Aligned Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=20</td>
<td>N=37</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Used substitute teachers to cover teachers’ classes</td>
<td>20 100%</td>
<td>37 100%</td>
</tr>
<tr>
<td>Used early dismissal or late start times for students</td>
<td>15 75%</td>
<td>23 62%</td>
</tr>
<tr>
<td>Used professional days built into the school year</td>
<td>19 95%</td>
<td>34 92%</td>
</tr>
<tr>
<td>Used common planning time for teachers</td>
<td>19 95%</td>
<td>33 89%</td>
</tr>
<tr>
<td>Used volunteers to cover teachers’ classes</td>
<td>3 15%</td>
<td>0 0%</td>
</tr>
<tr>
<td>Used faculty meetings reconstructed for professional development</td>
<td>17 85%</td>
<td>23 62%</td>
</tr>
<tr>
<td>Used stipend pay for additional time to support professional development</td>
<td>19 95%</td>
<td>31 84%</td>
</tr>
</tbody>
</table>

Both sets of schools utilize substitute teachers, dismissal times during the school day, professional days during the school year, and planning times for teachers. The set of
aligned schools used volunteers to cover classes during the school day, stipend pay
for additional time, and reconstructed faculty meetings to support professional
development activities to a greater extent than the schools that were not aligned.

Survey Question 15

Question 15 asked: What activities are utilized to address the goals of professional
development? This question identified the different designs for professional development
activities utilized by participants. Table 6 provided the activities stated within the
question responses with a comparison between the two sets of schools.

Table 6

Comparison of Responses to Question 15 Between the Set of Aligned Schools and
Schools Not Aligned With the NSDC’s Standards

<table>
<thead>
<tr>
<th>Response Option</th>
<th>Aligned School</th>
<th>Not Aligned Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=20</td>
<td>N=37</td>
</tr>
<tr>
<td>In-services/Workshops/Conferences</td>
<td>20 100%</td>
<td>37 100%</td>
</tr>
<tr>
<td>Study groups</td>
<td>17 85%</td>
<td>22 59%</td>
</tr>
<tr>
<td>Teams meetings</td>
<td>20 100%</td>
<td>35 95%</td>
</tr>
<tr>
<td>Mentoring or Coaching</td>
<td>18 90%</td>
<td>28 76%</td>
</tr>
<tr>
<td>Action research</td>
<td>14 70%</td>
<td>5 14%</td>
</tr>
<tr>
<td>Collaborative networks</td>
<td>15 75%</td>
<td>18 49%</td>
</tr>
<tr>
<td>Professional development literature</td>
<td>19 95%</td>
<td>26 70%</td>
</tr>
<tr>
<td>Redesign of faculty meetings</td>
<td>17 85%</td>
<td>16 43%</td>
</tr>
</tbody>
</table>
Both sets of schools used in-services or workshops and team meetings to implement professional development activities. The set of aligned schools utilized the other design options to a greater extent in comparison than the set of non-aligned schools. In addition, 85% of the schools aligned with the NSDC’s standards (2001) utilized at least six designs and 38% of the unaligned schools used six design options.

**Survey Question 16**

Question 16 asked: When designing professional development activities, are the career stages of teacher considered? The participants had three fixed responses to choose from: yes, no, or not sure. Table 7 listed the responses for the participants from the aligned schools and the non-aligned schools.

**Table 7**

*Comparison of Responses to Question 16 Between the Set of Aligned Schools and Schools Not Aligned With the NSDC’s Standards*

<table>
<thead>
<tr>
<th>Response Option</th>
<th>Aligned School</th>
<th>Not Aligned Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=20 %</td>
<td>N=37 %</td>
</tr>
<tr>
<td>Yes</td>
<td>15 75%</td>
<td>18 49%</td>
</tr>
<tr>
<td>No</td>
<td>3 15%</td>
<td>14 38%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>2 10%</td>
<td>5 13%</td>
</tr>
</tbody>
</table>

A greater percentage of the participants from the aligned schools considered the career stages of teachers when designing professional development activities. An approximately equal percentage of participants from both sets of schools were unsure whether career stages were considered.
The degree to which the context and process standards were implemented for professional learning was an unanticipated outcome in this study. The detailed analysis of four questions provided an understanding of the differences between the professional development practices between the aligned schools and the schools not aligned with the NSDC’s standards (2001). Differences were noted regarding how the resource of time was addressed by the public schools, which design options were implemented, and the consideration given to teacher career stages when designing professional development activities. The aligned schools incorporated more teacher leadership opportunities and addressed policy changes to a greater extent to support professional development. The aligned schools tended to reconstruct faculty meetings more often to offer time for professional learning. These schools also offered more design options for teachers to utilize in support of their professional development experiences and considered career stages to a greater extent when designing activities.

Summary

This chapter presented the findings to the three research questions posed within this study. Thirty-six schools were not aligned with the National Staff Development Council’s standards (2001) while 18 were aligned with these standards, according to the ratings by two panelists. An inter-rater reliability procedure revealed that the ratings of the two panelists showed a high degree of agreement. Three schools were randomly selected as samples in the training procedures given to the two panelists. Two of these schools aligned with the NSDC standards (2001) and one was not aligned. A total of 20
schools in this study were aligned with these standards and 37 public schools were not aligned.

To answer the second research question, a chi-square test was performed. This procedure indicated whether the ratings by the two panelists were statistically different from each other. The results of this test reported that the ratings of each panelist did not differ statistically.

To answer the third research question, the comments regarding challenges when implementing professional development activities were analyzed through a peer review process. Comments from the participants in the 37 schools not aligned with the NSDC's standards (2001) in this study were utilized. Two major themes emerged: resources and the change process. The theme of resources was divided into the sub-themes of time constraints, budget constraints, and limitations on human resources. The second theme was the change process impacting the clarity of professional development goals for public schools in this study. Sub-themes included: teacher reluctance, lack of ownership, lack of administrative support, participation demands by teachers, and diverse learning needs of staff members.

Four unanticipated outcomes were described. The context standards were established within the set of schools aligned with the NSDC's standards (2001) and the set not aligned. The set of aligned schools incorporated teacher leadership development and policy changes to a greater extent. These aligned schools used these practices to a greater extent: volunteers to cover classes during the day for teachers, offered stipend pay, and reconstructed faculty meetings to support professional development. Aligned schools offered more design options for professional learning opportunities than the set of
schools not aligned with the standards. The aligned schools also considered career stages of teachers to a greater extent when designing professional development activities.

Chapter V provides the conclusions and the implications for professional development practices. Recommendations for other studies are given.
CHAPTER V

Introduction

The final chapter of this research study summarizes the methodology and presents a discussion of the findings linked to the three research questions originally posed. The implications for educational practice are discussed and recommendations are suggested.

Research Study

Three research questions were posed for the purpose of describing the alignment of selected Ohio public schools with the National Staff Development Council's standards (2001). The NSDC’s standards were cited as a framework for designing and implementing effective professional development activities for teachers. This study also identified the types of challenges administrators faced when implementing professional development activities, as noted by those participants whose schools were not aligned with the NSDC’s standards. The research questions posed for this study were:

1. Were the actual practices, designed by Ohio public school administrators for teachers’ professional development activities, aligned with the National Staff Development Council’s standards?

2. Were the ratings by two panelists on the alignment of Ohio public schools with the National Staff Development Council’s standards statistically different?

3. In cases when actual practices did not align with the National Staff Development Council’s standards, what types of challenges to implementing professional development activities did administrators in Ohio public schools experience?
To answer these three questions, a questionnaire, an alignment schema, and scoring rubric were designed. The questionnaire was sent by electronic mail or United States mail to 165 professional development directors or directors of curriculum and instruction. Fifty-eight questionnaires were returned for a 35% return rate, acceptable to the Dissertation Committee. The questionnaire solicited responses that were rated by two panelists using an alignment schema and scoring rubric to determine whether professional development activities by individual schools were aligned with the National Staff Development Council’s standards (2001).

In response to the first research question, the panelists agreed that 18 schools were aligned with the standards and 36 schools were not aligned. The panelists disagreed on the rating of one school and the data from this school was not included in the analysis. An inter-rater reliability score yielded a .98 coefficient (Cohen, 1960) for a high level of agreement between the panelists. Three schools were randomly selected as samples for the scoring rubric training. Two of these schools were aligned with the standards and one was not. Data from these schools were included in the analysis presented in Chapter IV.

To answer the second research question, a chi-square test was used to determine whether the ratings by the two panelists were statistically different. The probability for the chi-square value of .042 was .84, which meant that the null hypothesis, stating that the ratings by the two panelists did not differ, was accepted. The ratings of the first panelist were not statistically different from the ratings of the second panelist. Therefore based upon this statistical procedure, the ratings of the two panelists were in agreement regarding the alignment of Ohio public schools with the NSDC’s standards (2001) in this study.
After determining the public schools in this study that were aligned with the NSDC’s standards (2001), the schools that were not aligned were selected for further review. The comments from two open response questions on the questionnaire regarding challenges when implementing professional development activities were analyzed using a constant comparison method (Glaser & Strauss, 1967; Merriam, 2001). An independent expert and I analyzed this qualitative data and agreed upon two major themes that emerged. These themes represented challenges experienced by participants of schools not aligned with the NSDC’s standards (2001) when implementing professional development activities. The first challenge was resources in the form of time constraints, budget or funding constraints, and the limitation of human resources. The second challenge was the dynamics of the change process occurring in the public schools from both internal and external factors. The change process impacted the clarity of professional development goals and school improvement goals. Sub-themes identified included: teacher reluctance toward implementing changes, teacher ownership of new practices, the lack of administrative support for professional development, and the diverse needs of adult learners within the schools.

Discussion

Several important points were discovered through this research project. The key points within this discussion were: (a) the context schema was strongly developed within all the public schools of this study (see Appendix A); (b) the larger than expected number of Ohio public schools in this study aligned with the NSDC’s standards (2001); (c) the difference between the schools that were aligned with the standards and those not aligned
in regard to teacher leadership and use of design options for professional development activities; (d) the challenges related to time for professional development and learning; and (e) challenges evolved from the process of change that tend to limit professional development and professional growth.

*Context Schema*

The three standards encompassed within the context schema were learning communities, leadership, and resources. The two panelists disagreed on the implementation of the learning community standard in only one school within the total sample set of 57, which included the schools aligned with the NSDC’s standards (2001) and those not aligned. This insight highlighted the fact that the context for professional development in the schools of this study provided “the structures that must be in place for successful learning to occur” (NSDC, 2001, p. 2). These standards built the contextual basis for high quality professional development programs in schools so that teachers can apply their learning in a job-embedded situation. The context or structures to facilitate staff development were defined as a means to address instructional improvement for one school district demonstrating exemplary practices (Elmore, 1997).

Through the context piece teachers collaborate with each other and take what is learned within the content schema and “tailor it to what that specific job or site needs to do” stated C. Yoder, Director, Center for the Teaching Profession, Ohio Department of Education (personal communication, December 20, 2003). The context of the professional development program was established in the public schools in this study for the processes and content of professional learning to occur.
Number of Aligned Schools

Twenty of the 57 schools analyzed (35% of the sample set) were aligned with the NSDC's standards (2001). Based upon this finding, effective professional development practices were occurring in Ohio public schools, as represented in this study. The context, process, and content schema were all utilized within these 20 schools. Of the 37 schools that were not aligned with the NSDC standards, 26 were not aligned solely because they did not utilize the family involvement standard in their professional development activities. If these 26 schools had met this standard, a total of 81% of the schools in this study would have been aligned with these standards. Nine more schools were not aligned because of the family involvement standard and one more standard not met. Two schools did not meet either the data-driven or the research-based standard.

Research by Henderson and Mapp (2002) and Ames, de Stefano, Watkins, and Sheldon (1995) reported the critical significance of family involvement to support student learning and achievement. Yet, the content of professional development activities in 35 schools did not include either how to communicate with families or the meaningful engagement of families in school/classroom activities linked to the academic content standards. A disconnect between what research stated as important for student achievement and current practices for the involvement of families for student success was evident in this study. Professional development activities to develop strategies focused upon students learning the academic content standards at home seemed critically important to promote student achievement in the public schools.
Teacher Leadership

Teacher leadership for decision-making and mentoring was incorporated by 19 of the 20 (95%) schools aligned with the NSDC’s standards (2001). In comparison, 28 of the 37 (76%) schools not aligned with these standards utilized teacher leadership opportunities. Mentoring or coaching was used by 18 of the 20 (90%) participants whose schools were aligned with the standards while only 28 of the 37 (76%) participants from not aligned schools implemented this practice. The participants from schools aligned with the NSDC’s standards (2001) used a larger number of design options; 85% as compared to 38% of the non-aligned schools. The combination of mentoring, coaching, teacher leadership, and professional development design options utilized by aligned schools seemed to address the various needs of teachers at different career stages.

Ball and Cohen (1999) stated that many people viewed teaching as a common sense practice and perceived little need for professional learning. Furthermore, they noted that teaching has been viewed as a career that does not require sustained learning for adequate performance. Recent reforms challenged these perspectives on teaching and the professional learning needs of teachers. The instructional practices and professional learning needed to meet today’s mandates “require teachers to become serious learners in and around their practice, rather than amassing strategies and activities” (Ball & Cohen, 1999, p. 4). Yet, for teachers to improve their instructional practices, school leaders have not typically emphasized teacher leadership or the sharing of knowledge and skills by master teachers to inform others. Therefore, collaboration to promote the learning of new instructional strategies has not occurred; teachers have remained isolated in their classrooms.
The collaborative cultures in learning communities with an emphasis on mentoring and using internal experts in the public schools would inspire teachers at various career stages to become the educational leaders needed to support student learning. Porter (1961) described the hierarchy of needs within work organizations. Security, affiliation, self-esteem, autonomy, and self-actualization were utilized to sustain an individual's growth-enhancing needs on the job. Autonomy was defined as an individual's need to participate in making decisions and setting goals, to exert influence within the work environment, and make choices based upon one's own initiative. Schools could offer teachers the ability to fulfill these motivational needs by: (a) fostering the ability to make decisions, (b) mentoring new teachers, (c) coaching other teachers based upon their areas of expertise, and (d) selecting professional design options relevant to fulfilling their professional growth need.

Fessler (1995) wrote that a supportive attitude from administrators, community members, and colleagues reinforced and encouraged teachers to progress through their careers. Staff development activities that emphasized teacher skill development and career alternatives such as mentoring, coaching, or modifications of job assignments, and leadership opportunities were important for offering support systems to teachers at various stages of their career. Mentoring activities and the use of teachers for designing and implementing professional development activities were practices utilized by participants in this study whose schools were aligned with the NSDC's standards (2001).
Challenges

The participants whose schools were not aligned with the NSDC’s standards (2001) experienced two major challenges as they implemented professional development activities. Resources were the first challenge with time constraints faced by 26 of the 37 participants. The change process itself was identified as the second major challenge which limited the development of professional development programs.

Time Constraints

Time constraints were an expected challenge for participants planning and implementing professional development activities. Time was a challenge for many aspects of an educator’s life, whether personal time to attend to family needs or completing the multitude of tasks posed from the demands of the job. The time constraints noted as challenges represented specific issues for the participants in this study. The participants stated that time to offer quality training to meet the diverse learning needs of the staff members in their schools was a challenge. Even when quality training was given, offering meaningful follow-up to the initial professional development activities was a challenge. Offering time during the school day meant releasing teachers from their instructional duties for embedded professional learning. Several participants stated this was a challenge. Elmore (1997) stated that time was necessary “to deliver the professional development required to change teaching practice and time to learn and adapt to new expectations” (p. 28).

Schools committed time for professional development during the school day or school year as evidenced in the practices found in this study. Practices utilized within the
schools included (a) common planning time, (b) time created by hiring substitute teachers, (c) restructured faculty meetings, and (d) full days or portions of school days devoted to professional development. Funding to support meetings or conferences and funds to support professional development literature were resources offered by most participating schools in this study. Participants acknowledged the necessity for professional development by the resources committed; yet recognized the constraints impacting the ability to provide professional learning as they described challenges.

If these resources were provided, why did the participants whose schools were not aligned with the standards describe the issue of time as a challenge? Possibly it was the issue that school leaders and educators did not have time to step back and systematically plan prior to implementing programs. Therefore, a specific plan for effective professional development was not clearly envisioned or described beyond one school year. The professional development activities were mere random acts of improvement rather than a coherently planned program with clear goals, followed by professional development design options strategically planned over several years to accomplish those goals. Guskey (2000) stated that “At the core of each and every successful educational improvement effort is a thoughtfully conceived, well-designed, and well-supported professional development component” (p. 4).

Change Process

The challenge of the change process was not anticipated, although upon reflection, this challenge made perfect sense. As schools were bombarded with the multitude of federal and state initiatives, personnel were working toward framing their
school improvement plans and priorities for staff development using one or two goals. Yet, as one goal was addressed, a number of new initiatives occurred that demanded a realignment of the district plans and the professional development activities offered. Taking a stance to focus on one or two district goals, reflective of federal and state initiatives yet driven by local needs, seemed critical.

In a study by Elmore (1997) a successful community school in New York designed a long-term focus on selected instructional priorities. The district policy makers and administrators sustained the professional development improvement efforts and buffered the school from external influences that impacted that focus. The commitment to the sustained change efforts was one reason for the improvement of student achievement noted through the efforts by administrators and teachers. With this in mind, school leaders must make every effort to commit to a long-term strategic plan for professional development.

Some of the teacher reluctance, noted as a challenge by participants whose schools were not aligned with the standards, was consistent with the research on career stages. Teachers need to have influence on decisions on curriculum, professional development goals and programs, and school improvement plans through leadership opportunities (Steffy et al., 2000). In addition, the changing mandates and practices have lead to a lack of coherence in school district goals and professional development planning which Supovitz and Zief (2000) found as leading to teacher resistance. Evans (1996, p.21) asserted that, “The key factor in change is what it means to those who must implement it, and that its primary meanings encourage resistance: it provokes loss, challenges competence, creates confusion, and causes conflict.” To overcome the
resistance or reluctance by some educators, Evans stated that a strong sense of efficacy or "the sense of making a meaningful difference, of true accomplishment" (1996, p. 95) was important. Related to the autonomy addressed with the section on teacher career stages, the development of teacher leadership would promote self-efficacy and overcome the resistance toward change efforts.

Implications for Practice

The implications for practice are focused upon (a) professional training of public school leaders, (b) learning communities of change to support school leadership, and (c) five leadership principles. Professional development programs for teachers have not been clearly linked to student achievement through research. Yet, it seems obvious that the teachers who effectively use their mastery of content knowledge and pedagogical practices will positively impact student performance.

Professional Training

Before effective professional development practices can be designed for teachers, our school leaders or administrators must have the knowledge and skills to plan, design, and implement these programs. Administrators typically have a primary role in designing and implementing professional development programs to ensure high-quality professional learning experiences for teachers. Therefore, the first implication is to continue to strengthen the understanding by administrators of the importance of professional development and the design qualities that define effective practices supported by research. According to Phelps (2003, p. 157), "It is critical that school leaders from board
members to department chairs, possess the required levels of knowledge and skill to lead and provide staff development that achieves school goals.”

The participants in this study used articles, newsletters, and workshops as a primary activity to acquire knowledge about the No Child Left Behind Act of 2001 and the National Staff Development Council’s standards (2001). Workshops have been the primary design for teacher learning (National Commission on Teaching & America’s Future, 1996; Sparks, 2001). School leaders need to understand the various design options available for professional development and be able to implement their use in the public schools. Design options such as study groups, mentoring or coaching, action research projects, and collaborative networks last for longer periods of time and had greater numbers of contact hours (Garet et al., 1999). Furthermore, teachers reported enhanced knowledge and skills along with a change in their teaching practice based upon their participation in these types of design options.

Practitioners in the field of education have written detailed descriptions and included models and forms for implementing study groups, action research projects, and mentoring programs. Focusing coursework, articles from professional organizations, newsletters, and workshops on these types of designs would promote a stronger knowledge base of professional development practices critical to the improved achievement of students. Topics for newsletters or professional articles include a review of the NSDC’s standards (2001) with specific details of those standards not fully implemented according to this study.

Understanding the framework of professional development practices, such as the National Staff Development Council’s standards (2001), is not an easy task. Adult
learning takes time, multiple experiences, and discussions to assimilate new
knowledge into practice. The training offered by the researcher for using the scoring
rubric was time intensive. The panelists were both doctoral students with professional
development as a cognate area in their program; yet, the training to reach consensus for
determining the alignment of schools was over two hours in length. This time for training
was unexpected but drew attention to the necessity for extensive training for individuals
who plan and implement professional development programs. Professional learning for
all educators, including administrators and those charged with planning and
implementing professional development programs, needs to be sustained to promote the
knowledge and skills necessary for today’s educators.

The training programs for educational leaders need to develop a common
understanding of professional development based upon the framework designed through
the National Staff Development Council’s standards (2001) and activities outlined within
the No Child Left Behind Act of 2001. Beyond understanding these standards and the
activities outlined in the federal mandate, school leaders need to know how to plan,
design, and implement effective professional development programs. Guskey (2000)
described three characteristics essential for effective professional development. First,
professional development is an intentional process with clear worthwhile goals that could
be assessed. Second, professional development is an ongoing process that focuses upon
continuous learning by educators throughout their careers to address new knowledge and
reflect upon the improvement of practices. Last, professional development is systematic
to take into account the necessary changes over time and reflect upon both individual and
organizational growth.
Following Guskey's model (2000) school leaders would devise a vision for professional development integrating federal and state initiatives, yet based upon the specific needs within the local school districts. The goals of the district would reflect upon the collection of data on student learning needs, teachers' learning needs, and needs for family involvement. The specific goals for professional development would be measurable and attainable with specific timelines for indicators of success. Design options and activities would align with the goals, timelines, teacher career stages, and provide the sustained involvement of teachers over a period of time. This means that professional development plans, similar to school improvement plans, need to focus on two to five year processes. The individual needs of a diverse teaching staff needs to be balanced with the systemic needs of the school to blend the optimal mix of professional development activities (Guskey, 1995).

As educational leaders plan, design, and implement professional development programs, they must have the knowledge base to understand processes linked to student and teacher learning and then develop the skill to implement them. As participants stated, our school leaders need more training to understand professional development and utilize resources to commit to professional learning practices. In order to develop clear goals and teacher leadership, design professional development options, and sustain improvement plans over time, it is critical for educational leaders to have training and ongoing support.

School leaders have not typically been taught "how to inspire and empower others, work collaboratively, listen and communicate effectively, or transform the school into a learning community" (Ramsey, 1999, p. 5). Managerial tasks for handling discipline, budgets, and legal issues have been emphasized at the expense of teaching the
instructional leadership skills that explore “better ways to use leadership to raise student performance” (Ramsey, 1999, p. 5). When addressing the learning needs of adults in an organization such as a school, understanding the change process and how to influence and facilitate the process also need to be acknowledged for improvement efforts to be successful (Hall & Hord, 2001). The principles defined by Kouzes and Posner (1995) provide an excellent source for school leaders to learn and understand leadership practices. These principles guide the implications for practice later in this chapter.

*Learning Communities for Change*

After school leaders are trained to provide high-quality professional development for teachers, policies and practices to support their leadership are critical. Policies to permit administrators to rethink schedules, staffing patterns, budgets, and learning communities for ongoing professional learning are necessary according to Darling-Hammond (1995). The Commission on Teacher Success (2003) recommends (a) funding through a variety of initiatives and time for sustained professional development, (b) job-embedded professional development in “an amount equivalent to five additional professional development days” (p. 38), (c) professional development standards reflective of the federal mandates, and (d) a systematic effort to ensure teachers and principals receive high-quality professional development throughout their careers. Policies impacting educational practices need to: (a) modify the school year to promote professional learning time for teachers and administrators; (b) offer funding that is non-discretionary and promotes individual school districts to offer professional development programs based upon their selected goals and needs; and (c) build a set of professional
learning standards, which incorporate the NSDC’s standards (2001) and will drive the practices of all schools toward effective professional development activities outlined in the No Child Left Behind Act of 2001.

Based upon conversations with M. Troyer and C. Yoder (personal communication, December 22, 2003), new policies and programs in Ohio are currently focused upon these practices. The institution of these policies would support school leaders as they plan, design, and implement professional development activities for teachers.

Other practices to support school leaders are the development of professional learning communities of administrators and the utilization of several design options for addressing professional learning goals. Opportunities for school leaders to frequently discuss literature and current issues in education, in order to find solutions to school based issues, would allay the feelings of isolation that many administrators hold. Learning communities in schools foster collaboration, learning teams, and the alignment of goals. Leaders facilitate and model these practices in their individual schools; yet they often need a team of their peers to share ideas and strategies toward implementing new organizational processes. Hall and Hord (2001) stressed that collaboration was necessary among leaders as they are responsible for leading change efforts. Similar to the learning needs of teachers, school administrators need various design options, such as mentoring, coaching, or study groups, to improve their leadership skills. School leaders hold a variety of experiences and the possible dialogue among administrators would be valuable for promoting new learning. The support of fellow school leaders in a risk-free environment would be beneficial as all new practices involve change. “Change is a
process, not an event” state Hall and Hord (2001, p. 4). Furthermore, school leaders are the implementation facilitators of change and they “need to have the patience to work daily with teachers who are attempting to figure out how to use the innovation” (Hall & Hord, 2001, p. 7). Providing the support through learning communities of administrators, policies, and multiple designs to promote new learning are critical for school leaders as they become the change agents within our public schools.

**Leadership Principles**

Kouzes and Posner (1995) defined five leadership principles in their research. These principles included (a) challenging the process to seek opportunities for growth and learn from mistakes; (b) inspiring a shared vision for describing a future and enlist others toward common values and goals; (c) enabling others to act through collaborative practices, developing competence, and offering support; (d) modeling the way by setting an example and promoting consistent progress; and (e) encouraging the heart through recognition of contributions and celebrating accomplishments. Each of these principles is important for public school leaders as they plan, design, and implement professional development programs. School administrators must develop and utilize leadership skills to face the challenges apparent in the change process occurring within the public schools. It is critical that school leaders restructure schools to meet the needs of students, who will be the leaders for our future.

**Challenge the Process**

The first principle is to challenge the current processes used for professional development (Kouzes & Posner, 1995). The No Child Left Behind Act of 2001 states that
professional development practices for teachers need to be meaningful, continuous, intensive, and embedded into practices relevant to the classroom. Furthermore, professional development is not to be limited to one-day in-services or short-term workshops. In order to offer this type of job-embedded professional development activities, educators will need to challenge those practices typically designed for professional learning. The utilization of different designs for learning and teacher leaders to facilitate learning experiences will challenge the traditional educational system.

After framing a professional development program following Guskey’s model (1995) of a clear vision, planned ongoing follow-up, and systematic focus for individual and organizational needs, a professional development plan could be conceived like the one below. Participants in this study incorporated time during the day, funding opportunities, substitute teachers, common planning times, and professional literature to offer professional development programs. The key seems to be to utilize these practices in a systematic way that focuses on a clearly stated goal and offers continuous learning.

The understanding of theory, modeling or demonstration of instructional strategies, and the practice of new strategies could be completed within a one-day workshop (Joyce & Showers, 2002). After the workshop, peer coaching or follow-up to transfer new ideas into classroom practices would occur within the collaborative team meetings or by hiring substitutes, two practices often used by public schools. After teachers have implemented a few strategies into their classroom instruction, another full day, portion of a day, or consultation within the classroom with a knowledgeable presenter would offer the follow-up practices necessary to assist teachers. This plan
offers theory, practice, follow-up, and better ensures the implementation of new instructional strategies into the classroom by teachers.

Professional development providers have often come to a school and leave without offering some type of follow-up to ensure learning transfers to classroom practices after the initial training. Therefore, thinking about how to plan, design, and implement a professional development program for the initial training and needed follow-up is critical for the success of effective professional development. To challenge the process of how public schools have typically offered professional development activities requires leaders to learn new strategies and take the time in their professional school day to carefully plan and design professional learning experiences in collaboration with teachers.

*Inspire a Shared Vision*

As educators challenge the culture within their schools to re-create time for professional learning and growth, they will need to inspire a vision of what the professional development activities are designed to accomplish (Kouzes & Posner, 1995). Several researchers and educational practitioners have recommended designing a vision or goals for school improvement through professional learning opportunities (DuFour & Eaker, 1998; King & Newmann, 2001; Lambert, 2003; Leithwood, et al., 1998, Newmann & Wehlage, 1997). Parker (2003) indicated that districts need a clear vision regarding their goals toward effective professional development. Parker noted that a vision was crucial for increased teacher commitment toward learning and focusing on student achievement.
Supovitz and Zief (2000) state that the lack of coherence in professional development programs or topics often encourages teachers to resist new ideas. Therefore, developing a clear goal and strategically planning for the accomplishment of the goal is critical to the success of a professional development program as noted in Guskey’s model (1995). No longer will activities be used solely for credit hours to achieve a higher degree, rather they will be focused upon student achievement. As teachers are given opportunities to develop goals for their own learning and decide how they will learn through new design options such as: action research, study groups, and coaching, they will embrace these new activities rather than be reluctant to participate in them.

Enable Others to Act

The third leadership principle explained by Kouzes and Posner (1995) was the idea of enabling others to act. This idea embraces two factors: teacher leadership and family involvement. Jandura and Burke (1989) stated,

The empowerment concept rests on the belief that decisions should be vested as much as possible in those who are affected by the decisions and are responsible for implementing them. Teachers, as professionals, know what it takes to make schools effective places for students to learn. (pp. 7-8)

Sharing authority for decisions with teachers who are closest to the task of student learning gave teachers responsibility for identifying and solving their own problems as well as their responsibility for student achievement (DuFour & Eaker, 1998; Kruse et al., 1994). Teacher leadership offers educators in the classroom the opportunity to facilitate others’ use of new instructional strategies, curriculum practices, and assessment
techniques. Steffy et al. (2000) suggested that teachers have the ability to influence decisions about curriculum, professional development activities, and school goals. These authors also noted that the social context beyond the classroom be considered to support professional growth. Support groups within a school, mentoring and coaching opportunities, peer observations, and partnerships with universities are possibilities for supporting teachers. Desimone et al. (2002) and Garet et al. (1999) found that teacher participation in professional development planning is associated with positive aspects of professional learning.

School leaders may overcome reluctance by considering how to involve teachers in the creation of school improvement goals, planning staff development programs, and other activities that are professionally enriching. Renyi (1996) commented that professional development leaders find ways to reward educators in becoming future leaders, which is a major motivator for all teachers to incorporate demanding learning into their daily school practices. Pasch, Wolfe, Steffy, and Enz (2000) suggested administrators support teacher career growth through these practices: (a) share a vision of excellence along with factors supporting growth, (b) provide mentoring and coaching programs, (c) encourage teachers to continually grow in their professional career, (d) celebrate achievements within all career stages, (e) adapt workloads, (f) offer opportunities to build professional cultures of learning for all school members, (g) develop school partnerships with universities and community agencies to foster collaboration, and (h) redesign the time for professional learning. Understanding and addressing the needs of teachers across career stages will be necessary to promote the
concerted efforts of all teachers toward student achievement and gaining their participation in professional development activities.

Expanding the role teachers currently play in the educational system means changing the mindset of legislators, educators, and community members. As M. Troyer, Associate Superintendent, Center for the Teaching Profession, Ohio Department of Education, stated, “One thing I would like to see, is to have us think more about professional development as it pertains to different stages of a teacher’s career” (personal communication, December 20, 2003).

Enabling families to become partners in their children’s learning experiences comes through communication from school leaders and teachers. Therefore, promoting professional development activities that facilitate communication with families, especially in regard to academic content standards, will positively impact student achievement.

Model the Way

When leaders model desired actions they set an example for others toward committing to a challenge and leading the process of accomplishing small wins (Kouzes & Posner, 1995). For example, educational leaders may integrate federal and state initiatives into a school improvement plan rather than having these mandates drive school practices. Through the integration of goals, leaders are modeling the commitment presented by the school to focus on specific improvement plans integral to the success of their specific student population. They are also buffering the teachers from practices that are not relevant to the school system or key to its success. School leaders need to have the
autonomy to review data based upon student achievement, student programs, and teachers' needs to determine what works for their system. Initiatives start at the state or federal level but districts need to make decisions at the local level for effective professional development to be fully implemented (M. Troyer, personal communication, December 20, 2003).

DuFour and Berkey (1995) noted that principals must model a commitment to their professional growth in order to convince other educators to commit to continual professional learning. When administrators attend professional development programs with teachers, the practice reinforced the continuous learning values of the school (Fink & Resnick, 2001). Modeling the commitment to professional learning is another practice school leaders must demonstrate to others. Professional growth through professional development activities is an apparent type of intervention, which Hall and Hord (2001) stated is critical to the success of a change process.

Encourage the Heart

The fifth principle of leadership is the ability to recognize individual contributions to the success of a project or school plan and celebrate accomplishments (Kouzes & Posner, 1995). School Leaders need to take the time for appreciating staff and celebrating successes as a priority throughout their school day. According to Evans (1996, p. 254), "Recognition is widely seen by scholars and practitioners in many fields as being essential to job satisfaction, motivation, and performance." Yet, Evans noted that schools often "shower recognition on pupils and deny it to adults" (p. 255). School leaders who
leaders who focus on the leadership principles by Kouzes and Posner (1995) will
direct genuine recognition and praise on specific tasks, teams, and the faculty as a whole.

Recommendations

This study focused upon the professional development practices designed for
teachers in the public schools in Ohio. The recommendations are defined according to
these categories: new studies, professional learning practices for administrators, and
practices from recent reports in Ohio.

New Studies

As studies of professional development practices are considered, one
recommendation is to perform a similar study to this one that would include all school
districts in the state of Ohio. A more intensive study could modify the methodology by
utilizing interviews of administrators and teachers and including documentation of
professional development programs. Another study could focus more specifically on the
family involvement standard based upon the professional development practices designed
and implemented toward meeting this standard. The consideration given by practitioners
to the career stages of teachers would be an interesting study to determine the knowledge
base of administrators on teacher career stages, leadership practices utilized in schools,
and how design options are created to accommodate teacher professional learning. A
follow-up study to this one would determine if changes in the implementation of the
NSDC’s standards (2001) have occurred. The questionnaire and scoring rubric could be
modified to more clearly delineate the measure of alignment with the NSDC’s standards.
Research designed to study specific Ohio school districts’ performance ratings could lead to an understanding of how various aspects of professional development are defined and utilized. A correlation between the performance ratings and selected aspects of effective professional development practices could reveal insights and recommendations for policy changes and program development.

*Professional Learning Practices for Administrators*

Administrative preparation programs need to examine the professional practices that were identified in this study. The following specific recommendations are examples of the objectives that need to be integrated into coursework and professional discussions:

1. The importance of professional development toward improving teacher knowledge, skills, and practices in the classroom in order to increase student achievement;

2. A clarification of effective, meaningful, job-embedded professional development practices and how to utilize the National Staff Development Council’s standards (2001) which reflect the definition from the No Child Left Behind Act of 2001;

3. An understanding of Guskey’s model (2000) to ensure professional development goals are intentional, programs are ongoing and systematic, and the evaluation of professional learning focuses on student achievement by modifying teachers’ practices in the classroom;
4. A knowledge base on teacher career stages and how to facilitate teacher professional growth plans to support teachers throughout their careers and develop teacher leadership opportunities;

5. An insight into the available design options for professional development activities and how to utilize these options to serve the diverse learning needs of staff;

6. The importance of family involvement and the linkage to increased student achievement as well as strategies to involve families in meaningful educational activities with their children that relate to the academic content standards;

7. A grasp of the dynamics of the change process and its impact on schools and their staff members, families, and communities;

8. A comprehension of leadership principles, specifically defined by Kouzes and Posner (1995) to facilitate new practices through challenging traditional ones, envisioning excellence in education, empowering teachers and families, modeling leadership, and celebrating successes; and

9. The examination of school policies to think creatively about time, schedules, personnel, and budgets to support professional learning.

As administrators enter into their new role as building or district leaders, a mentoring process to support them would facilitate learning and potentially lessen the turnover in administrative positions, commonly found in Ohio public schools. Administrators need support groups to be able to share confidences regarding employment issues, leadership implementation, and creatively problem-solve situations to effectively serve the students, families, and staff members within their schools. The
collaboration found within learning communities is necessary for school administrators to lessen their isolation from other educational leaders and to learn effective strategies for leading schools into a new era.

*Practices From Recent Reports in Ohio*

In the past few years, an examination of professional development practices in Ohio has been conducted. The Legislative Office of Education Oversight (LOEO) (2001) gave recommendations regarding funding issues, time constraints, and evaluation efforts that limited schools in implementing effective professional development programs. In addition to the report from the LOEO (2001), the Governor’s Commission on Teacher Success (2003) made six recommendations specific to professional development. The following recommendations are made based upon these two reports:

1. Permit school districts to combine professional development funding sources in order to utilize funds that best meet the school improvement plans and professional learning needs of the teachers within the school system;

2. Re-examine the time allocated for student learning and professional learning to promote new legislation on the school year for embedded professional development time, as well as permit school districts to design meaningful, job-embedded professional development activities within the school day in order to effectively integrate curriculum, instruction, and assessment practices into the classroom;

3. Design a systematic evaluation of professional development within each professional development program, following Guskey’s model (2000) that will
ensure professional learning impacts student achievement through teacher performance;

4. Build learning communities, establish leadership, and utilize resources to firmly establish the context for professional development programs in every school;

5. Implement the National Staff Development Council’s standards (2001) or a consistent set of professional development standards across the state of Ohio that reflect the definition of high-quality professional development contained within the No Child Left Behind Act of 2001; and

6. Utilize student data along with teacher leadership for the development of professional development goals and design options in schools that will improve student achievement.

These recommendations are meant to impact practices within Ohio so that professional development programs have significant value to changes for instructional practices in the classroom. By improving professional learning opportunities for all educators, the original statement by the National Commission on Teaching and America’s Future (1996) would no longer be true. Instead, teachers would be able to “produce the kind of learning demanded by the new reforms” (p. 5) because schools are supporting them and they are implementing curricular, instructional, and assessment practices that impact the student achievement with the new knowledge provided to them.

In addition, the two of the three strategies promoted by the National Commission on Teaching and America’s Future (2003) would be met. The two strategies accomplished by effective professional development activities are the teaching and learning success
organized around theories of teacher development and development of a high quality teaching profession through sponsoring career path teacher growth.

Summary

This final chapter gave the highlights of the methodology and findings for this research study. Participating public schools in this study utilized practices indicative of a strong context schema identified within the framework of the NSDC’s standards (2001). This meant that the structure for professional development programs to implement the process and content standards was noted within the public schools in this study.

Although research practices report the critical importance of family involvement for promoting student achievement, a discrepancy was noted in this study with only 35% of the schools implementing the NSDC’s family involvement standard (2001) into their professional development activities. Implications for educational practices included: a) professional training of public school leaders on selected programs, b) the need for learning communities of change to support school leadership, and c) the promotion of the five leadership principles identified by Kouzes and Posner (1995). Several recommendations were given for new studies on professional development, the professional learning practices for administrators, and practices promoted within recent reports.
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APPENDIX A

NATIONAL STAFF DEVELOPMENT COUNCIL'S STANDARDS
National Staff Development Council's Standards (National Staff Development Council, 2001, p. 5)

I. Content Standards

1. Learning Communities: Staff development that improves the learning of all students organizes adults into learning communities whose goals are aligned with those of the school and district.

2. Leadership: Staff development that improves the learning of all students requires skillful school and district leaders who guide continuous instructional improvement.

3. Resources: Staff development that improves the learning of all students requires resources to support adult learning and collaboration.

II. Process Standards

4. Data-Driven: Staff development that improves the learning of all students uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement.

5. Evaluation: Staff development that improves the learning of all students uses multiple sources of information to guide improvement and demonstrate its impact.

6. Research-Based: Staff development that improves the learning of all students prepares educators to apply research to decision making.

7. Design: Staff development that improves the learning of all students uses learning strategies appropriate to the intended goal.
8. Learning: Staff development that improves the learning of all students applies knowledge about human learning and change.

9. Collaboration: Staff development that improves the learning of all students provides educators with the knowledge and skills to collaborate.

III. Content Standards

10. Equity: Staff development that improves the learning of all students prepares educators to understand and appreciate all students, create safe, orderly, and supportive learning environments, and hold high expectations for their academic achievement.

11. Quality Teaching: Staff development that improves the learning of students deepens educators’ content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately.

12. Family Involvement: Staff development that improves the learning of all students provides educators with knowledge and skills to involve families and other stakeholders.
APPENDIX B

LETTER
November 12, 2003

Dear,

I am a doctoral student in the Ashland University Educational Leadership program. I am currently completing a research study for my dissertation on professional development practices in public schools. I would greatly appreciate your help in completing the attached questionnaire relevant to my study. The results of this study will provide information on how administrators design learning activities for teachers and what issues cause a deviation from practices defined by the National Staff Development Council standards. A consultant for the Ohio Department of Education has expressed interest in the results of this study, which may assist us in identifying our future needs for professional development programs.

Participation in this study is voluntary and no risks are expected within the confines of this research study. Individual personnel or school districts will remain anonymous within the dissertation. The results of the study may be submitted for a presentation or a publication. By returning the attached questionnaire, you have given informed consent to participate in the research study. After returning the questionnaire, you may withdraw from the study at any time by contacting me. If you have any questions, please contact me at mo_Uitto@neonet.k12.oh.us or at 330-628-7264.

The survey will take approximately 25 minutes to complete and is a Microsoft word document. Please follow these directions to complete the questionnaire attached to this email.

1. Open the attachment to acquire the questionnaire.
2. Save the questionnaire to your desktop, documents file, or a disk.
3. Respond to the survey and save your responses.
4. Send the completed questionnaire as an attachment to my email address at mo_Uitto@neonet.k12.oh.us

Another option is to complete the following steps.
1. Open the attachment to acquire the questionnaire.
2. Respond to the questionnaire and save it as an attachment.
3. Forward the original email with the questionnaire attached to my email address at mo_Uitto@neonet.k12.oh.us

I greatly appreciate your cooperation as a participant in this research study. I am hoping to have all responses by the first week of December.

Many thanks,
Denise J. Uitto
APPENDIX C

QUESTIONNAIRE
Professional Development Practices
in Public Schools

The following questionnaire is designed to identify the practices by professional development decision-makers in the public schools.

Please respond to this questionnaire and save your responses. Return your completed questionnaire to Denise Uitto as an attachment via email or by forwarding the original email with your saved responses attached to the email. My email address is mo_uitto@neonet.k12.oh.us.

1. Are you responsible for professional development activities based upon a school district, school building, or both? Underline one please.

   District               School Building            Both

2. What is your title within this school district? __________

3. Name of District/School: (for tracking purposes only, this will not be placed into the dissertation)

   __________

4. Grades that you serve in your school/district: (Please underline all that apply)

   K 1 2 3 4 5 6 7 8 9 10 11 12 All

5. Are you responsible for allocating or implementing Title II-A, Improving Teacher Quality funds?
   _____ Yes
   _____ No

6. Do you utilize Title II-A funds for professional development activities?
   _____ Yes
   _____ No

7. How many teachers in this school/district receive professional development activities based upon your efforts? _____

8. What certificates/licenses do you hold? Mark all that apply.
   _____ Teacher
   _____ Superintendent
   _____ Reading Supervisor
   _____ School Counselor
   _____ Other __________
   _____ Principal
   _____ Assistant Superintendent
   _____ Educational Personnel Certificate
   _____ Administrative Specialist License
9. Prior to your current position, what were your educational work experiences? *Mark all that apply.*

- [ ] Teacher
- [ ] Curriculum Coordinator
- [ ] Superintendent
- [ ] Grant Administrator
- [ ] Principal
- [ ] Special Education Supervisor
- [ ] Assistant Superintendent
- [ ] Other _______________________

10. What professional development activities have prepared you to implement the professional development activities expected within the No Child Left Behind Act? *Mark all that apply.*

- [ ] Coursework
- [ ] Newsletter(s)
- [ ] Articles, Books, or other literature
- [ ] Mentoring experiences
- [ ] Workshops, Conferences
- [ ] Other _______________________

11. What professional development activities have prepared you to implement the National Staff Development Council standards? *Mark all that apply.*

- [ ] Coursework
- [ ] Newsletter(s)
- [ ] Articles, Books, or other literature
- [ ] Mentoring experiences
- [ ] Workshops, Conferences
- [ ] Other _______________________

12. Please break your work responsibilities into categories with a percentage of time spent for each category (such as: supervising teachers, attendance at meetings, curriculum review, etc.).

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage of time spent</th>
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<tbody>
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</tbody>
</table>

13. If you could re-allocate your time in terms of importance for specific tasks, how would you do this?

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage of time spent</th>
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</thead>
<tbody>
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</tbody>
</table>
1. Do learning teams (ex: interdisciplinary teams, grade level teams, etc.) meet regularly to discuss curriculum, plan instruction, examine student work, and/or solve problems?
   [ ] Yes  
   [ ] No  
   [ ] Not Sure

2. Are the professional development activities of these learning teams focused upon student learning goals?
   [ ] Yes  
   [ ] No  
   [ ] Not Sure

3. Does your school improvement plan or continuous improvement plan incorporate professional development goals aligned with student learning?
   [ ] Yes  
   [ ] No  
   [ ] Not Sure  
   [ ] Do not have a school improvement or continuous improvement plan

4. In the last 12 months, how often have you participated in professional development activities with teachers from your school/district?
   [ ] Never  
   [ ] Once or twice  
   [ ] 3-5 times  
   [ ] 6 or more times

4a. Please describe why you have or have not participated. __________________________________________

5. With regard to the professional development activities for teachers in this district, who has PRIMARY responsibility for the following items? *Mark all that apply for items a – c.*

   a. Deciding the content?
      [ ] Teachers  
      [ ] Principals or other school staff  
      [ ] District staff  
      [ ] Outside professional development providers (e.g., university faculty, professional organizations)

   b. Designing and planning the activities?
      [ ] Teachers  
      [ ] Principals or other school staff  
      [ ] District staff  
      [ ] Outside professional development providers

6. Do you think professional development is linked to student achievement?
   [ ] Yes  
   [ ] No  
   [ ] Not Sure
7. In your role, what resources do you incorporate into the professional development activities for teachers? *Mark all that apply.*

- Time during the school day for professional development
- Funding to support meetings, conferences, workshops
- Professional development materials, resources, books, etc.
- Teacher leadership development for decision-making, mentoring, etc.
- Policy changes to support professional development
- Other _____________________

8. What opportunities are used to provide teachers with time for professional development during the school year or regular contract hours? *Mark all that apply.*

- Substitute teachers to cover teachers’ classes
- Early dismissal or late start for students
- Professional days built in before the beginning, during, or after the school year
- Common planning time for teachers
- Volunteers to cover teachers’ classes, such as: university personnel, parents, etc.
- Faculty meetings reconstructed for professional development
- Stipend pay for additional time to support professional development
- Other _____________________

9. Is a portion of the school’s/district’s budget dedicated to professional development?

- Yes
- No
- Not Sure

10. To determine the impact of professional development activities, do teachers utilize formative/summative assessments to obtain evidence of student learning?

- Yes
- No
- Not Sure

11. Does disaggregated student data drive the professional development activities designed for teachers?

- Yes
- No
- Not Sure

12. What information is gathered to evaluate professional development activities link to student achievement? *Mark all that apply.*

- Teachers’ reactions to the professional development activities
- Teachers’ learning of new knowledge and skills
- Changes in school practices (resources, policies, funding, etc.)
- Changes in teachers’ practices in the classroom
- Changes in student learning outcomes or achievement
- Unsure of the information gathered
- None of the above are used

13. Are professional development activities used to formally study research-based practices?

- Yes
- No
- Not Sure
14. What evidence is collected to evaluate professional development activities? *Mark all that apply.*

- Evaluation forms
- Observations of school/classroom activities
- School records of resources, student data, formative assessments
- Meeting notes
- Portfolios of student work
- Interviews or conversations with teachers
- Unsure what evidence is collected
- None of the above are used

15. What activities are utilized to address the goals of professional development? *Mark all that apply.*

- In-services/Workshops/Conferences
- Study groups
- Team meetings for curriculum, instruction, and/or assessment practices
- Mentoring or Coaching
- Action research
- Collaborative networks within the school or with teachers outside the school
- Professional development literature/books/videos
- Redesign of faculty meetings for professional development

16. When designing professional development activities, are the career stages of teachers considered?

- Yes
- No
- Not Sure

17. Do professional development activities utilize any of these practices? *Mark all that apply.*

- Understanding of theory for knowledge & skills of a content area
- Demonstrations through modeling or videotapes
- Practice of new skills in a simulated setting
- Feedback about performance in a simulated setting
- Follow-up activities for feedback and support in the classroom with teachers

18. Do professional development opportunities in your school/district prepare teachers to work collaboratively as skillful group members?

- Yes
- No
- Not Sure

19. Are teachers provided professional development opportunities to address the diversity of needs in your school/district student population, such as students with disabilities, limited English language learners, and/or students with diverse cultural backgrounds?

- Yes
- No
- Not Sure
20. When considering the content for professional development opportunities, what are the primary influences? Rank in order of priority.

_____ Federal initiatives, such as No Child Left Behind
_____ State initiatives, such as Academic Content Standards, Achievement Tests
_____ District/School improvement plans
_____ Teacher preferences, such as: Content area knowledge for teachers; Instructional strategies for specific content area; Assessment practices

21. Do professional development activities focus on both specific content areas (such as math or science) and the knowledge of how students learn the subject matter?

_____ Yes
_____ No
_____ Not Sure

22. What instructional practices to support student learning are addressed within professional development activities? Mark all that apply.

_____ Teaching concepts through similarities and differences
_____ Teaching summarizing and note taking skills
_____ Recognizing student effort and achievement
_____ Discussions on homework
_____ Teaching graphic or visual representations
_____ Utilization of cooperative learning groups
_____ None of the above

23. Do professional development activities prepare teachers to design classroom assessments appropriate to the content standards being taught?

_____ Yes
_____ No
_____ Not Sure

24. Do professional development activities focus on teachers developing communication strategies with families?

_____ Yes
_____ No
_____ Not Sure

25. Are teachers provided professional development experiences for involving families in school/classroom activities that are linked to the academic content standards?

_____ Yes
_____ No
_____ Not Sure

26. What are the challenges you have experienced when designing, implementing, or evaluating professional development activities in your school district/building? Please list or describe.
27. Please describe a decision you made for professional development activities in your school district/building. Include the following:

a. The school or district goals, improvement plans, or professional development needs necessitating the decision

b. Your rationale in making the decision.

c. Difficulties in implementing this decision

d. Other alternative decisions you considered along with the reasons you rejected those decisions

Thank you for participating in this survey.
APPENDIX D

SCORING RUBRIC
<table>
<thead>
<tr>
<th>Learning Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff development that improves the learning of all students organizes adults into learning communities whose goals are aligned with those of the school and district.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard 1</th>
<th>Evidence in Support</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teamwork, work together, team planning, improvement plans, professional development goals district/building plans, building goal, grade level goal, committee, team participation, teachers together, collaboration, groups of adults for professional conversations</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Only use marked items, not written qualifying comments)

<table>
<thead>
<tr>
<th>Question 1</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Question 2</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
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</thead>
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<table>
<thead>
<tr>
<th>Question 3</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
</table>

(Use responses from Q 26 & 27)

(Each “Yes” response counts as 1 piece of evidence)

Qualitative data  Yes  No

No  (2 or more pieces of evidence)

No Response = NR is not counted as a piece of evidence  “Not Sure” is not counted as a piece of evidence

If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence

© 2004
<table>
<thead>
<tr>
<th>Leadership</th>
<th>Evidence in Support</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff development that improves the learning of all students requires</td>
<td>Vision, facilitating professional development, mentoring, teacher leadership, empowerment, challenging the process, leading, improvement plans, data-driven decision-making, guidance, committee leadership, accountability, student improvement, student achievement, administration</td>
<td>Yes (2 or more pieces</td>
</tr>
<tr>
<td>skillful school and district leaders who guide continuous</td>
<td></td>
<td>of evidence)</td>
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<tr>
<td>instructional improvement.</td>
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<td>(Only use marked items, not written qualifying comments)</td>
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<tr>
<td>Question 4 never 6 or more times (Never or 1-2 times = No</td>
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<td></td>
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<tr>
<td>3-5 times = Yes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 5a Teachers Principals District staff</td>
<td>(Use responses from Q 4a, 26 &amp; 27)</td>
<td>No</td>
</tr>
<tr>
<td>Outside professional development providers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 5b Teachers Principals District staff</td>
<td>Qualitative data Yes No</td>
<td></td>
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<tr>
<td>Outside professional development providers (Teacher plus one other</td>
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<tr>
<td>personnel for 5a &amp; 5b together = Yes)</td>
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<tr>
<td>Question 6 Yes No Not sure</td>
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<tr>
<td>(Each “Yes” response counts as 1 piece of evidence)</td>
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No Response = NR is not counted as a piece of evidence  
“Not Sure” is not counted as a piece of evidence  
If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence  
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<table>
<thead>
<tr>
<th><strong>Standard 3</strong></th>
<th><strong>Evidence in Support</strong></th>
<th><strong>Met</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Resources</strong></td>
<td>Schedules, time offered for professional learning embedded within daily practices, literature, fiscal and human resources to support professional development, training resources, internal and external experts</td>
<td></td>
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<td>(Only use marked items, not written qualifying comments)</td>
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<tr>
<td>Question 7 (Treat each as separate pieces of evidence)</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>___ Time during the school day</td>
<td>(Use responses from Q 26 &amp; 27)</td>
<td>(2 or more pieces of evidence)</td>
</tr>
<tr>
<td>___ Funding to support meetings, conferences</td>
<td>Qualitative data Yes No</td>
<td></td>
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<tr>
<td>___ Professional development materials, resources</td>
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<tr>
<td>___ Teacher leadership development</td>
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<tr>
<td>___ Policy changes</td>
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<tr>
<td>___ Other</td>
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<tr>
<td>Question 8 (Treat each as separate pieces of evidence)</td>
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<tr>
<td>___ Substitute teachers to cover teachers’ classes</td>
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<tr>
<td>___ Early dismissal or late start for teachers</td>
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<tr>
<td>___ Professional days built in the school year</td>
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<tr>
<td>___ Common planning time for teachers</td>
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<tr>
<td>___ Volunteers to cover teachers’ classes</td>
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<tr>
<td>___ Faculty meetings reconstructed for professional development</td>
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<td>___ Stipend pay for additional time</td>
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<tr>
<td>___ Other</td>
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<tr>
<td>Question 9 Yes No Not sure</td>
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<tr>
<td>(Each “Yes” response counts as 1 piece of evidence)</td>
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No Response = NR is not counted as a piece of evidence
"Not Sure" is not counted as a piece of evidence
If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence
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<tr>
<th>Standard 4</th>
<th>Evidence in Support</th>
<th>Met</th>
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<tbody>
<tr>
<td><strong>Data-driven</strong></td>
<td>Data, student results, scores, student achievement, state test results, formative or summative tests, state report cards results, item analysis, data analysis, disaggregated scores, data collection – these are used as evidence to inform the needs for professional development activities</td>
<td>Yes (2 or more pieces of evidence)</td>
</tr>
<tr>
<td>(Only use marks assigned to the specific questions)</td>
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<tr>
<td>Question 10 Yes No Not sure</td>
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<tr>
<td>Question 11 Yes No Not sure</td>
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<tr>
<td><em>(Each “Yes” response counts as 1 piece of evidence)</em></td>
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No Response = NR is not counted as a piece of evidence

*Not Sure* is not counted as a piece of evidence

If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence

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<thead>
<tr>
<th>Standard 5</th>
<th>Evidence in Support</th>
<th>Met</th>
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<tbody>
<tr>
<td>Evaluation</td>
<td>Survey or needs assessments, achievement levels of students, decisions to meet students’ needs, teacher requests for professional development, improvement in student performance, disaggregated information — these are used to demonstrate student growth</td>
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<td>(Only use marks assigned to the specific questions)</td>
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<tr>
<td>Question 12</td>
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<tr>
<td>— Teachers’ reactions to the professional development activities <em>(Do not count this item as one piece of evidence)</em></td>
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<tr>
<td>— Teachers’ learning of new knowledge and skills</td>
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<tr>
<td>— Changes in school practices</td>
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<tr>
<td>— Changes in teachers’ practices in the classroom</td>
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<tr>
<td>— Changes in student learning outcomes or achievement</td>
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<tr>
<td>— Unsure of the information gathered</td>
<td>(Use responses from Q 26 &amp; 27)</td>
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<tr>
<td>— None of the above are use</td>
<td>No</td>
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<tr>
<td>Question 14</td>
<td>Qualitative data</td>
<td>Yes No</td>
</tr>
<tr>
<td>— Evaluation forms <em>(Do not count this item as one piece of evidence)</em></td>
<td></td>
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<tr>
<td>— Observations of school/classroom activities</td>
<td></td>
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<tr>
<td>— School records of resources, student data, formative assessments</td>
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<tr>
<td>— Meeting notes</td>
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<tr>
<td>— Portfolios of student work</td>
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<tr>
<td>— Interviews or conversations with teachers</td>
<td></td>
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<tr>
<td>— Unsure what evidence is collected</td>
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<tr>
<td>— None of the above are used</td>
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No Response = NR is not counted as a piece of evidence  
“Not Sure” is not counted as a piece of evidence  
If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence  
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<table>
<thead>
<tr>
<th><strong>Standard 6</strong></th>
<th><strong>Evidence in Support</strong></th>
<th><strong>Met</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Research-based</strong></td>
<td>Discussing research based practices with teachers, specific programs, good research, action research, forming decisions based on student achievement data from classroom or school wide practices</td>
<td>Yes only need one piece of evidence</td>
</tr>
<tr>
<td><strong>(Only use marked items, not written qualifying comments)</strong></td>
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<tr>
<td>Question 13 Yes No Not sure</td>
<td>(Use responses from Q 26 &amp; 27)</td>
<td>No</td>
</tr>
<tr>
<td><strong>(Each “Yes” response counts as 1 piece of evidence)</strong></td>
<td>Qualitative data Yes No</td>
<td></td>
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<thead>
<tr>
<th><strong>Standard 7</strong></th>
<th><strong>Evidence in Support</strong></th>
<th><strong>Met</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design</strong></td>
<td>Training programs targeted at specific goals for teacher growth</td>
<td>Yes (2 or more pieces of evidence)</td>
</tr>
<tr>
<td><strong>(Only use marked items, not written qualifying comments)</strong></td>
<td></td>
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<tr>
<td>Question 15 (Treat each as separate pieces of evidence)</td>
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<td></td>
</tr>
<tr>
<td>____ In-services/Workshops/Conferences <em>(Do not count this item as one piece of evidence)</em></td>
<td>(Use responses from Q 26 &amp; 27)</td>
<td>No</td>
</tr>
<tr>
<td>____ Study groups</td>
<td>Qualitative data Yes No</td>
<td></td>
</tr>
<tr>
<td>____ Team meetings</td>
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<td></td>
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<tr>
<td>____ Mentoring or Coaching</td>
<td></td>
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<tr>
<td>____ Action research</td>
<td></td>
<td></td>
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<tr>
<td>____ Collaborative networks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>____ Professional development literature/books/videos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>____ Redesign of faculty meetings</td>
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</tbody>
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No Response = NR is not counted as a piece of evidence  “Not Sure” is not counted as a piece of evidence
If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence
© 2004
<table>
<thead>
<tr>
<th>Standard 8</th>
<th>Evidence in Support</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning</strong>&lt;br&gt;Staff development that improves the learning of all students applies knowledge about human learning and change.</td>
<td>Career stages, adult learning strategies, change process theory, adult development</td>
<td></td>
</tr>
<tr>
<td>(Only use marked items, not written qualifying comments)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 16  Yes  No  Not sure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 17 (Treat each as separate pieces of evidence)&lt;br&gt;— Understanding of theory for knowledge &amp; skills of a content area&lt;br&gt;— Demonstrations through modeling or videotapes&lt;br&gt;— Practice of new skills in a simulated setting&lt;br&gt;— Feedback about performance in a simulated setting&lt;br&gt;— Follow-up activities for feedback and support in the classroom with teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Each “Yes” response counts as 1 piece of evidence)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No Response = NR is not counted as a piece of evidence  "Not Sure" is not counted as a piece of evidence
If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence
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<table>
<thead>
<tr>
<th><strong>Standard 9</strong></th>
<th><strong>Evidence in Support</strong></th>
<th><strong>Met</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collaboration</strong>&lt;br&gt;Staff development that improves the learning of all students provides educators with the knowledge and skills to collaborate.</td>
<td>Teams working together, collaboration practices, working together</td>
<td>Yes&lt;br&gt;(If first standard is marked “Yes” this standard is marked “Yes” also)</td>
</tr>
<tr>
<td>(Only use marked items, not written qualifying comments)</td>
<td>(Use responses from Q 26 &amp; 27)</td>
<td></td>
</tr>
<tr>
<td><strong>Question 18</strong>&lt;br&gt;Yes  No  Not sure</td>
<td>Qualitative data  Yes  No</td>
<td>No</td>
</tr>
<tr>
<td>(Each “Yes” response counts as 1 piece of evidence)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Standard 10</strong></th>
<th><strong>Evidence in Support</strong></th>
<th><strong>Met</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity</strong>&lt;br&gt;Staff development that improves the learning of all students prepares educators to understand and appreciate all students, create safe, orderly, and supportive learning environments, and hold high expectations for their academic achievement.</td>
<td>Addressing the needs of all students, differentiated practices for instruction, promote inclusion type instruction or class placements, safe environment for student learning, high expectations</td>
<td>Yes&lt;br&gt;(only need one piece of evidence)</td>
</tr>
<tr>
<td>(Only use marked items, not written qualifying comments)</td>
<td>(Use responses from Q 26 &amp; 27)</td>
<td></td>
</tr>
<tr>
<td><strong>Question 19</strong>&lt;br&gt;Yes  No  Not sure</td>
<td>Qualitative data  Yes  No</td>
<td>No</td>
</tr>
<tr>
<td>(Each “Yes” response counts as 1 piece of evidence)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No Response = NR is not counted as a piece of evidence  
“Not Sure” is not counted as a piece of evidence  
If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence  
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<table>
<thead>
<tr>
<th>Standard 11</th>
<th>Evidence in Support</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality teaching</strong>&lt;br&gt;Staff development that improves the learning of students deepens educators’ content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standard, and prepares them to use various types of classroom assessments appropriately.</td>
<td>Content knowledge, content pedagogy, research-based classroom instruction techniques, research-based classroom assessments, standards based instruction, teaching the standards,</td>
<td></td>
</tr>
<tr>
<td>(Only use marked items, not written qualifying comments)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 21  Yes  No  Not sure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 22  (Treat each as separate pieces of evidence)&lt;br&gt;- Teaching concepts through similarities and differences&lt;br&gt;- Teaching summarizing and note taking skills&lt;br&gt;- Recognizing student effort and achievement&lt;br&gt;- Discussions on homework&lt;br&gt;- Teaching graphic or visual representations&lt;br&gt;- Utilization of cooperative learning groups&lt;br&gt;- None of the above</td>
<td>(Use responses from Q 26 &amp; 27)</td>
<td></td>
</tr>
<tr>
<td>Question 23  Yes  No  Not sure</td>
<td>Qualitative data  Yes  No</td>
<td></td>
</tr>
<tr>
<td>(Each “Yes” response counts as 1 piece of evidence)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No Response = NR is not counted as a piece of evidence  "Not Sure" is not counted as a piece of evidence  If both “Yes” and “No” responses are marked, rate as a “Yes” and count as a piece of evidence

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<table>
<thead>
<tr>
<th>Standard 12</th>
<th>Evidence in Support</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family involvement</strong>&lt;br&gt;Staff development that improves the learning of all students provides educators with knowledge and skills to involve families and other stakeholders.</td>
<td>Communication with families, families activities or programs to promote student achievement, community involvement</td>
<td>Yes (2 or more pieces of evidence)</td>
</tr>
</tbody>
</table>

(Only use marked items, not written qualifying comments)

<table>
<thead>
<tr>
<th>Question 24</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
<th>(Use responses from Q 26 &amp; 27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 25</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
<td>Qualitative data Yes No</td>
</tr>
</tbody>
</table>

(Each "Yes" response counts as 1 piece of evidence)

No Response = NR is not counted as a piece of evidence
"Not Sure" is not counted as a piece of evidence
If both "Yes" and "No" responses are marked, rate as a "Yes" and count as a piece of evidence
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APPENDIX E

TRAINING PROCEDURES
Training Procedures for Panelists

1. Welcome

Thank you for coming to this training and work session today. I appreciate your assistance and your support as I complete my dissertation. You will serve as a panelist who will help me to establish inter-rater reliability for each of the standards reflected in my questionnaire. Today’s agenda includes an introduction to my research, the purpose of the panel, and the specific procedures to be followed during our work session.

2. Introduction to my research

The focus of my dissertation is to describe the actual practices in Ohio public schools as they are aligned with the National Staff Development Council standards and to describe the challenges experienced by practitioners. I became intrigued with these standards through my dissertation coursework. The National Staff Development Council standards were designed as a framework to guide effective professional development practices; yet the question was posed when these standards were developed, “Will policy makers and educators use the standards to reshape their understanding and expectations of staff development?” (NSDC, 2001, p. vi).

I conducted a thorough review of the literature to describe the individual standards and developed a questionnaire that reflected the 12 National Staff Development Council standards. This questionnaire was designed to collect
quantitative and qualitative data to answer two research questions. I used a table
of specifications to establish credibility and face validity of my questionnaire.

3. Purpose of the Panel

My questionnaire was sent to 165 public school professional development
directors and curriculum and instruction directors across the state of Ohio.
Responses to the questionnaire were acquired from 58 participants. (Give a blank
copy of the questionnaire to each panelist) The first two pages of the
questionnaire solicited information about the participant and background
information. Twenty-seven questions were used to solicit information about
professional development practices. These 27 questions will be the basis for our
rating of the 12 standards. Based upon the responses from the participants, your
role as a panelist is to determine which of the 12 National Staff Development
Council standards are met on each of the returned questionnaires.

Each panelist will be given a completed questionnaire from every respondent
and an accompanying scoring rubric to complete your task today. Based upon
your ratings for each standard on the scoring rubrics, an inter-rater reliability
procedure will be conducted. This correlation test will be used to determine the
agreement of the panelists’ responses; therefore providing the reliability of the
ratings for each standard.

4. Scoring Rubric

I have designed a scoring rubric to rate the individual responses on each
questionnaire to determine which of the 12 NSDC standards are met. (Pass out
blank scoring rubric.) It will be critical to rate each of the 12 standards on the scoring rubric as we work through each questionnaire today. The rubric has five sections for the individual standards being rated with each standard designed in the same way.

The top left sections give the name and description of the specific standard being rated, such as: standard 1. (Reference the scoring rubric.) The standard is quoted directly from the NSDC standards. This reference will be helpful to you as you make a decision about the qualitative data. The section below the description of the standard gives the specific questions from the questionnaire relevant to each standard. This left section below the stated standard is used for rating the quantitative data.

When you receive the questionnaires to be rated, the quantitative data for the individual questions 1-25 will be pre-coded. By pre-coding these questions, I eliminated the mundane task involved in transferring the quantitative responses from the individual questionnaires to the scoring rubrics. As you review the responses for evidence to support the standards, please take a moment to recheck the responses to the questions on the left side of the scoring rubric. Many times the respondents wrote qualifying comments when marking their responses. I used only the marks assigned by the respondents not any qualitative comments written beside the responses. When we discuss the sample questionnaires, I will show you the qualifying comments.
As we rate the responses given by participants, we are recording pieces of evidence to support the individual standards. When a participant marked a question as “Yes” in the quantitative section, that mark indicates one piece of evidence. (Reference the comment in the quantitative section, “Each ‘Yes’ response counts as 1 piece of evidence.”) In the first standard, questions 1-3, each “Yes” response is rated as one piece of evidence (reference the scoring rubric). When the participant gave no response to the question or a response of “Not sure” was indicated, those responses are not counted as a piece of evidence. (Reference the comments in the footer section of each page of the scoring rubric.) When the participant marked both “Yes” and “No,” the question is rated as a “Yes” and counted as a piece of evidence. (Reference the footer section.) Let’s look at the questions in the questionnaire and the scoring rubric for responses marked as “Yes, No, Not sure.”

For some selected individual questions, specific criteria are used for an individual response to be rated as “Yes” or included as a piece of evidence. As we go through each standard, I will highlight how the individual questions need to be rated. (Reference questions 4, 5a and 5b, 7, 8, 12, 14, 15, 17, and 22 in the questionnaire and the scoring rubric) After I explain the right side of the scoring rubric, which details the rating of the qualitative data, we will discuss a sample questionnaire. At that time we will review each standard for further clarification of the procedures.
The top right section states “evidence in support” and contains the type of qualitative data that would indicate that an individual standard was met. (Reference the scoring guide sections) The words or phrases denote the types of responses representative of the evidence to support the standard being met. The section below the “evidence in support” provides you with two options for whether the qualitative data meets the standard or not. If the responses indicate evidence to support the standard, then this section is rated as “Yes” on the rubric. Only responses to questions 26, and 27 will be rated as qualitative data. You may circle or underline the word or phrase, that provide evidence in support of the standard, on the questionnaires you are rating.

The column on the far right side marked “Met” is used for the final scoring of each standard. After reviewing the quantitative data or responses to the individual questions rated on the left side of the rubric and the qualitative data on the right side of the rubric, you will decide whether an individual standard is met. If the standard was met, you will circle “Yes” and if the standard was not met, you will circle “No.” The evidence needed for each standard is written onto the scoring rubric. Let’s review the evidence needed for each standard.

For 9 of the 12 standards to be identified as “met,” two pieces of evidence must be present. (Reference the individual standards and the ratings noted in the “Met” column throughout this discussion) The two pieces of evidence include either two pieces of evidence from the quantitative data on the left side of the scoring rubric or one piece of evidence from the quantitative data and one
comment as evidence to support the qualitative data for each standard being analyzed. Remember that it is critical to determine whether the qualitative data shows evidence in support of the standard, even if two or more pieces of evidence already exists from the quantitative data or the responses to the questions. The exceptions to having two pieces of evidence are made for three standards: #6 research based; #9 collaboration; and #10 equity. The two standards of research-based, which is #6 on the scoring rubric, and equity, #10 on the scoring rubric, need to have only one piece of evidence because only one fixed-response question within the questionnaire was used. The other exception is standard #9 collaboration. This standard is rated as "Met" whenever learning teams or collaborative work is indicated within the questionnaire. If standard #1 learning communities is rated as "Yes," then this standard is rated in the same way. This decision was based upon a conversation with a national expert that when we are using some form of collaboration, we are meeting this standard.

5. Samples for practice

The questionnaires were placed in alphabetical order and numbered from 1 to 58. To demonstrate the use of this rubric, six questionnaires have been randomly selected. The questionnaires and the accompanying scoring rubrics are color coded, blue and yellow, to avoid any confusion with the rating process between panelists.

Taking the rubric and the first sample questionnaire, let’s look at the first standard. (Give out the first sample school questionnaire) Sample questionnaire 1
has all three questions answered with “yes” responses. Look at the statement at the bottom of the section for the quantitative data, “Each ‘Yes’ response counts as 1 piece of evidence” and we will note how the responses are counted as evidence. Let’s read through the responses for questions 26 and 27 to find words or phrases that denote evidence in support of the first standard. Then we will look at the data together to gain consensus of the responses found in support of the standard. (After a few minutes, hold a discussion to describe the data found in questions 26 and 27.) In sample school 1, what responses did you find as evidence to support standard 1, learning communities? Comments such as “team trained to instruct teachers” from question #26 and “core academic teams” from question #27 both indicate the use of teachers or teams working together; therefore the qualitative data is rated as “Yes” for showing evidence.

To determine if this standard is “Met”, we look at both the quantitative and qualitative data. “Yes” responses from the three questions indicate that 3 pieces of evidence are apparent. A “Yes” rating for the qualitative data means that four pieces of evidence to support the first standard are indicated. Therefore this standard is marked “Yes” in the far right column.

We will proceed through each standard for the first sample questionnaire and review how to score each section. I will highlight the information for individual questions and comments for scoring the quantitative section. We will also review the responses to rate the qualitative data for each standard. (Continue through sample school 1 for each standard, explaining the quantitative and qualitative data.
that reflect pieces of evidence. Focus upon the statements in each section of every standard to be sure panelists note the comments that determine how a question is rated. Continue with a second sample school to ensure that each panelist has the same understanding of the process of rating each standard using the quantitative and qualitative data. Proceed through additional sample schools, if needed, until agreement is formed between the panelists to ensure consistency in rating the responses. Any sample questionnaires, along with their accompanying scoring rubrics, that are not used for explaining the procedures will be rated with the remaining questionnaires.

6. Procedures for the Rating Process

Now that we have built consistency for rating the individual questionnaires, we will begin completing the scoring process. Each panelist will have an “In” box and an “Out” box for the questionnaires and accompanying scoring rubrics. The questionnaires with attached scoring rubrics will be taken from the “In” box for rating each standard and placed into the “Out” box when the rating process is completed. My committee chairperson will collect the questionnaires and accompanying scoring rubrics form the “Out” boxes throughout the time you are working on the scoring of the questionnaires. My committee chairperson will finish a scoring guide based upon your ratings and I will cross check my marks on the scoring guide to ensure accuracy. I will not be able to provide any assistance to you or answer any questions once we start the process of rating the standards.
on the questionnaires. Are there any questions before we begin? (Discussion of other comments and questions will be held.)

We will meet for approximately five hours today. We will serve lunch at noon and you may take individual breaks throughout the day. Please do not discuss any of the data or responses from the questionnaire with other panelists during today's session. When you have rated all of the questionnaires, aside from the sample questionnaires, your responsibility as a panelist will be completed and you are welcome to go home. I will talk with you individually as you leave to explain how this process assists me in answering my first research question.

Again I appreciate your assistance as a panelist as I complete my research study for my dissertation. If there are no additional questions, you may begin your work.

7. Finishing the process

(When each panelist completes the task of rating all the questionnaires, I will individually thank the panelist for his/her time and work during the day. I will explain the next step in the process.)

Reference to the book given to each panelist: