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ABSTRACT

PROFESSIONAL DEVELOPMENT, TEACHER LEARNING, AND
NATIONAL STANDARDS: A MIXED-METHOD MULTIPLE-
CASE STUDY OF THE PROFESSIONAL LEARNING
EXPERIENCES OF EVANGELICAL CHRISTIAN
SCHOOL TEACHERS

by

Vincent Montoro

Chair: Duane Covrig

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: PROFESSIONAL DEVELOPMENT, TEACHER LEARNING, AND NATIONAL STANDARDS: A MIXED-METHOD MULTIPLE-CASE STUDY OF THE PROFESSIONAL LEARNING EXPERIENCES OF EVANGELICAL CHRISTIAN SCHOOL TEACHERS

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Date completed: July 2012

Problem

Today's educational environment requires teachers who understand teaching and learning, have strong content knowledge, and can make connections between life experiences and the curriculum. Teachers are expected to be continually learning to improve their practice. Professional learning is essential in this process. Research on professional development practices in various school contexts shows how teachers can improve and develop better instructional practices through a variety of learning experiences. Sadly, very little research exists on professional development practices of private Christian school teachers. This study explored professional development practices

of Christian school teachers in nine evangelical Christian schools in the Detroit, Michigan, area.

Method

This study explored Christian school teachers' professional development experiences using a mixed-method multi-case study approach. I used the National Staff Development Council's (NSDC) Standards Assessment Inventory (SAI), which focused on 12 professional development standards: (a) learning communities, (b) leadership, (c) resources, (d) data-driven, (e) evaluation, (f) research-based, (g) design, (h) learning, (i) collaboration, (j) equity, (k) quality teaching, and (l) family involvement. I also collected qualitative data from teacher focus-group interviews and written reflections to discover themes and patterns in their professional processes, growth, and learning. I surveyed nine evangelical Christian schools and 171 teachers participated.

Results

Three of the 12 standards that emerged with the highest means were equity, leadership, and family involvement. The three standards that were ranked the lowest were evaluation of professional practice, data-driven professional learning practices, and professional learning communities.

In focus groups and written reflections, teachers reported many sources of professional learning, ranging from parental, school, and college influences as children and youth, to faith development aspects, to personal experiences, including parents, travel, dialogue, and reading. They reported their Christian "walk" was a sustaining force

in their own professional development. They sought teacher networks, graduate education, and training via the Internet as places for growth. They also reported utilizing more traditional learning methods (e.g., generalized book discussions and workshops) and informal, individual professional means (e.g., daily experiences and faculty conversations) of learning. Teachers believed their educational leaders had strong beliefs about the importance of teacher professional learning and articulated a shared commitment to professional growth, but often designed broad professional learning activities, while most teachers preferred content specific professional learning tied to effective teaching strategies. Teachers reported strong leadership was lacking and wanted their leaders to be better role models of professional growth and learning.

Together, the survey and qualitative data indicated many positive learning elements were present as listed above (supportive leadership, family involvement, personal experiences, etc.). Some elements, however, were missing. There was not a culture where teachers observed and gave feedback to each other, nor was there regular data collecting and sharing nor data-driven decisions and shared assessments. One area uniquely present but not always indicated in the general professional development literature was the role of teachers' Christian faith in guiding and inspiring personal and professional learning. These teachers considered themselves "called" to nurture their students' faith and learning. This commitment to God and his children motivated them to become the best teachers possible.

Conclusions and Recommendations

The Christian school teachers developed professionally: (a) through traditional professional development practices, (b) by daily, job-embedded classroom and professional experiences, and (c) informal professional learning experiences, but needed more, well-planned, professional development opportunities that were content specific and allowed them to collaborate or network with other teachers, particularly from other Christian schools. They also received support to attend conferences and workshops and complete advanced degrees, and extra time during the school day to use student data to make collaborative decisions.

School leaders should (a) create professional development funding in their budgets, (b) plan quality professional learning activities in cooperation with teachers who have content-rich and relevant strategies, (c) share current literature on quality and effective professional practices, (d) model life-long, professional learning, and (e) encourage informal, teacher-directed learning that includes experimentation and reflection.

More research could explore the quality and effectiveness of professional learning experiences, especially the role of informal, teacher-directed learning, and the role and professional learning of school leaders in the development of professional learning communities at Christian schools.

Andrews University

School of Education

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SCHOOL TEACHERS

A Dissertation

Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by

Vincent Montoro

July 2012

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To the Triune God
Creator, Redeemer, Sustainer
To my wife, Susan and my *children*,
Andrew, Vincent, Christina
To my Mom and Dad
To Drs. Covrig, Freed, and Ledesma
To Donna
To the Christian school teachers and administrators
Without you all this would have not been possible.

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CHAPTER ONE

TEACHER PROFESSIONAL LEARNING

Introduction: History and Background

Today's educational environment requires teachers who understand teaching and learning, have strong content knowledge, and can make connections between life experiences and the curriculum (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009a; Hicks, 2000; Hirsh & Sparks, 1999; Martin-Kniep, 1999). No longer are teachers isolated to classrooms without much accountability (Arnau, 2009; Kohm, 2002). In today's reform- and policy-driven educational culture, teachers are expected to be learning and leading professionals (Elmore, 2002; Hirsh, 2009). Professional learning is expected to contribute to better quality instruction and improved student learning (Baker, 1999; Danielson, 1996).

The introduction of the National Staff Development Council (NSDC) and its professional development standards has led to a more specific focus on professional learning experiences. NSDC created a task force consisting of representatives from many of the largest education associations that examined the research on teacher staff development and used its findings to design that which could support high-quality teacher learning (Hirsh, 2001). NSDC and its standards have played a major role in the research and practice of professional learning for nearly two decades (Fishman, Marx, Best, &

Tal, 2003; Leonard & Leonard, 2003; King, 2002; Sachs, 1999). A recent article reinforced the importance of more study on specific aspects of professional learning:

By examining information about the nature of professional development currently available to teachers across the United States and in a variety of contexts, educational leaders and policy makers can begin both to evaluate the needs system in which teachers learn and do their work and to consider how teachers' learning can be further supported. (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009b, p. 4)

Although research into professional development practices that are available to teachers in various school contexts promised to assist educational leaders and professional development experts in distinguishing what is best for teacher growth and student learning (Buchholz & List, 2009; Raack, 2000; Schmoker, 1996), there is very little literature about professional development at Christian schools (Finn, Swezey, & Warren, 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010). The Christian school presents a unique context (Brown, 2002; Graham, 2003; Knight, 1989; Schultz, 2002; Wilhoit, 1991), one that needed to be tapped for its contribution to professional learning in general, and the growth of professional Christian educators in particular (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010).

Furthermore, a group of researchers from the University of Michigan concluded that the design process for professional development required a program that studied the impact and effectiveness of professional development practices (Fishman, Best, Foster, & Marx, 2000). Christie (2009) adds, "A growing number of policy makers are insisting on evaluation—particularly tied to increased student learning" (p. 461). However, current literature focuses on the professional development efforts of public school institutions with very little research on private schools, particularly Christian schools (Darling-

Hammond et al., 2009b; Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010).

Hence, school-based professional development theory and practice have dominated recent research and practical literature, and the National Staff Development Council with its Standards and Standards Assessment Inventory has begun to analyze the validity of school-based professional development practices that were aligned with the current literature on the topic (Roy & Hord, 2003). However, more research has been requested in this important area of study (Desimone, 2009). A recent research brief, written by Vaden-Kiernan, Jones, and McCann (2009), encouraged additional research studies to bring perspective to the table, and it stressed the need for data collected through multiple methods (e.g., surveys, interviews, and reflective writing) that could address the multiple dimensions of professional development as to attain a broader picture of teacher professional development (Best, 2011; Goran, 2012; Little, 2012).

Since little knowledge about professional development practices at private Christian schools was available, more information needed to be known about what the professional development practices of Christian school teachers were that influence healthy and effective teacher growth and learning.

Statement of the Problem

The problem on which this study focused was the lack of knowledge available on the professional development experiences and practices of Christian teachers in the Protestant, evangelical Christian school environment. Neuzil and Vaughn (2010) wrote:

The spotlight in education in recent years has been focused on the areas of professional development activities for teachers and the development of professional learning communities. However, the majority of research has omitted

the Christian school community which requires its own body of research examining the unique conditions in which both private school students and educators learn and work. (p. 1)

While private Christian schools have been known for the quality of their programs (Jeynes, 2008), little emphasis has been placed on teacher professional growth and learning within these institutions (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010). Yet, there are over 4,000 evangelical Christian schools internationally, serving well over 1,000,000 students worldwide (Headley, 2008).

Purpose of the Study

This study examined the professional development of teachers in select Christian schools. I surveyed and then interviewed Christian school teachers to understand their experience with professional development, particularly as classified by the NSDC professional development standards. I was particularly interested in learning the characteristics and learning practices of teachers in Christian school contexts.

The National Staff Development Council's 2001 Standards for Staff Development were divided into three standard categories, (a) context, (b) process, and (c) content. There were 12 standards. The context standards contained three standards: (a) learning communities, (b) leadership, and (c) resources. The process standards comprised six standards: (a) data-drive, (b) evaluation, (c) research-based, (d) design, (e) learning, and (f) collaboration. The content standards included three standards: (a) equity, (b) quality teaching, and (c) family involvement.

Research Questions

Two questions drove my research: (a) How do Christian school teachers professionally learn and develop, and (b) What school processes and practices and individual and professional experiences support their professional learning and why?

Research Design

This mixed-methods, multiple-case study combined both quantitative and qualitative methodologies. The quantitative aspect of the study allowed me to describe teacher practices related to the NSDC standards. The qualitative aspects afforded me the ability to explore in more detail the teachers' interpretation of their professional growth and learning, particularly their personal perspectives and individual understandings. A mixed-methods study allowed for a more holistic look at professional development practices at Christian schools.

The study utilized teachers from evangelical, Protestant Christian schools in the Detroit area to determine the professional development practices of these Christian schools. Ten schools were contacted and 9 participated. These schools had a total of 277 teachers of whom 171 participated in the survey and 37 participated in the focus group interviews. The study researched the teachers' professional learning experiences in light of current educational research of successful professional learning practices to be able to explore Christian schools' professional development practices in relation to published literature on the topic (Borko, 2004; Wayne, Yoon, Zhu, Cronen, & Garet, 2008; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). All the teachers from the selected schools were first invited to participate in taking the NSDC survey which addressed these general

areas. Next, teachers from these schools were asked to participate in focus groups and asked to reflect in writing on their professional development experiences.

Data analysis for surveys used descriptive statistics to show trends in the teachers' responses to the areas of professional development outlined by NSDC. I coded interviews and written reflections using descriptive, vivo, and values coding (Saldana, 2009). I took into consideration NSDC standards, the professional development literature, and the qualitative data itself in my analysis (DeCuir-Gunby, Marshall, & McCulloch, 2011). My findings were of particular interest to Christian school leaders; however, the findings may benefit others as well, particularly Christian school teachers.

Conceptual Framework

This study was guided by professional development literature and recent research findings on the professional learning experiences of K-12 teacher and effective professional development practices of K-12 schools. The National Staff Development Council with its national Standards (2001) and Standards Assessment Inventory (SAI) played a central role in guiding my understanding of the literature and were the central conceptual grids that guided my data collection. My review of literature uncovered three areas of research and study that most impacted my thinking during this study. They were (a) the paradigm shift from traditional professional development practices to those that are more progressive, (b) effective professional development practices at the school level, and (c) professional development practices at Christian schools.

The NSDC with its national Standards (2001) and Standards Assessment Inventory (SAI, 2003) has played an important role in analyzing the validity of school-based professional development practices that are aligned with the current literature on

the topic (Borko, 2004; Wayne et al., 2008; Yoon et al., 2007). It seemed that literature on school-based professional development at K-12 schools in general and NSDC's standards in particular offered a solid basis to guide this study. Furthermore, more research was being requested in this important area of study (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010; Vaden-Kiernan et al., 2009).

A significant conceptual shift occurred in the last two decades in the area of professional development of teachers (Sparks & Hirsh, 1997). Campbell, McNamara, and Gilroy (2004) wrote, "There has been a major shift in the nature, content and location of professional development in the last five years. This has included a move away from courses and workshops to workplace and professional learning communities" (p. viii). Research on professional development has explored how to best educate in-service teachers, either through traditional means like in-service workshops, off-site conferences and/or college/university classroom courses or more progressive approaches to learning that were job imbedded and based on individual and school interests and needs. A number of studies have indicated that successful teacher learning is tied to the types of activities or practices (Dadds, 1997; French, 1997; Weiss & Pasley, 2006), yet other studies have tied quality professional learning to particular elements within professional development practices than to the types of activities or practices (Guskey & Yoon, 2009). Others have argued that quality professional growth can be connected only to student learning (Darling-Hammond et al., 2009a). Research on Christian schools has been limited with a few studies exploring the types of professional learning being practiced at Christian schools that are members of the Association of Christian Schools International (Finn et al., 2010; Headley, 2003, 2008). Another study explored the connection between

professional development practices and characteristics of professional learning communities (Neuzil, 2010; Neuzil & Vaughn, 2010). Therefore, the conceptual framework of my study is founded on research conducted over the last two decades that has emphasized schools as professional learning communities that practice sustained and intensive professional development, teacher collaboration, content- and practice-focused learning that is research-based and data-driven.

Rationale and Significance of the Study

A renewed interest in teaching and learning followed the release of *A Nation at Risk* in April 1983. The report voiced its concern for an educational system that was being eroded by mediocrity, and stated its challenge for schools to better prepare students for a rapidly changing world. With the passing of the No Child Left Behind Act in 2001, a more focused, government interest in quality teaching was introduced to an already reform-minded public school system. Garet, Porter, Desimone, Birman, and Yoon (2001) stated:

In recent years, national, state, and local policymakers and educators have launched efforts to improve education by creating a fundamental shift in what children learn and how they are taught. . . . Thus, the success of ambitious education reform initiatives hinges, in large part, on the qualifications and effectiveness of teachers. As a result, teachers' professional development is a major focus of systemic reform initiatives. (p. 916)

The last 25 years have seen many reform movements and many attempts at providing students a quality education, particularly at the K-12 level (Darling-Hammond & McLaughlin, 1995; Darling-Hammond, 1995). Teacher professional development has played an important role in these reform efforts (Corcoran, 1995a; Fenwick, 2004; Richardson, 2011). Scribner (1999) wrote that professional development efforts have

become the panacea of reform efforts. Professional development has become a major vehicle in educational reforms as evidenced in recent national research findings (Cohen & Hill, 2001; Corcoran, 1995b; Darling-Hammond et al., 2009b; Houghton & Goren, 1995; National Commission on Teaching and America's Future, 1996; National Foundation for the Improvement of Education, 1996).

Therefore, it was timely to research the professional development experiences and practices of teachers at Christian schools, especially in light of national standards and recent research on what constituted effective professional development programs and activities (Carter, 2011; Coburn, 2012; Desimone, 2009; Klein & Riordan, 2011).

This study contributes to the field of education and educational practice by bringing insight to an area that has received little attention in the education literature, particularly in the area of professional growth and development. To date there has been very little research or empirical findings/research that addressed the professional development experiences at Christian schools, particularly as they related to teacher learning practices found in the school-based professional development literature (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010) and to national standards (Darling-Hammond et al., 2009a).

This study informs Christian school principals and other Christian school educational leaders, in particular, and enlightens school principals and other school leaders in general about the learning characteristics and practices of Christian schools (Jeynes, 2008).

This study discovered practices that would help teachers understand better the professional learning practices of other teacher-educators (Jones, 2010; Lom & Sullenger,

2011). It gives them data that would help them answer the question: How do other professional educators grow professionally (Camburn, 2010; Richardson, 2011)?

Private Christian schools have been known for the quality of their programs (Jeynes, 2008), but not much emphasis has been placed on teacher professional growth and institutional learning, until the last couple of years (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010). Knowledge about professional development practices at private Christian schools has been mostly anecdotal, except for a few studies based on Headley's (2003) professional development checklist. More needed to be known about what happens in the professional development practices of Christian schools that influence healthy and effective teacher growth and change. Such research is vital not only for Christian school administrators and teachers, as just noted, but also for all those interested in the success of Christian schools.

This study provides a research-based understanding of the types of professional development activities that were foundational to quality professional learning and teacher instruction. As such, it also contributes to the growing body of knowledge about these practices, especially in reference to NSDC standards.

Furthermore, in the preface to the *Professional Learning in the Learning Profession* (Darling-Hammond et al., 2009a), it was suggested that policymakers, researchers, and school leaders examine information “on the nature of professional development currently available to teachers across the United States and in a variety of contexts” to analyze professional development practices “to consider how teachers’ learning opportunities can be further supported” (p. 4). This study responded to that invitation.

Therefore, this study which examined the nature of professional development in select Christian schools has contributed to Christian schools, Christian school leaders and teachers, and the broader research of teacher professional development practices.

Definitions of Terms

Professional Development: The efforts used by schools to promote professional growth and learning to all faculty, both teaching and administrative, while on the job. These activities are planned and organized efforts to improve the skills, knowledge, and attitudes of administrative and instructional staff.

Professional Learning: The formal and informal learning experiences throughout a faculty member's career. The experiences may include, but are not limited to, college course work, in-service workshops, personal study, and lunch room conversations.

Traditional Professional Development or Workshop: A structured methodology of professional development that transpires outside teachers' classrooms. It generally involves a presenter(s) with specific expertise and participants who attend sessions at scheduled times—often after school, on weekends, or during the summer. Educational institutes, graduate courses, learning seminars, and teachers' conferences are other traditional forms of professional learning that share many features of workshops (Garet et al., 2001).

Reform Types, Effective, Quality, School-based, or Job-embedded Professional Development: The terms used in the research literature to support professional learning that reflect professional development activities that are non-traditional and include such things as study groups, mentoring, coaching, collaboration, classroom observations, content focused, and teacher centered.

National Staff Development Council: The National Staff Development Council (NSDC) or Learning Forward is an international membership association of learning educators focused on increasing student achievement through more effective professional learning. The National Staff Development Council (NSDC) or Learning Forward's purpose is ensuring that every educator engages in effective professional learning every day so every student achieves.

Change: Personal or institutional alterations (either positive or negative) within an educational setting, including personal growth and learning, change in personal and/or school philosophy and programming, curricular improvements and up-dates, and the introduction of new teaching methods and classroom activities.

Christian Schools: Conservative, Protestant, evangelical Christian schools.

Conservative: Schools that hold to the historic teachings of the Christian faith, particularly as found in the New Testament and early church creeds.

Evangelical: Schools that integrate the Christian faith, including biblical principles into the curriculum and daily life of the school (Pazmino, 1988).

Assumptions

This research project was based on some general assumptions. The assumptions of this study are as follows: (a) the participants were honest and truthful when completing the survey and when describing their personal understanding of the professional development programs and activities at their schools, and (b) the participants shared their true experiences and not those which they believe the researcher wanted to hear.

Delimitations

This study was delimited to Christian teachers at Christian schools in a large metropolitan region in the Midwest. It sought only to understand Christian teachers at Christian schools, because this is an understudied group in the professional development research literature. It delimited this group further by using only non-Catholic, Christian schools. Since this study was a mixed-method study employing survey, focus group interviews, and written reflections, the sample size was delimited to about 200 teachers.

Summary and Organization of the Study

Professional development and growth among teachers have been touted as a way to bring continuous improvement to teacher quality and to student learning in schools. Research on professional development has been completed from various perspectives (e.g., program effectiveness, best practice, and, most recently, student achievement).

Since Christian schools have been known for the quality of their programs and most information about professional development practices at private Christian schools was anecdotal, more focus on teacher professional growth and institutional learning in these schools was needed.

This exploratory study of Christian school teachers' professional learning experiences utilized the NSDC's Standards Assessment Inventory, teacher focus group interviews, and written reflections to discover the professional development experiences of Christian school teachers in the Detroit metropolitan area. Such research was vital as Christian school administrators and educational leaders learn how best to improve teacher performance and student achievement (Brown, 1992).

Chapter 2 reviews and discusses the relevant literature that was foundational to this study, especially the more progressive approaches in professional development that have contributed to teacher learning over the last two decades. Chapter 3 details the mixed-method design of the study. Chapter 4 reveals the findings of the study, both quantitative and qualitative. Chapter 5 summarizes the data by reviewing it in relationship to the study's research questions and then discussing and interpreting these findings related to the literature and professional practice. Practical recommendations are made along with suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This study focused on the professional growth and development of Christian teachers within Christian school learning communities and helped educators, particularly Christian educators, understand how to best facilitate adult learning and motivation in a school context (Borko, 2004). This research explored their adult learning and how they developed best as professionals, either through traditional means like in-service workshops, off-site conferences, and/or college/university classroom courses or more progressive approaches to learning that were job imbedded and based on individual and school interests and needs. To facilitate that learning this study focused on professional teacher learning. This chapter reviews areas, especially the more progressive approaches in professional development, that have contributed to teacher learning (Darling-Hammond, 1995; Lyons & Pinnell, 2001). However, recent findings indicate that successful teacher learning is tied more to the particular elements within professional development practices than to the types of activities or practices (Guskey & Yoon, 2009).

This chapter reviewed the literature (Boote & Beile, 2005) on various aspects important to this study: (a) professional development practices (i.e., the paradigm shift from traditional professional development practices to those that are more progressive, effective professional development practices at the school level, professional

development experiences of teachers in Christian schools, and experiential professional learning (includes non-formal/informal and self-directed learning), (b) professional learning communities, and (c) professional learning and teacher change.

Professional Development Practices

A number of research studies have been written on the topics of teacher learning, teacher professional development, adult education, and continuing education over the last decade or so. Many of these recent studies dealt with professional development and professional teacher learning in relation to job-embedded professional development efforts by schools and through teacher self-directed professional learning. It seemed appropriate to include these in my literature review since they were relevant, scholarly works. Furthermore, I began the literature review with the paradigm shift that had been taking place over the last dozen or so years. I concluded the review with a brief look at professional learning and change. The evolution of classroom teaching, like the history of education itself, has been replete with change. The last couple of decades have seen an increase in literature that dealt with educational change.

Adult learning has been at the forefront of educational change and reform. How do adults learn? Why are adults involved in learning activities? How does one's social context shape the adult learning experience? These are questions that have been addressed by leading scholars (Knowles, Holton, & Swanson, 2011; Merriam, Caffarella, & Baumgartner, 2007) and applied to understand and facilitate the greatest learning for adults (Brookfield, 1991). Research has suggested that adult learners are goal, activity, and learning oriented (Scribner, 1999). In addition, adults are motivated by an array of intrinsic and extrinsic factors (Wlodkowski, 2008). An understanding of adult learning

has been an important contribution to the study of teacher professional learning (Scribner, 1999).

Paradigm Shift

A significant paradigm shift has occurred in educational leadership as educators have been embracing a new understanding of organizational structure and leadership (Moon, Butcher, & Bird, 2000; Zohar, 1997). This was especially true in the area of professional development of teachers (Sparks & Hirsh, 1997). Campbell et al. (2004) wrote, “There has been a major shift in the nature, content and location of professional development in the last five years. This has included a move away from courses and workshops to workplace and professional learning communities” (p. viii). Many have embraced a new model that enabled schools to function as learning organizations (DuFour & Eaker, 1998; Wald & Castleberry, 2000; Zohar, 1997). This new model, referred to as the new science or the quantum approach, was based on complexity, chaos, and uncertainty theory. Some principles of professional growth and development that influenced organizations and that have evolved from this theory (and subsequent paradigm shift) and have become a growing part of organizational thinking and envision organizations are as follows: (a) emergent, (b) contextual and self-organizing, (c) imaginative, and (d) experimental (Zohar, 1997). This “new” way of thinking has begun to displace the older paradigm. In the foreword to a very important recent study (Darling-Hammond et al., 2009a), Governor James B. Hunt, Jr., wrote, “We need to place a greater priority on strengthening the capacity of educators and building learning communities to deliver higher standards for every child” (p. 2).

The older model of professional development worked within a Newtonian physics simplicity which was reductionistic, law-abiding, controllable, and reactive (Zohar, 1997). Traditional professional development programs and practices were more didactic, less hands-on and job embedded, and more about changing knowledge than systematically improving practice (Dadds, 1997; Weiss & Pasley, 2006). French (1997) wrote, “The most common approach to teacher learning—one-shot lectures delivered to all teachers in a building—are squeezed in after school or tucked into half-day sessions once a year” (p. 41). She continued by stating, “Delivering the same instruction to everyone ignores the different needs of teachers in different fields with differing levels of experience. These largely passive experiences are discounted by teachers as boring and irrelevant” (p. 41). This major move in the philosophy, content, and context of professional learning brought about the realization that professional development practices should be based on good research and valid evidence that results in well-informed and research-based teaching practice that promoted teaching and learning (Campbell et al., 2004; McCarty, 2000). Many professional development activities that were described as “outmoded,” “factory modeled,” and “egg-crated isolation of teachers” do not support the shift to more progressive professional development practices.

Professional learning founded on a strong research base has been a driving force in the newer model of professional development. Luke and McArdle (2009) argued, after reviewing the literature on characteristics of effective professional development programs and activities, for using research and theory in selecting, framing, and evaluating professional learning experiences. At the same time, however, it is important to note that not all studies support the idea of key characteristics that support effective professional

learning. Hill (2009) believed that despite evidence that specific characteristics and programs improve teacher knowledge and practice, these professional learning efforts seldom reach teachers on a large scale. She argues that professional development should be designed around the individual needs of the teacher (Hill, 2009).

Effective Professional Development Practices

The effectiveness of professional development practices has been a “well-researched” topic for more than a decade (Maldonado & Victoreen, 2002). States, districts, and schools were requiring, or at least supporting, professional development for teachers (Panella, 1999). Educational leaders, practitioners, and researchers were increasingly concerned with improving the quality of evidence about the effectiveness of teacher professional development, particularly as it pertains to professional development’s influence on teachers’ knowledge and practice (Humphries, 2002). Penuel, Fishman, Yamaguchi, and Gallagher (2007) studied 454 science teachers engaged in inquiry-based teaching to determine the different characteristics of professional learning on teachers’ knowledge and classroom implementation. They found that the coherence of teachers’ professional development experiences, especially time for planning implementation of knowledge learned and provision of technical support, were keys to effective professional learning. Depending on the situation, teachers were required or encouraged to learn as professionals and to improve their teaching. There were various components that constitute “effective” professional development practices. Wilson and Berne (1999) summarized well the features of effective staff development. They cited collaboration and teacher interaction, and active learning and inquiry as the

most common themes in contemporary professional development research on teacher learning.

The first large-scale empirical research comparison of the effects of distinctive aspects of professional development on teachers' learning indicated three principal features of professional learning experiences that had significant, positive impact on teachers' knowledge, skills, and classroom practice. These principal features were as follows: (a) content of the professional learning (i.e., what the teachers are actually learning), (b) active learning (e.g., meaningful discussions, planning, and practice), and (c) coherence of professional development program. Three structural features are derived from the principal features that significantly contribute to teacher learning: (a) type of activity (e.g., workshop vs. study group), (b) collaboration, and (c) time spent with learning experience (Garet et al., 2001). The authors utilized data from a Teacher Activity Survey conducted as part of the national evaluation of the Eisenhower Professional Development Program. Other research (Putnam & Borko, 2000) indicated that successful professional development activities depended on the specific learning goals of the teachers. Summer workshops may have worked well for expanding one's content knowledge or for gaining new understanding of student learning; however, the teacher's own classroom was the ideal place to enact new instructional practices. Concerning professional learning practices, Putnam and Borko (2000) wrote, "There is some evidence that staff development programs can successfully address this issue by systematically incorporating multiple contexts for teacher learning" (p. 7).

More recent literature reviews (Borko, 2004; Yoon et al., 2007; Wayne et al., 2008) examined studies that identified the features of effective professional development

programs. Wayne et al., (2008) noted that it was generally acknowledged that intense, sustained, job-embedded, and content-focused professional development was more likely to improve teacher knowledge, class instruction, and student achievement. Furthermore, active learning, constancy, and collaboration have also been promoted as promising professional development practices. Therefore, recent literature reviews suggested the important role these practices contributed to high-quality and effective professional development.

Scribner (1999) used an embedded case study to examine the ways teachers experienced professional learning within a work context. He concluded that one's work context limited the types of learning activities and knowledge available to teachers. Teachers experienced professional learning broadly through such activities as collaboration, individual inquiry, experience, conferences and workshops, school-based in-services, and graduate courses. In this article, Scribner (1999) called for a better understanding of teacher learning experiences and for professional development to become an integral part of the teacher's work and of the school's professional learning culture.

Another relevant study (Desimone, Porter, Garet, Yoon & Birman, 2002) found that staff development which centered on particular teaching practices increased teachers' use of those practices in the classroom. The study discovered that active learning increased the effect of professional learning on teachers' instruction as well. Research supported the idea that teachers needed to be active learners, which required significant changes in the attitudes of teachers and educational leaders (Easton, 2008).

Yet some researchers (Kazemi & Hubbard, 2008) challenged the typical research on professional development that generally focused on what teachers learned as a result of their participation in professional development. They argued that researchers should examine what teachers learned during and after professional development experiences.

Kazemi and Hubbard (2008) wrote:

We contend that researchers should examine whether and how teachers' participation across these settings *coevolves* over time by asking, 'What is the relationship between settings over time, and how does this affect teachers' participation in each setting?' We show why pursuing that question instead of the more typical, 'What is the impact of participating in PD on teachers' practice?' will strengthen how we understand and design for teacher learning. (p. 428)

Desimone et al. (2002) wrote, "Despite the amount of literature on in-service professional development, relatively little systematic research has explicitly compared the effects of different forms of professional development on teaching and learning" (p. 82). Lists of characteristics that are reflective of quality and effective professional learning experiences have been common in the professional development literature; however, there is little reported evidence that these characteristics are associated with improved instruction and student learning. A more recent report (Darling-Hammond et al., 2009a) examined what researchers discovered about teacher professional learning that contributed to instructional practice and student learning. Among these findings, sustained and intensive professional development, teacher collaboration, content focus, and practice-focused learning were common elements of professional development that improved teaching and learning, both for teachers and students.

Professional Development Practices at Christian Schools

Private schools, faith-based schools in particular, have received limited attention in the research literature. This was particularly true in the area of professional development at Protestant, evangelical Christian schools. All studies related to professional development at Christian schools that I have encountered had been built upon Headley's work and had utilized the survey instrument he developed in 1997 (Finn et al., 2010; Headley, 2003, 2004, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010). These research studies were limited to schools that were members of the Association of Christian Schools International (ACSI) and studied teachers' and administrators' recent involvement in professional development activities. The results from these studies provided an overview of the professional development activities most common to these Christian schools.

Headley (2003) was the first to study and publish research on the professional development practices at Christian schools. Headley surveyed administrators of ACSI schools in the northwest region of the United States. Headley developed a one-page professional growth checklist that listed a number of items identifying specific professional development practices identified in the literature. Headley analyzed the data by compiling frequencies and percentages of responses regarding the professional development practices at these schools. Headley concluded that the professional development practices at these Christian schools were mostly traditional (e.g., workshop and course participation, teacher evaluations, and book studies); however, these schools did offer collaboration opportunities. In a more recent study, Headley (2008) studied the academic preparation of K-12 teachers at ACSI schools. Since only about 20% of the

teachers studied had gone through teacher education programs at Christian colleges and universities, Headley recommended Christian school leaders be proactive in their professional development efforts to meet the specific needs of Christian school educators.

Neuzil (2010) incorporated aspects of Headley's (2003) survey to determine specific professional development practices of Christian schools that were associated with the Mid-American Region of ACSI. Neuzil aligned these professional development practices with Hord's (1997) professional learning communities (PLC) survey instrument to determine if these professional learning practices reflected professional learning communities. While four professional development practices (i.e., peer observations, teacher evaluations for professional growth, school-sponsored in-services, and collaborative teacher research) reflected sound PLC practices, the other professional learning experiences were very tradition. Neuzil recommended that Christian school leaders add other professional development activities (e.g., classroom walk-throughs, Critical Friends Groups, and collaboration with other K-12 schools) that encouraged the establishment of professional learning communities.

Even though the study of effective professional development practices at Christian schools was all but absent from the research literature, Christian school leaders have been encouraging professional development and the establishment of professional learning communities at Christian schools (Ackerman, 2009; Dill, 2009; Edlin, 2007; Lykins, 2009; MacLean, 2009; McKinley, 2009; Roels, 2009; Schindler, 2009; Wilcox, 2010).

Experiential Professional Learning

Teacher learning within the context of the workplace was another aspect of the professional development of teaching faculty (P. Knight, 2002). Since the early 1990s, individuals have been constructing theoretical frameworks (Watkins & Marsick, 1992) and analyzing practical learning practices (Kane, 2004) in relationship to teaching and learning. Experiential professional learning took place when teachers engaged in experiences and personal reflections in order to increase knowledge, develop skills, and encourage student learning. Experience was the cornerstone to teachers constructing their profession knowledge (Klein & Riordan, 2011). Kwakman (2003) wrote, “As teachers’ learning is embedded in everyday activities teacher learning at the workplace is consequently taking place by teachers’ participation in activities within the school context” (p. 152). One aspect of teacher workplace learning was informal learning.

Professional development has been defined as activities that may assist teachers by giving them information about instructional methods and has noted that the information is shared formally in seminars and conferences or informally between teachers (Desimone, 2011). The fact that many professional learning opportunities are informal has been less recognized. Furthermore, Lom and Sullenger (2011) believed that self-directed learning and informal professional learning were not only less recognized, they were less understood. Researching teacher-directed and informal professional development, according to Lom and Sullenger, has almost been considered an oxymoron. They contended that this type of professional learning raised new challenges, yet insights may be gained with teachers’ permission and active participation; it required creating a context of trust and reflection. They described what the teachers counted as professional

development (Lom & Sullenger, 2011). A study of 32 teachers who were learning in an informal learning context analyzed changes in conceptions and behavior while obtaining new knowledge, experimenting with new methods, and reflecting on the effectiveness of certain teaching methods. Results of the study determined that variation in teachers' informal learning led to differentiated learning in the workplace (Hoekstra, Brekelmans, Beijaard, & Korthagen, 2009). A McCormack, Gore, and Thomas (2006) study of 16 early career teachers reported that traditional forms of teacher development were useful, yet collaborative, informal, unplanned learning from colleagues was reported as the most significant and valuable source of professional learning.

A similar study (Williams, 2003) focused on the learning of new teachers with a particular interest on non-formal or informal learning. The study used interview and survey data from the work with new teachers to identify aspects of job-embedded learning which may not be best accommodated within current professional learning practices. The study concluded that much of new teachers' professional learning was informal rather than formal, reactive rather than deliberative, and collaborative rather than individual. One last study (Richter, Kunter, Klusmann, Ludke, & Baumert, 2011) examined teachers' formal and informal learning experiences throughout their careers. Analyses were based on data from nearly 2,000 secondary teachers within nearly 200 schools. Results showed that formal learning (workshops and seminars) took place more frequently by mid-career teachers, whereas informal learning showed distinct patterns throughout teaching careers. Reading professional literature increased with teacher age, but teacher collaboration decreased. Therefore, informal professional learning of teachers has been a focus for the last few years (McNally, 2006). Focusing on informal education

has been an important aspect of developing a robust theory of professional learning in teaching.

Web-based and Internet technologies are constantly being developed, evolving into new avenues of working, teaching, and learning (Vasileiou & Paraskeva, 2010). Therefore, many teachers have been turning to the Internet to grow professionally, since online professional development opportunities have provided a great learning venue. Duncan-Howell (2010) showed that teachers were engaged in the typical professional development activities, like conferences, workshops, and courses; teachers who were members of online communities were committing 1-3 hours a week to their professional learning. This online learning was relevant, allowed for teacher choice, and was content-rich. Internet professional learning communities provided teaching professionals an accessible and flexible learning experience that is more learner-centered. This approach also helped enrich and improve the interaction of teachers, especially those in rural areas (Salazar, Aguirre-Munoz, Fox, & Nuanez-Lucas, 2010).

Online learning has introduced high-quality and cost-effective professional development for teachers that has led to increased portability of training and the exchange of creativity, information, and dialogue (Villar & Alegre, 2008). Therefore, online learning experiences have played an increasing role in professional development and teacher collaboration (Richardson, 2011). Kern and Levin (2009) studied the benefits of online learning systems like opportunities for teacher professional development and online teacher conversations. Anderson (2011) offered observations on how teachers can use the social networking and micro-blogging service Twitter as a means for professional learning.

One study suggested that the Internet and e-learning have facilitated the creation of virtual learning experiences that have complemented traditional learning and encouraged collaborative learning. According to Stevens (2008), e-learning has provided new ways of organizing teaching, learning, and the management of learning opportunities. Careful course design contributed to teachers exploring and applying new learning to classroom contexts (Jones, 2010). However, have teachers embraced the new technology? Yuen and Ma (2008) explored teacher acceptance of online learning. Contrary to the previous literature, perceived ease of use became the sole determinant to intended usage, while perceived usefulness was non-significant to predicted usage of the technology.

Furthermore, researchers have begun to study online learning and its many facets of learning. One study (Levenberg & Caspi, 2010) revealed the perceived learning experiences of 239 elementary school teachers. Teachers reported that they learned better in formal learning environments, as opposed to informal learning environments, yet those who used social media reported higher perceived learning with online experiences than with face-to-face ones. Mebane, Porcelli, Iannone, Attanasio, and Francescato (2008) compared the efficacy of face-to-face and online education seminars in professional learning contexts. The results showed that academic knowledge was increased by both means, but the online participants improved their collaboration skills also. One article (Brooks, 2010) suggested that hybridization of faculty development to encourage collegial interaction is viable to traditional face-to-face teacher development programs. Chen, Chen, and Tsai (2009) described the experiences of an in-service professional development program for teachers that focused on online synchronous discussions.

Another study (Russell, Kleiman, Carey, & Douglas, 2009) investigated whether online professional learning experiences with various levels of support had a different impact on teacher learning. All levels of support showed significant impact on content understanding, pedagogical beliefs, and instructional practices. Teachers' Internet self-efficacy and beliefs about web-based learning were important predictors of their attitudes toward online professional development. Positive consequences of web-based learning were very significant in developing positive attitudes toward online professional learning (Kao & Tsai, 2009). A follow-up article reflected that teachers with positive Internet experiences and strong beliefs about the positive aspects of web-based learning tended to express higher motivation toward online professional learning experiences (Kao, Wu, & Tsai, 2011).

Faculty conversations in the midst of day-to-day professional experiences have become a recent research topic of interest. Haigh (2005) presented outcomes of personal reflections and inquiry about professional conversations as a context for professional learning and development. Grangeat and Gray (2007) conducted 60 interviews to increase the understanding and knowledge of teachers' professional learning. They employed models derived from industrial contexts to analyze the components of the work environment that were used by teachers to grow professionally. Horn and Little (2010) investigated how the structure of teacher conversations functions in professional learning communities to forge, sustain, and support staff development and school improvement. They studied teachers' workgroup interactions focused on teacher learning and collegiality. They concluded that conversational routines were important for professional learning. Levine (2011) addressed the claim that the path to instructional change in the

classroom lies with more collaborative professional communities among teachers by asking the question: “How do different approaches to developing collaborative professional communities impact experienced teachers and their abilities to change?” (p. 30). He concluded that schools which nurture collaboration among their teachers create professional cultures that assist experienced teachers in their professional growth and learning. These teacher professional communities develop resources like innovative climates, shared objectives, relational trust, continuity with the past, and respect for seasoned teachers. Levine (2011) concluded, “Schools that rapidly engineer a ‘professional learning community’ may lack such resources, reducing experienced teachers’ willingness and ability to change” (p. 30). Teacher conversations appeared to be one of the main factors for improving teachers’ conceptions about teaching. Ideas for constructing new professional development programs were outlined in this report.

Professional, job-embedded experiences also contributed to the professional development of teachers. One research report (Hagger, Burn, Mutton, & Brindley, 2008), based on a series of post-lesson interviews and conducted with 25 student teachers following a 1-year postgraduate course, explored the thinking and reflection of the teachers in relation to their planning, conducting, and evaluating an observed lesson. The findings suggested that while all of the student teachers learned from the experience, the nature and extent of the learning varied considerably. Understanding the varied learning approaches that were taken by the student teachers would better equip teacher educators in preparing content teachers and professional learners. Putnam and Borko (2000) emphasized the importance of individual situations in understanding teacher knowledge and learning. Parise and Spillane (2010) focused their research on teachers’ learning

opportunities, both formal and informal, utilizing data from 30 elementary schools. They explored the relationships between teachers' formal professional development and on-the-job learning opportunities and instructional change. The results suggested that formal professional development and informal learning opportunities were both significantly associated with changes in teachers' instructional practices. Therefore, formal and informal professional learning activities and opportunities contribute to teacher learning and the development of professional learning communities.

Professional Learning Communities

In recent years the concept of professional learning communities has become a new model of understanding that has been applied to professional growth and development in many schools. At these schools, learning suggested action, curiosity, shared values and vision, and reflection (DuFour & Eaker, 1998; Huffman, 2003). In these schools individual and organizational growth and development occurred simultaneously and were interdependent (Palmer, 1998; Senge et al., 2000; Wald & Castleberry, 2000). DuFour and Eaker (1998) recognized that schools which operate as learning communities engage their faculty in ongoing professional study and regular practice that characterizes a committed to continuous improvement. Some characteristics that I have come to associate with professional learning communities are as follows: (a) shared mission and vision (i.e., core purpose and values), (b) collaboration (e.g., collective inquiry and collaborative teams/learning), (c) exploration (i.e., experimentation, imagination and innovation), (d) reflection, (e) continuous growth and improvement, and (f) outcomes based. Therefore, professional learning communities were a preferred approach to professional growth and development (Barth, 2002). The

traditional “in-service” training approach, with its disconnected workshops and seminars led by experts who transmitted knowledge, skills, and strategies, has been losing its influence. Some schools were taking their own learning seriously with many teachers and administrators taking on the roles of the experts (Campbell et al., 2004; Steiny, 2009). Learning was driven by the educational/school community and centered on meaningful, relevant issues. It was experimental and innovative by nature and was fueled by rich, diverse, accessible sources of information (Bull & Buechler, 1996; DuFour & Eaker, 1998; Wald & Castleberry, 2000).

A key component in establishing learning communities within schools was developing or creating a school culture that nourished staff and student learning (R. Evans, 2001; Jenlink, 1995). The culture of a school has had a significant impact on its quality and effectiveness (Owens, 2010). A school’s culture supported teaching and administrative faculty and staff learning, quality instruction, and student achievement (Fullan, 2007). An important aspect of a positive school culture was the element of change, along with the need for innovation. “If professional learning communities are to support changing teachers’ practice, they need to be an integral part of routine school development,” commented Harris and Jones (2010, p. 179). School improvement that was built upon change required a systemic approach, focusing on all aspects of education from one’s educational philosophy to classroom practice (Fullan, 2001; Jenlink, 1995; Siccone, 1997). Lieberman and Pointer Mace (2008) recommend re-conceptualizing professional development for practicing teachers by establishing learning communities that reflected openness, scholarly rigor, and collaboration. Wells and Feun (2007) tracked the professional learning efforts of teachers and educational leaders from six high

schools in their attempt to develop professional learning communities. Qualitative and quantitative analyses of interviews with school administrators and other leaders showed the transition to a professional learning community tended to center on sharing resources and materials, whereas critical issues such as learning results or best-practice strategies were seldom addressed. According to Giles and Hargreaves (2006), who explored the impact of time in sustaining professional learning communities, concluded that though professional learning communities may provide a stronger resistance to traditional processes of learning and change, they also showed signs of defaulting to conventional patterns of professional and student learning in the face of mandated reform. The literature that promotes movement towards schools becoming professional learning communities has required a systemic approach, focusing on all aspects of education from one's educational philosophy, to classroom practice, to student achievement (Fullan, 2001; Jenlink, 1995; Lieberman & Pointer Mace, 2008; Siccone, 1997; Wells & Feun, 2007).

Leadership has played an important role in establishing professional learning communities (F. King, 2011). Harris and Jones (2010) wrote, "It is clear that professional learning communities require certain forms of leadership to be successful. Strong, supportive leadership is necessary to build and sustain professional learning communities" (p. 179). Vernon-Dotson and Floyd (2012) employed a collective case-study design to explore the impact of leadership on professional development. In changing times, teachers require flexibility, adaptability, and creativity. Furthermore, Printy (2008) concluded that principals and other school leaders, like department heads, were instrumental in shaping teachers' professional learning experiences. However, since

principals were often well removed from the classroom and its concerns, it was important for leaders to stay connected to teacher needs. Stoll and Temperley (2009) argued that promoting teacher creativity is a fundamental challenge for school leadership. Furthermore, a study of 502 elementary teachers that examined the impact of leadership practices, organizational conditions, and teacher motivation and teacher learning suggested that teachers' engagement in professional learning communities, particularly experimenting and reflecting, was a powerful predictor to teacher learning. The results suggested that teachers' engagement in professional learning activities, especially experimentation and reflection, was a powerful predictors of teacher performance. They concluded that transformational leadership is required to foster teacher learning (Thoonen, Slegers, Oort, Peetsma, & Geijsel, 2011). Kimball (2011) emphasized the role of principals in teacher development. He stressed the need for strategic talent management, instructional leadership, teacher effectiveness, and teachers' work contexts. Quality professional development and educational leadership have required creating school environments where quality learning and teaching were expected and evaluated, including professional development opportunities.

School leadership has become responsible for the quality of instruction and for the growth and improvement of teachers (Senge et al., 2000). Therefore, staff development programs and activities have come under much more scrutiny. Professional development workshops have been primarily evaluated with participant, self-reported surveys that have addressed the teachers' satisfaction with the workshop, what they learned, and what they applied in the classroom. Professional learning outcomes were seldom assessed through analysis of observed teaching practices. Ebert-May et al. (2011) analyzed

videotapes of teachers following a learner-centered professional development workshop to compare actual teaching practices to what was stated on self-reported surveys. The observational data revealed that participation in professional development did not result in learner-centered teaching. Although 89% of the teachers surveyed stated they made changes in their classes that included active, learner-centered instruction, the majority of them (75%) used lecture-based, teacher-centered pedagogy.

Teacher collaboration has been linked to successful teacher professional growth and development (Evans, 2001; Fullan, 2001; Jenlink, 1995; Siccone, 1997). Numerous research studies linked collaboration with successful professional development programs and activities and teacher growth and learning (Larsen, 2001; Ermeling, 2005). Asbury (2002) believed typical staff-development activities do not provide teachers with the time and forum in which to collaborate or reflect upon employing innovative instructional practices. Furthermore, she concluded that collaborative professional learning that is tied to the classroom resulted in the greatest degree of teacher change. Additionally, school cultures that promoted (i.e., create and sustain) a professional and collegial atmosphere enhanced collaboration and teacher change (Rogers, 2003). Hence, collaborative learning increased teacher capacity for learning and change (Thibodeau, 2006) and provided more and better resources and enhanced opportunities for professional growth and change (Ndlalane, 2006). Kazemi and Franke (2004) reported that 21 teachers from a large urban school, who met twice a month in workgroups and regularly analyzed student work, over time came to understand their students' thinking and learning strategies well and were more able to design classroom strategies to best advance their students' learning. P. Graham (2007) reported on the results of a mixed-method case study investigating the

relationship between professional learning communities and teacher learning. The results demonstrated that professional learning community activities that consisted of same-subject, same-grade teacher teams had the potential to influence significant teacher growth if certain factors were present, including leadership and organizational practices, collaboration, teacher conversations, and sense of community.

Using data as the foundation for designing professional development activities has played an important role in teacher learning. SMART goals (O'Neill, 2006) have been one way in which teachers have established professional learning goals. The acronym SMART represents professional learning goals that are specific, measurable, attainable, result-oriented, and time-bound. Data-driven design has served as a good guide to set measurable, yearly learning and instructional goals (Marsh, Pane, & Hamilton, 2006). Salpeter (2004) wrote that a key aspect of data-driven decision making in schools involved being immersed in data over an extended period of time. This longitudinal approach allowed schools to monitor trends and track the effectiveness of professional development and student learning as groups of students move from grade to grade. Putting data-driven decision making into practice, especially among teachers, has been a very recent and important research endeavor. Coburn and Turner (2012) wrote:

Investigating the practice of data use directly is important if we are to understand what is happening at the ground level of one of the most prominent strategies for educational improvement in the country. Understanding the practice of data use not only can help us explain the outcomes of the data use but also provides insight into when and under what conditions data use acts as a productive pathway to educational improvement and when it does not. (p. 100)

A number of authors have investigated various studies on data-driven decision making, what teachers and others actually do with the data, and have argued for a more robust, methodologically sophisticated, and extensive program of micro-process research (Goren,

2012; Little, 2012; Moss; 2012; Spillane, 2012). One concluding study (Park & Datnow, 2009) examined leadership practices in school systems that were implementing data-driven decision making. Using qualitative data from a case study of four urban school districts, the authors' discovered that successful data-driven decision making included a strong commitment to learning and continuous improvement, staff empowerment, and human and social capital. Collaboration and teacher conversations have built strong professional learning communities (DuFour & Eaker, 1998; Palmer, 1998).

Professional Development and Teacher Change

The literature on change has been diverse. From managing change (Baum, 2000), to leading change (Fullan, 2001; Siccone, 1997), from understanding systemic change (Fullan, 2007; Jenlink, 1995), to recognizing the human side of change (R. Evans, 2001), there was an abundance of books and articles on educational change. With this in mind, an awareness of recent discussions on the subject of educational change, in this case, teacher change, was informative.

The success of teacher training and staff development programs in relation to teacher change and student achievement has also been of research interest. The success of professional learning programs, according to Catherine Larsen (2001), was related to significant support and shared common learning experiences, including reflection and implementation of lessons and other learning activities. Poletti (2003) suggested that successful professional development programs were gradual, give opportunity for teacher reflection and positive outcomes to be observed, and require administrative and peer support. If schools are going to experience positive, lasting change, successful professional development models must be identified and implemented. Ermeling (2005)

suggested an inquiry-based professional development framework (i.e., the PIER system) that encouraged deliberate instructional planning, implementation, and collaborative analysis of lessons, meaningful reflection and revision, and solid pedagogical content knowledge is best to promote teacher change. Chu (2005) researched the success of teacher training programs linked to external agencies that promote change.

Another area of concern was the transfer of professional learning into classroom practice. Very little research had been done on the impact and transfer of training related to the classroom instructional practices of teachers. C. Knight's (2007) study indicated the potential of transfer if key elements were in place. C. Knight (2007) believed that even though quality instruction, including improved instructional practices, was important to quality teaching and learning, professional development programs had only been evaluated by perceptions of the training itself. C. Knight (2007) continued that less was known about teacher training effectiveness, transfer of learning into classroom practice, and the impact on students' learning. Did the teachers actually change their practices? Another recent study identified professional development practices that increased the likelihood of change in instructional and curricular practices (Maxfield, 2000).

Some research on professional learning had been completed in relationship to teachers' perspectives of the educational change process. Agnew (2003) concluded that (a) educational change was complex and contextual; (b) in-service professional development was not sufficient enough to transform a teacher's values, beliefs, and practices; (c) intentional change began with the teacher; (d) teacher inquiry was vital for professional growth and change; and (e) learning communities provided new avenues of

learning and, therefore, contributed to teacher growth and learning. Direct and ongoing staff development experiences tended to contribute to meaningful teacher change (Russell, 2000), and intense technology workshops helped improve the integration of technology in classrooms, yet may not be the best vehicle to provide professional development (Gaither, 2005). Mouza (2002) examined two professional development models designed by Columbia University's Teachers College in order to understand changes in teachers' knowledge, practices, and beliefs and to determine their impact and influence on teacher learning of classroom technology. The study concluded that all teachers became more proficient in their use of technology, acquired a better understanding of technology integration, and implemented computers more frequently in their classrooms. Green's study (2002) showed that staff-development activities were most meaningful to teachers when the activities met pre-determined and particular teacher wishes. Foley (2004) studied the role of beliefs, reflection, and inquiry as a teaching methodology in the area of teacher educator change.

Some educational change was mandated. Research has been completed that is related to professional development and teacher change due to government mandates, licensure, and/or reform initiatives. Kline (2002) studied Ohio-certified teachers who participated in the Pathwise Classroom Observation System. Participants in this professional development effort believed that the program "acts as a catalyst for veteran teachers' reflection on their own teaching" (Abstract). However, the quantitative analyses indicated no statistically significant difference in teacher practice of participants. Studies indicated that teacher change was required while implementing an educational mandate (Espinoza, 2006) and that teachers normally changed to comply with government

frameworks; however, the quality of the frameworks and the professional development provided played a key role in the change process (Hanley, 2000). Furthermore, the impact of teachers' perceptions and attitudes of change on the implementation of professional learning activities related to government reform efforts were important, and according to Molina-Walters (2004), initial teacher motivation, change implementation, and change analysis were significant factors in this type of educational change. Deglau (2005) concluded that when negotiating individual and district-level change, teachers shed their positional identities as an isolated and marginalized sector of the teaching force and assumed roles as collaborators, innovators, leaders, advocates, and content experts. Brunkowski (2004) studied the effects of self-directed professional learning on teaching practice. His research focused on Illinois teacher reform legislation which tied professional learning to certification renewal. However, individual or personal teacher change was not the focus of the study. Another study analyzed online professional development as a valid means of teacher professional development (Whitehouse, 2006).

Teacher change and growth have depended, to a great measure, on one's beliefs. Teachers' beliefs have played a significant role in the teacher learning process. Changes in instructional practices are the result of growth in teachers' beliefs. The notion of teacher change and learning is multidimensional and has been influenced by both personal factors and one's professional context (Richards, Gallo, & Renandya, 2001). The findings of one study suggested that teachers' self-directed professional learning was driven by a commitment to the moral purposes of teaching. This was characterized by the teachers' desire to grow professionally and supported by the organizational climate of the schools (Tang & Choi, 2009). Song, Hannafin, and Hill (2007) introduced a framework

for understanding and reconciling perspectives on teaching and learning, since there seemed to be a marked difference between how students approach learning and how teachers approach teaching.

Summary

Professional development and growth among teachers has been touted as a way to bring continuous improvement to teacher quality and to student learning in schools (Campbell et al., 2004; Maldonado & Victoreen, 2002). This new direction in thought that was moving away from centering teacher learning on pre-service/undergraduate education to career-long education and training was finding acceptance throughout the world (Moon et al., 2000). Clement and Vandenberghe (2000) reported about the consensus that now exists on the importance of teachers' professional learning. Research on professional development (Campbell et al., 2004) has been completed from various perspectives (e.g., program effectiveness, best practice, and, most recently, student achievement) and by a number of research traditions (e.g., quantitative/qualitative and/or positivist/ contextualist).

The literature on quality, effective teacher learning showed that over the last decade or so there has been a move to more progressive forms of professional learning. Traditional approaches to professional development were characterized as ineffective and passive. Teachers considered these types of professional development unconnected and monotonous. These professional development efforts have been referred to as one-shot lectures, outmoded, factory-modeled, and egg-crated isolation of teachers. The effective, more progressive professional development practices were highlighted by intense, sustained, job-embedded learning experiences that included teacher inquiry,

collaboration, and other progressive elements (Darling-Hammond et al., 2009b). Yet, others (Guskey & Yoon, 2009) saw a stronger connection between traditional professional development practices, like workshops, and quality professional learning. However, common elements of effective professional development have been characteristic of the literature. Guskey and Yoon (2009) sum this up well, “It thus seems clear that effective professional development requires considerable time, and that time must be well organized, carefully structured, purposefully directed, and focused on content or pedagogy or both” (p. 497).

Sadly, very little has been published about the professional development experiences and practices of private, Christian school teachers (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010). Furthermore, no studies have been conducted on exclusively Christian schools utilizing the National Staff Development Council’s Standard Assessment Inventory. Studies that have focused on professional development at Christian schools have been limited to members of the Association of Christian Schools International (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010) and have utilized Headley’s checklist (Headley, 2004). Therefore, more needs to be known about what happens in the professional development practices of Christian schools that influenced healthy and effective teacher growth and change.

CHAPTER THREE

METHODOLOGY

Introduction

This study explored the professional growth and learning experiences of Christian school teachers to develop an understanding of Christian teachers' professional growth and learning.

In this chapter I review my research design. First, the research design is explained. Second, the research questions that governed the study are articulated to set the agenda for what follows. Third, the population and sample utilized for the study are explained, and I clarify the main variables used in the study and how they were operationalized in the data collection and data analysis process. These sections included the research procedures used. Within each section there are separate areas for qualitative and quantitative processes. Last, validity, generalizability, and any ethical or IRB issues are stated to conclude the chapter.

Research Questions

Two questions drove my research: (a) How do Christian school teachers professionally learn and develop, and (b) What school processes and practices and individual and professional experiences support their professional learning and why?

Research Design

The study was designed as a sequential, mixed-method, multi-case study (Creswell, 2007; Johnson & Onwuegbuzie, 2004). Mixed-method afforded me an opportunity as a practicing researcher to utilize methods and implement techniques that were similar to what educators actually use in practice. Johnson and Onwuegbuzie (2004) write:

Today's research world is becoming increasingly interdisciplinary, complex, and dynamic; therefore, many researchers need to complement one method with another, and all researchers need a solid understanding of multiple methods used by other scholars to facilitate communication, to promote collaboration, and to provide superior research. (p. 15)

This mixed-method, multiple-case study had two phases from which data were collected. The first phase involved quantitative data, the survey. This phase answered the question: What are they doing? The NSDC's Standards Assessment Inventory described the teachers' professional development practices. The second phase was qualitative: focus group interviews with a written reflection component. This phase answered the questions: What are they doing and why are they doing it? The focus group interviews with written reflections occurred in the second phase and provided any clarification that might have been needed from the survey results and explored any nuances to teacher professional growth and learning.

Population and Sample

Purposive and convenience sampling were used to select the schools and teachers for this research study. The population for this study was kindergarten through 12th-grade teachers from Christian schools in the Detroit metropolitan area who were teaching at the schools during the 2010-2011 academic school year. The schools and teachers for

this study were chosen because they represented a good sample, a cross section, of suburban Christian schools across the United States of America (e.g., suburban, elementary and secondary teachers, small and larger student enrollments, independent and church-operated evangelical Christian schools, and experienced and novice teachers). Schools were chosen that were with close proximity to me, therefore affording me the ability to conduct timely and low-cost focus group interviews. Furthermore, the online survey made collecting the quantitative data convenient. Approximately 250 Christian teachers at nine K-12 Christian schools were invited by email to participate in the NSDC's Standards Assessment Inventory on-line survey with an additional 5-10 teachers per school invited to participate in focus group interviews with written reflections as part of the focus group study (Gibbs, 1997; Williams & Katz, 2001).

Data Collection

This research study used three sources of data collection (i.e., a national online survey of professional development practices, focus group interviews, and written reflections). A description of each is provided below with reliability and validity, administration processes, and research-based support for each one. Due to the nature of this study, the quantitative and qualitative portions of this study are discussed separately.

Quantitative Data

I administered an online survey to select K-12 Christian schools in the metro-Detroit area during the first semester of the 2010-2011 school year. The National Staff Development Council's Standards Assessment Inventory was used to collect professional development data for this study. I contacted the head administrators from each school to

be studied requesting their permission to be a part of the study. After permission was granted, I emailed the heads of school with everything needed to invite the teachers to participate in the survey, which was the first phase of the study. The heads of school from each of the Christian schools invited all of their teachers to participate in the study. I emailed each head of school the survey link. The inventory has been used to assess the learning culture of many public school systems. An extensive 2009 report documented findings using the 60-item National Staff Development Council (NSDC) survey of four states (Arizona, Georgia, Kansas, and Missouri), as well as other research from teacher and school questionnaire data from the federal Schools and Staffing Surveys of 1990-2000 and 2003-04 (National Center for Educational Statistics) to examine trends over time. This study used the NSDC instrument to assess the professional development and learning culture of Christian schools to determine what teachers were doing to learn and develop as professional educators in their school contexts (Darling-Hammond et al., 2009a).

The survey that was used in this study is the NSDC's Standards Assessment Inventory. I analyzed the findings which included the indicator averages, frequency counts by indicator, and basic frequency counts of each teacher and school (and the schools as a whole). The findings of the Standards Assessment Inventory assessed what was happening at the schools and gave me an overview of the professional development practices of the teachers at these Christian schools. From these findings and from the school-based professional development literature in general and the NSDC professional standards in particular, I developed major areas or patterns of professional growth and learning that could be explored for a deeper understanding of these practices.

How did these teachers develop and why did the teachers learn and develop the way they did?

Standards Assessment Inventory was designed to obtain the professional development practices of schools and to understand the learning culture of these schools. According to NSDC, its professional development standards “are grounded in research that documents the connection between staff development and student learning” (National Staff Development Council, 2003, p. 1). The survey instrument was employed because of its relevance to current research on quality professional development standards and practices.

The National Staff Development Council (NSDC) contracted with the educational firm, Southwest Educational Development Laboratory (SEDL), to design an assessment tool to measure schools’ professional development practices in relation to NSDC standards. SEDL’s Evaluation Services (ES) department developed a reliable and valid professional development assessment instrument aligned with NSDC’s standards for quality staff development. The instrument was created to be completed by teachers and other educational staff and was intended to measure the degree to which a school’s professional development practices conformed to the council’s professional standards. Schools across the country were notified about the new survey and were offered opportunities to volunteer in one of three pilot studies of the assessment tool. Sixty schools (20 in each pilot study) and hundreds of educators participated in the survey’s reliability and validity analysis. According to NSDC’s executive summary of the Standards Assessment Inventory, each of the schools that participated was rated by an individual with extensive knowledge of the NSDC standards, and knowledge about

professional development program at the pilot school (National Staff Development Council, 2003). Data from each pilot study were analyzed by SEDL's ES staff to calculate reliability and validity of the new instrument. SEDL's findings (p. i) are as follows:

Instruments reliability was consistent and high across all three pilot studies ($\alpha=.98$) for the overall scale, and consistently good to strong ($\alpha=.71$ to $.98$) for the 12 subscales.

The instrument demonstrated good content validity through the process of soliciting expert advice on the instrument's clarity and relevance to the characteristics of each of the standards and to the experiences of school faculties.

Criterion-related validity was supported, indicating that teacher ratings of their school's professional development program alignment with NSDC standards were comparable to ratings of their school experts.

Construct validity was not supported for a 12-factor model suggested by the NSDC standards. Findings suggested overlap within the 12 instruments subscales that reflected the standards, and further examination was warranted.

Therefore, the analysis of the soundness of the assessment tool indicated the survey was a reliable and valid measure of the degree that schools' professional development programs and practices reflected the NSDC professional standards. As of this writing, there were no other research findings, independent of NSDC, which utilized the Standards Assessment Inventory and corroborated its reliability and validity.

Qualitative Data

This phase of the study included two types of qualitative data, focus groups and written reflections, which provided a rich, natural understanding of teachers and their professional growth and learning.

Focus Group Interviews

The NSDC survey allowed me, the researcher, to identify key components of schools' professional development practices, as represented by the school-based professional development literature. However, more specific data were needed to understand why these teachers do what they do. These data were gathered from focus group interviews and written reflections (Morgan, 1997; Morgan & Krueger, 1993). The usefulness of a mixed-method study was that it gave me the ability "to listen to what people have to say about their activities, their feelings, [and] their lives" (Eisner, 1998, p. 183). It enriched the study by heightening the understanding of a teacher belief about the professional development practices and experiences and how these practices contributed to one's professional learning (Flores & Alonso, 1995).

I scheduled the focus group interviews through the heads of school. Each interview was allotted at least an hour. The interviews were scheduled at various times of the day. I worked within the times allotted to me. Some interviews were conducted early in the morning before teachers began their teaching responsibilities, some were scheduled during teacher in-service days, and others were arranged during staff meetings after school or during planning periods throughout the day.

I conducted each interview at the participating schools. I began each interview by reading from a script that I composed to ensure constancy from one interview to another.

I began each interview by introducing the study and its purpose. I then addressed the ground rules for the interviews (Gibbs, 1997; Williams & Katz, 2001). During each interview I took field notes and digitally recorded participants' responses.

I used varied focus interview questions to guide the discussions. Choice of questions depended on the flow and quality of the conversations. Some of the questions were as follows:

1. What role has professional development played in you becoming the teacher you are today?
2. What does your school do for professional development?
3. Describe your most successful professional development experience? What made it a positive experience?
4. Describe your worst professional development experience? Why did the experience fail?
5. What are your favorite professional development experiences? (If teachers are slow to give you categories, suggest adding formal [i.e., school-initiated] and/or informal [teacher-initiated].)
6. Describe challenges faced by teachers wishing to develop professionally in Christian schools?
7. How can principals and educational leaders best facilitate teacher professional growth? How could professional development activities make your school a better school? Make you a better teacher?
8. What is your definition of professional development?

9. Are there other questions I should have asked you about professional development?

10. Is there anything anyone would like to add?

Written Reflections

Prior to the focus group interviews, teachers were asked to reflect in writing about the question “How have you become the teacher you are today?” They were asked to write down without previous discussion. The teachers were also encouraged to reflect in writing throughout the focus group interviews as thoughts about their personal professional growth came to mind.

Qualitative inquiry, including written reflections, enhanced the research study and ultimately helped inform educational practice (Campbell et al., 2004; Eisner, 1998). Personal written reflections allowed for a frankness or depth not attainable through quantitative means, such as surveys, or by qualitative means, like interviews (Campbell et al., 2004; Ferraro, 2000).

Teacher reflection, both with seasoned and pre-service educators, has been touted in recent years as being a very beneficial practice for educators (Artzt & Armour-Thomas, 2002; Margolis, 2002; Mayes, 2001a, 2001b; Moore, 2002; Rock & Levin, 2002; Swain, 1998). Fendler (2003) believes that the benefits of reflective teaching may be traced to John Dewey’s 1933 work *How We Think*. Dewey broke from routine and the traditional understanding of teaching and learning. Dewey’s learning theory, based on experience, relied more on practitioner reflection than previously understood. Therefore, Fendler (2003) analyzed the historical development of teacher reflection, including the various types of reflection practiced by teachers and teacher educators today. Fendler

(2003) mentioned four types of teacher reflection that have developed in the United States which are as follows: (a) Cartesian rationality, (b) Dewey's reflective thinking, (c) Schon's reflective practitioner, and (d) political and social reflection. I believe Cartesian rationality best reflects the use of written reflections in this study.

Although much of the recent research on teacher reflection has been dedicated to Dewey's reflective thinking, to Schon's reflective practitioner, or to political and cultural reflection, Descartes' rational reflection seemed to be the best fit for this study: The reflection of these teachers was a valid means to regenerate knowledge about their professional growth and learning (Ellwein, Graue, & Comfort, 1990; Kunzman, 2003; McCombs, 1997; Smyth, 1989, 1992; Whipp, 2003). Fendler (2003) stated,

Insofar as Descartes is regarded as the founder of modern philosophy, reflectivity—the ability to see oneself as object—is a defining characteristic of modern self-awareness. . . . Reflection, in its common Cartesian meaning, rests on the assumption that self-awareness can generate valid knowledge. By implication, when teachers are asked to reflect on their practices, the Cartesian assumption is that self-awareness will provide knowledge and understanding about teaching. (p. 17)

Therefore teacher reflection, as a form of self-awareness, can generate a solid foundation of knowledge for understand teachers' professional growth and learning. Cartesian reflection illustrates well the conscious interaction teachers' display between thought and practice. Evans and Pollicella (2000) connected this understanding well when they stated, "Reflection requires teachers to be introspective, open-minded, and willing to be responsible for decisions and actions" (p. 62). The Cartesian understanding of the self-reflection granted me the opportunity to develop a valid source of knowledge concerning the professional learning of these Christian school teachers—knowledge not merely based on experience and social awareness, but knowledge based upon a critical analysis of their

teaching and learning. The Cartesian assumption is that self-reflection will generate valid knowledge and provide understanding of teacher professional learning (Fendler, 2003).

Data Analysis

This study was designed as a mixed-methods, multi-case study. I used the data collected from the NSDC's Standards Assessment Inventory, teacher focus group interviews, and written reflections of individual teachers during these focus group interviews. Data from surveys, interviews, and written pieces were organized and analyzed to preserve the confidentiality of the study's participants. The survey was analyzed by using descriptive statistics. The focus group interviews and written reflections were analyzed by coding the data as themes appeared within the process.

Quantitative Analysis

I analyzed the data of the NSDC Standards Assessment Inventory using descriptive statistics including the indicator averages, frequency counts by indicator, and basic frequency counts of each teacher and school, and the schools as a whole. I used the findings of the Inventory as administered to the selected Christian schools to recognize themes or patterns in the teachers' professional learning. I compared these findings with the school-based professional development literature, in general, and the NSDC professional standards, in particular, to better understand the current professional development practices of Christian school teachers to develop quality focus group and written reflection questions.

Qualitative Analysis

The data were collected and analyzed in two phases. After administrating the survey to all teachers with invitation to participate further in the study, I compiled a list of teachers who indicated an interest in participating further in the study. I initially analyzed survey data before the second phase of collection, ensuring that quality focus group and written reflection questions were developed. I visited each school to conduct focus group interviews and written reflections about their professional growth at their schools.

I analyzed the data by coding the interview transcripts and written reflections. I looked for key words and ideas related to the professional learning experiences of teachers, as Merriam (2001) suggests, to consider issues such as regularity, distinctiveness, and previously unfamiliar ideas. When the qualitative data were collected and coded, I analyzed and interpreted the data to gain a full picture of the professional development practices of teachers at Christian schools. I identified the overarching themes, categories, or patterns that gave insight into the professional learning of teachers at the Christian schools studied that were rich and well informed. Therefore, this was an inductive data analysis which helped me make sense of the data collected. Saldana (2009) stated that “the act of coding requires that you wear your researcher’s analytic lens. But how you perceive and interpret what is happening in the data depends on what type of filter covers that lens” (p. 6). Three types of filter covers that Saldana (2009) mentioned in his book—*vivo* coding (participant’s own language), descriptive coding (summary of a passage’s basic topic), and values coding (captures and labels subjective perspectives)—helped me code data and organize the themes. I validated my coding by two forms of

peer review. My class of high-school seniors and members of my doctoral studies regional group participated in initial coding (Saldana, 2009) of my data. These separate groups of students examined the data for similarities and differences, coded them, and arranged them into themes. The codes and themes that developed were strikingly similar to those that I concluded with the same data.

Research Procedures

I contacted the head administrators from each school requesting permission for them to be a part of the study. I then emailed the heads of school with everything needed to invite the teachers to participate in the survey. The heads of school from each of the Christian schools invited all of their teachers to participate in the study. I emailed each head of school the survey link. The head of school forwarded the link to the teachers. The survey link was available for a limited time, approximately 4 weeks. I sent follow-up emails and made follow-up phone calls, if needed, to ensure timely responses.

The Christian schools invited to participate in this study were selected because the schools were known to me through participation in athletic competition and were in close proximity for study and data collection purposes. Furthermore, the schools were similar to the school that employs me and characteristic of Christian schools in general. During this phase, the teachers were given an opportunity to participate further in the study. All teachers interested in further participation participated in focus interviews and the written reflection component of the data collection process. Teachers invited for the follow-up focus group interviews and written reflections were by purposive sampling also.

All teachers were invited; experienced teachers were especially encouraged to participate, because of their years of professional development experience. I limited the

number of teachers for the follow-up focus group interviews and written reflections to 5-10 to allow for a thorough analysis of the data yet have enough depth to understand the professional development practices represented by the teachers. Furthermore, the research literature supported groups within this range of participants (Gibbs, 1997; Morgan, 1997; Morgan & Krueger, 1993; Williams & Katz, 2001). I personally facilitated and conducted the focus group interviews and written reflection activities, collected and coded the data, and analyzed and interpreted the data to gain a full picture of the professional development practices of teachers at Christian schools.

Limitations

This research had some limitations, since it focused on select K-12 Christian schools and their teachers from the Detroit metropolitan area. Participants and schools were chosen for proximity convenience, and the quantitative tool utilized was selected for its validity and ease of implementation. The geographic area, the nature of the study (e.g., Christian schools), the survey being implemented, and the number of participants and schools of the study necessarily limits the degree to which the findings can be generalized to other schools in general and Christian schools in particular. Since this research examined teachers' perceptions and personal understandings of the professional development practices at their schools, it was understood that personal recollections carried all the limitations of self-reported data.

Validity

The analysis of the soundness of the NSDC survey was that it was a reliable and a valid measure of the degree that schools' professional development programs and

practices reflected the NSDC professional standards. Instrument reliability was consistent and high across all pilot studies. The instrument demonstrated good content validity, and criterion-related validity was well supported. Focus group interviews and written reflections were validated by peer reviews.

Generalizability

I believe the mixed-methods, multiple-case design of this study facilitated a deeper understanding of teacher growth and learning in Christian school contexts. Since one of the greatest means of professional learning was through the experience of others (Eisner, 1998), this mixed-method study allowed me to collect experiences about many individuals through the use of a quantitative questionnaire and then allowed me to get more personal interpretations and explanations of teacher experience in the qualitative phase. These two forms of data enhanced the confidence of the findings and offset some of the limitations associated with single-method research.

When qualitative and quantitative data were collected together, research findings were enriched. In this study, several factors improved its generalizability. First, the quantitative data collected included a sufficient number of respondents to allow quantitative generalizability to a Midwest Christian school teacher population. Hanson, Plano, Clark, Petska, Creswell, and Creswell (2005) noted that utilizing both forms of data allows researchers to simultaneously generalize results from a sample to a population and to gain a deeper understanding of the phenomenon of interest. Second, qualitatively, Eisner (1998) concluded, “Direct contact with the qualitative world is one of the most important sources of generalization” (p. 202). Such data often allowed for a fuller understanding, a holistic story, of what is occurring. In this study, that was the case

as Christian teachers explained holistically their professional development practice. Hence, the reader generalized to other Christian school teachers. In summary, Eisner (1998) stated:

Human beings have the spectacular capacity to go beyond the information given, to fill in gaps, to generate interpretations, to extrapolate, and to make inferences in order to construe meanings. Through this process knowledge is accumulated, perception refined, and meaning deepened. (p. 211)

Ethical and IRB issues

I read the Andrews University (2009) guidelines for human subjects research, understood the guidelines, and faithfully adhered to them recognizing that “research involving human subjects should be carried out with a profound sense of the sacredness of the human will and existence, with respect and concern for the dignity and welfare of the people who participate, and with cognizance of federal and state regulations, University policy, and professional standards” (p. 4) were in the best interest of everyone involved in the study. I received IRB approval before doing my research.

Conclusion

In summary, this chapter described my research design, instrumentation, data collection, and analysis procedures to better understand the professional learning practices of Christian school teachers as surveyed by NSDC’s Standards Assessment Inventory, teacher focus group interviews, and written reflections. The design attempted to detail teachers’ professional learning practices in light of current educational research of successful professional learning practices to discover any insights and/or commonalities in the professional learning of teachers at Christian schools in a large Midwest metropolitan area.

CHAPTER FOUR

RESEARCH FINDINGS

Introduction

The purpose of this sequential, explanatory mixed-method, multi-case study was to explore the professional growth experiences reported by K-12 teachers at Christian schools. The study collected data from both an online survey and through focus group interviews that included written reflections. The results of both the quantitative and qualitative data are reported in this chapter. First, the sample is explained. The second section reviews descriptive statistics from the 171 online surveys used from the 9 schools. The third section reports general themes and specific responses to focus group interviews and written reflections from the 37 teachers who participated in the qualitative portion of this mixed-method study.

Sample Population

Nine Christian schools from the Detroit metropolitan area were invited to participate in the study. All accepted the invitation. I invited approximately 250 teachers to participate in the online survey of whom 171 teachers responded. Seven school administrators completed the survey, but their submissions were not included in the findings, since teachers were the focus of the study. The number for each survey item varies from 144-157 since every teacher did not respond to every question.

The online survey requested a response to a number of demographic questions. I have provided the information in Table 1, which reports the number of years teachers have taught at the teachers' current school, the total number of years the teachers have taught, the grade levels taught, and the core areas taught by each teacher.

Quantitative Findings

This section reports findings from the NSDC- SAI survey. Responses are represented by three categories: (a) Context, (b) Process, and (c) Content. These categories are broken down into 12 areas that represent the NSDC Standards for Staff Development. A total of 60 items was included on the survey, five indicator items for each of the 12 NSDC standards. Teachers rated the indicators using a Likert scale: 0=Never, 1=Seldom, 2=Sometimes, 3=Frequently, and 4=Always.

Table 2 shows the average response values for each of the questions grouped by standard and standard category (Context, Process, and Content). The 12 areas discussed are as follows: within the context area are (a) learning communities, (b) leadership, (c) resources; within the process area are (d) data-driven, (e), evaluation, (f) research-based, (g) design; and within content area are (h) learning, (i) collaboration, (j) equity, (k) quality teaching, and (l) family involvement.

The following paragraphs describe the results from the online survey. I reported the three main categories with secondary domains, including results from each survey question. I abbreviated the online items in the tables to facilitate reporting of data. The reader may wish to read the full questions in the appendix to more fully understand this discussion. Items had a Likert scale from 0 to 4, with 0 being *never* and 4 being *always*. As such, means as low as 0 or as high as 4 were possible, and a mean of 2 was the mode.

Table 1

Teacher Information

Variables	Frequency	Percentage
<i>Years in Education</i>		
0 - 1 Years	3	2
2 - 4 Years	25	16
5 - 9 Years	28	18
10 - 20 Years	45	29
21+ Years	52	34
<i>Years at Current School</i>		
0 - 1 Years	20	12
2 - 4 Years	39	24
5 - 9 Years	27	17
10 - 20 Years	41	25
21+ Years	34	21
<i>Grade Levels Taught</i>		
Pre-K	5	3
K	26	16
1 st	23	14
2 nd	25	15
3 rd	28	17
4 th	29	18
5 th	33	20
6 th	36	22
7 th	51	31
8 th	52	32
9 th	60	37
10 th	62	38
11 th	69	43
12 th	63	39
Other	3	2
<i>Core Areas Taught</i>		
Math	75	46
Language Arts	71	44
Fine Arts	18	11
World Languages	7	4
Physical Education	11	7
History	59	36
Other	13	40

Table 2

Summary of Quantitative Findings

CONTEXT					
Learning Communities		Leadership		Resources	
#9	2.5	#1	3.3	#2	2.4
#29	1.4	#10	2.7	#11	2.4
#32	2.5	#18	2.6	#19	2.0
#34	2.0	#45	3.1	#35	2.9
#56	1.8	#48	2.6	#49	2.5
Average	2.0	Average	2.9	Average	2.5

PROCESS					
Data-Driven		Evaluation		Research-Based	
#12	2.0	#3	1.4	#4	2.4
#26	1.9	#13	2.2	#14	2.1
#39	1.9	#20	1.9	#21	2.4
#46	2.4	#30	1.7	#36	2.6
#50	1.8	#51	1.8	#41	2.3
Average	2.0	Average	1.8	Average	2.3

Design		Learning		Collaboration	
#15	1.9	#5	2.5	#6	2.3
#22	2.3	#16	2.0	#23	1.7
#38	2.7	#27	2.0	#28	2.5
#52	2.3	#42	2.4	#43	2.8
#57	2.4	#53	1.5	#58	2.7
Average	2.3	Average	2.1	Average	2.4

CONTENT					
Equity		Quality Teaching		Family Involvement	
#24	2.7	#7	2.2	#8	2.1
#33	3.8	#17	2.3	#31	3.4
#37	3.4	#25	2.5	#40	1.8
#44	3.6	#54	1.9	#47	2.9
#59	2.0	#60	2.6	#55	3.1
Average	3.1	Average	2.3	Average	2.7

Context

There were three secondary domains under the context category which are as follows: (a) learning communities, (b) leadership, and (c) resources. Each secondary domain represented five questions. I provide a table of descriptive statistics for each item grouped for these three areas and briefly explained each table below.

Learning Communities Domain

Five questions were posed under the domain of learning communities and had response rates from 91% and 97%. Statistics are shown in Table 3.

Table 3

Learning Communities Domain

<i>Learning Communities</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
9. Whole Staff	157	2.48	1.023	2	29	45	54	27
29. Observe	154	1.37	1.143	39	53	37	16	9
32. Beginning	147	2.51	1.094	7	18	45	47	30
34. Feedback	148	1.97	1.094	10	46	44	34	14
56. Examine	150	1.81	1.006	16	38	60	30	6

Note. Group Mean is 2.03; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Item 9, *The teachers in my school meet as a whole staff to discuss ways to improve teaching and learning*, had a mean of 2.5. This moderate score showed that, on average, teachers occasionally met as a staff to discuss the improvement of teaching and learning. Item 29, *We observe each other's classroom instruction as one way to improve our teaching*, had a low 1.4 mean, suggesting teachers rarely observed the classroom instruction of others as a way to improve their own instructional practice. Item 32, *Beginning teachers have opportunities to work with more experienced teachers at our*

school, had a mean of 2.5, showing that sometimes beginning teachers reported opportunities to work with experienced teachers. Item 34, *We receive feedback from our colleagues about classroom practices*, had a mean of 2.0 and indicated that teachers only occasionally received feedback about their classroom teaching. The last item under this domain, item 56, had a mean of 1.8. The responses to the question, *Teachers examine student work with each other*, indicated that teachers seldom consulted each other about their students' work.

Leadership Domain

Five questions fell under the leadership domain and had response rates from 91% and 97%. Statistics are shown in Table 4.

Table 4

Leadership Domain

<i>Leadership</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
1. Belief	156	3.37	0.888	2	6	13	47	88
10. Decisions	154	2.65	0.875	0	19	38	75	22
18. Commitment	157	2.63	1.040	3	20	46	51	37
45. School Culture	147	3.09	0.843	0	5	31	57	54
48. Empowerment	148	2.64	1.043	5	13	47	48	35

Note. Group Mean is 2.88; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

The first question, item 1, in this section, had a mean of 3.3. The responses to the question, *Our principal believes teacher learning is essential for achieving our school goals*, indicated that teachers strongly believed that their principals think professional learning was important in obtaining school goals. Item 10, *Our principal's decisions on*

school-wide issues and practices are influenced by faculty input, had a mean of 2.7 which reported that faculty input was moderate. *Our principal is committed to providing teachers with opportunities to improve instruction*, item 18, had a moderate mean of 2.6. Although school leaders were seen as valuing professional learning, it was reported they only occasionally acted on teacher recommendations and sometimes provided learning opportunities. Item 45 had a mean of 3.1. The question, *Our principal fosters a school culture that is focused on instructional improvement*, indicated that these Christian school principals fostered a strong learning culture within their schools. The last item, under leadership, is as follows: *I would use the word, empowering, to describe my principal*. This item, item 48, had a mean of 2.6. This revealed teachers at these schools felt empowered at times.

Resources Domain

Five questions pertained to resources for professional learning and had response rates from 89% to 97%. Statistics are shown in Table 5.

Table 5

Resources Domain

<i>Resources</i>	<i>#</i>	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
2. Implementation	157	2.47	1.035	5	22	51	52	27
11. Technology	156	2.45	0.972	2	23	59	47	25
19. Substitutes	155	2.08	1.472	31	30	27	29	38
35. Creativity	146	2.83	0.935	1	12	36	59	38
49. Goals	144	2.53	0.953	3	17	46	57	21

Note: Group Mean is 2.47; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Item 2, *Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school*, had a mean of 2.4 and indicated teachers occasionally received learning support from others to implement new teaching practices. Item 11, *Teachers at our school have opportunities to learn how to use technology to enhance instruction*, had a mean of 2.4 and showed teachers received some opportunities to learn how to utilize technology in the classroom. Item 19, *Substitutes are available to cover our classes when we observe others' classes or engage in other professional development opportunities*, had a mean of 2.0. This modest score revealed that classroom coverage was not often available for these teachers to receive professional development. Item 35, *In our school we find creative ways to expand human and material resources*, had a mean of 2.9 and indicated that teachers were resourceful in their professional learning efforts. The last item under this domain, item 49, had a mean of 2.5. The responses to the question, *Schools goals determine how resources are allocated*, suggested school goals somewhat helped determine the allocation of professional development resources.

Process

There were six secondary domains under the process category, which are as follows: (a) data-driven, (b) evaluation, (c) research-based, (d) design, (e) learning, and (f) collaboration. Each secondary domain was composed of five questions. I briefly report below each of the five questions for these six domains and the descriptive statistics for each question and domain.

Data-Driven Domain

Five questions fell under the data-driven theme and had response rates from 88% to 97%. Statistics are shown in Table 6.

Table 6

Data-Driven Domain

<i>Data-Driven</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
12. Using Data	157	1.96	0.940	8	41	64	37	7
26. Effectiveness	149	1.86	1.027	17	34	56	37	5
39. Planning	143	1.88	1.123	20	28	55	29	11
46. Discussions	145	2.40	0.938	4	18	55	52	16
50. Analyze	146	1.81	0.985	13	44	51	34	4

Note. Group Mean is 1.98; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

The first question, item 12, in this section, had a mean of 2.0. The responses to the question, *Teachers at our school learn how to use data to access student learning needs*, indicated that teachers on occasion utilized data to understand the learning needs of students. Item 26, *Teachers at our school determine the effectiveness of our professional development by using data on student improvement*, had a mean of 1.9. Faculty occasionally used data to determine the quality and effectiveness of professional development. *Teachers use student data to plan professional development programs*, item 39, had a mean 1.9. These teachers reported student data are seldom used in planning professional development activities or in making teacher improvement decisions. Item 46 had a mean of 2.4. The question, *Teachers use student data when discussing instruction and curriculum*, indicated that these Christian school teachers sometimes used student data when discussing curriculum and instruction. The last item,

under data-driven, is as follows: *Teachers analyze classroom data with each other to improve student learning*. This item, item 50, had a mean of 1.8. This moderately low rate concluded that teachers at these schools seldom evaluated student progress together.

Evaluation Domain

The questions that dominated this section dealt with the evaluation of schools' professional practice. The response rates in this section were from 90% to 96%. Statistics are shown in Table 7.

Table 7

Evaluation Domain

<i>Evaluation</i>	<i>#</i>	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
3. Pre-designed	153	1.42	1.207	45	38	37	26	7
13. Evaluation of PD	155	2.22	1.158	11	33	46	41	24
20. Time	156	1.86	1.150	19	43	50	29	15
30. Planning	146	1.65	1.124	26	40	47	25	8
51. Analyze	145	1.77	0.984	18	30	67	27	3

Note. Group Mean is 1.78; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Question 1, item 3 of the survey, *We design evaluations of our professional development activities prior to the professional development program or set of activities* had a mean of 1.4. Item 13 had a mean of 2.2. The question, *We use several sources to evaluate the effectiveness of our professional development on student learning*, revealed limited evaluation of quality professional development as it pertained to student learning. Question 20, *We set aside time to discuss what we learned from our professional development experiences* had a mean of 1.9. Item 30, *At our school evaluation of*

professional development outcomes are used to plan for professional development choices, had a moderately low mean of 1.6. The last item in this section, item 51, had a mean of 1.8. Responses to the question, *We use students' classroom performance to assess the success of teachers' professional development experiences*, disclosed that these Christian school teachers rarely assessed their school's professional development programs and activities.

Research-Based Domain

Five questions were posed under the domain of research-based. Teachers responded at the rate between 86% and 94%. See Table 8.

Table 8

Researched-Based Domain

<i>Research-Based</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
4. Research	152	2.40	1.012	6	20	54	51	21
14. Decisions	153	2.10	1.105	15	24	62	35	17
21. Evidence	151	2.36	0.963	8	13	61	54	15
36. Results	140	2.56	0.969	3	15	47	51	24
42. Effectiveness	134	2.32	0.781	3	10	69	45	7

Note. Group Mean is 2.35; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Item 4, *Our school uses educational research to select programs*, had a mean of 2.4. This moderate score denoted schools sometimes consulted educational research in making staff development decisions. Item 14, *We make decisions about professional development based on research that shows evidence of improved student performance*, had a mean of 2.1. This moderate score implied that teachers sometimes employed

research in professional learning decisions. Item 21, *When deciding which school improvement efforts to adopt, we look at evidence of effectiveness of programs in other schools*, had a mean of 2.4 and signaled that some of these schools consulted other schools with successful school improvement efforts. Item 36, *When considering school improvement programs we ask whether the program has resulted in student achievement gains*, had a mean of 2.6 and indicated that schools considered student achievement gains important in school improvement decisions. The last item under this domain, item 41, had a solid mean of 2.3. The responses to the question, *The school improvement programs we adopt have been effective with student populations similar to ours*, indicated that these Christian schools made decisions based on schools that are similar to them.

Design Domain

Five questions pertain to the design of professional learning experiences, and teachers responded at the rate between 87% and 96%. See Table 9.

Table 9

Design Domain

<i>Design</i>	<i>#</i>	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
15. Learning	156	1.85	1.146	19	43	51	28	15
22. Strategies	152	2.27	1.029	9	20	62	43	18
38. Improvement	143	2.69	1.158	8	12	40	39	44
52. Knowledge	141	2.30	0.984	7	20	50	52	12
57. Longevity	142	2.39	0.974	6	17	50	54	15

Note. Group Mean is 2.30; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Item 15, *At our school teacher learning is supported through a combination of strategies*, had a mean of 1.9. This moderately low score indicated that teachers only

occasionally employed a variety of professional growth activities. Item 22, *We design improvement strategies based on clearly stated outcomes for teacher and student learning*, had a mean of 2.3. This moderate score indicated that professional learning strategies were, at times, based on clearly stated learning outcomes. Item 38, *Teacher professional development is part of our school improvements plan*, had a mean of 2.7. This score revealed that professional development was normally a part of a school's improvement plan. Item 52, *Teachers' prior knowledge and experiences are taken into consideration when designing staff development at our school*, had a mean of 2.3 and indicated that teachers' prior knowledge and experiences were sometimes considered in designing professional development activities. The last item under this domain, item 57, had a mean of 2.4. The responses to the question, *When we adopt school improvement initiatives we stay with them long enough to see if changes in instructional practices and student performance occur*, seemed to indicate that schools stayed with school improvement initiatives to give time to help determine success.

Learning Domain

Five questions fell under the learning domain. Teachers responded at the rate between 91% and 97%. See Table 10.

The first question, item 5, in this section, had a mean of 2.5. The responses to the statement, *We have opportunities to practice new skills gained during staff development*, indicated that teachers believed that they received opportunities to practice newly learned skills. Item 16, *We receive support implementing new skills until they become a natural part of instruction*, had a mean of 2.0. Of the respondents, faculty support was moderate. *Our professional development promotes deep understanding of a topic*, item 27, had a

mean of 2.0. Item 42 had a mean of 2.4. The question, *At our school teachers learn through a variety of methods*, indicated that these Christian schools offered teachers a variety of learning methods. The last item, under learning, is as follows: *At our school teachers can choose the types of professional development they receive*. This item, item 53, had a mean of 1.5. This modest rate concluded that teachers at these schools rarely chose their own professional learning activities.

Table 10

Learning Domain

<i>Learning</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
5. Practice	156	2.52	1.074	10	15	40	66	25
16. Support	157	1.98	1.053	16	31	59	42	9
27. Understanding	151	2.03	0.905	9	27	70	40	5
42. Variety	147	2.41	1.116	9	23	36	56	23
53. Choice	148	1.47	1.115	31	50	41	18	8

Note. Group Mean is 2.38; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Collaboration Domain

There were five questions that pertain to the last domain in this section, collaboration, and teachers responded at the rate between 90% and 96%. See Table 11.

Item 6, *Our faculty learns about effective ways to work together*, had a mean of 2.3. This score indicated that teachers learned about effective ways to work together, just not often. Item 23, *My school structures time for teachers to work together to enhance student learning*, had a mean of 1.7. This moderately low score indicated that teachers occasionally received time to work together. Item 28, *Our school's teaching and learning goals depend on staff's ability to work well together*, had a mean of 2.5. This score

revealed that a school's learning and teaching goals sometimes depended on teachers working together. Item 43, *Our school leaders encourage sharing responsibility to achieve school goals*, had a mean of 2.8 and indicated that teachers were encouraged by school leaders to share responsibilities to achieve goals. The last item under this domain, item 58, had a mean of 2.7. The responses to the question, *Our principal models effective collaboration*, indicated that principals at these Christian schools faithfully modeled collaboration.

Table 11

Collaboration Domain

<i>Collaboration</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
6. Learning	154	2.34	1.049	8	22	55	48	21
23. Time	156	1.72	1.027	17	53	49	31	6
28. Goals	152	2.47	1.035	4	21	55	43	29
43. Sharing	146	2.80	0.899	0	17	25	74	30
58. Modeling	147	2.69	0.888	1	11	48	59	28

Note. Group Mean is 2.40; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Content

There were three secondary domains under the content category, which are as follows: (a) equity, (b) quality teaching, and (c) family involvement. Each secondary theme represented five questions. I briefly report each question within the three domains. I briefly report each item with questions and means within the themes. Tables 12-14 report descriptive statistics of each domain item.

Equity Domain

Five questions were posed under the domain of equity and response rates between 90% and 96%.

Table 12

Equity Domain

<i>Equity</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
24. Diversity	156	2.70	0.846	0	16	38	79	23
33. Respect	148	3.78	0.434	0	0	1	31	116
37. Expectations	147	3.39	0.667	1	0	9	68	69
44. Creation	149	3.60	0.580	0	0	7	46	96
59. Training	146	2.03	0.961	8	33	60	37	8

Note. Group Mean is 3.10; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Item 24, *At our school we adjust instruction and assessment to meet the needs of diverse learners*, had a mean of 2.7. This score indicated that teachers adjusted instruction and assessments to meet students' needs. Item 33, *teachers show respect for all of the student sub-populations in our school*, had a mean of 3.8. This very high score indicated that Christian school teachers respected all students, no matter their background. *Teachers at our school expect high academic achievement for all our students*, item 37, had a mean of 3.4. This high score revealed that teachers had high expectations of all their students. Item 44 had a mean of 3.6. Responses to this item, *We focused on creating positive relationships between teachers and students*, indicated that teachers considered building quality relationships with students a high priority. The last item under this domain, item 59, had a mean of 2.0. The responses to the question, *Teachers receive training on curriculum and instruction for students at different levels of*

learning, indicated that teachers sometimes received training in curriculum and instruction.

Quality Teaching Domain

Five questions fell under the quality teaching domain. Response rates were between 90% and 95%. See Table 13.

Table 13

Quality Teaching Domain

<i>Quality Teaching</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
7. Understanding	154	2.18	1.061	9	32	52	45	16
17. Strategies	152	2.25	1.044	11	20	56	50	15
25. Research-Based	150	2.54	0.864	2	15	49	68	16
54. Assessment	145	1.94	1.005	12	33	59	33	8
60. Conversations	149	2.64	0.932	2	15	44	62	26

Note. Group Mean is 2.31; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

The first question, item 7, in this section, had a mean of 2.2. The responses to the question, *Teachers are provided opportunities to gain deep understanding of the subject they teach*, indicated that less than half of the teachers believed that they received opportunities to gain a deeper understanding of the subjects they teach. Item 17, *The professional development that I participate in models instructional strategies that I will use in my classroom*, had a mean of 2.3 which indicated faculty input was moderate. *We use research-based instructional strategies*, item 25, had a mean of 2.5. Item 54 had a mean of 1.9. Responses to the question, *Our school's professional development helps me learn about effective student assessment techniques*, indicated that these Christian school teachers occasionally learned about effective student assessment techniques. The last

item, under quality teaching, is as follows: *Our administrators engage teachers in conversations about instruction and student learning*. This item, question 60, had a mean of 2.7. This moderately high response concluded that teachers at these schools believed their administrators engaged their teachers in faculty conversations about teaching and learning, just not frequently.

Family Involvement Domain

Five questions pertain to resources for family involvement. The response rates in this section are from 86% to 95%. See Table 14.

Table 14

Family Involvement Domain

<i>Family Involvement</i>	#	<i>X</i>	<i>SD</i>	<i>N</i>	<i>S</i>	<i>SM</i>	<i>F</i>	<i>A</i>
8. Involvement	154	2.14	0.971	6	30	62	43	13
31. Communication	148	3.39	0.762	0	1	22	43	82
40. Community	139	1.78	1.057	16	40	50	25	8
47. Relationships	146	2.92	0.979	1	12	34	50	49
55. Home	150	3.05	0.775	0	5	26	75	44

Note. Group Mean is 2.66; N= Never, S= Seldom, SM= Sometimes, F= Frequently, A= Always.

Item 8, *Teachers are provided opportunities to learn how to involve families in their children's education*, had a mean of 2.1. This score indicated that teachers received opportunities to learn how to involve families in their children's learning. These opportunities were not very often, however. Item 31, *Communicating our school mission and goals to families and community members is a priority*, had a mean of 3.4. This high score indicated that communicating the school's mission was a priority. Item 40, *School*

leaders work with community members to help students achieve academic goals, had a mean of 1.8. This modest score revealed that the private Christian schools surveyed seldom included community members in their educational process. Item 47, *Our principal models how to build relationships with students' families*, had a mean of 2.9 and indicated that principals modeled relationship building effectively. The last item under this domain, item 55, had a mean of 3.1. The responses to the question, *Teachers work with families to help them support students' learning at home*, indicated that teachers worked with families to help them support students' learning at home.

To summarize some of the highlights, I mention the top three items with the highest means and the three items with the lowest means. Furthermore, I indicate the top three categories, both highest and lowest means. Of all the items in the survey, the top three fell within the equity category. Teachers had a very positive response to the following three items: item 33, showed respect for all students (3.8); item 37, teachers have high academic expectations for all students (3.4); and item 44, teachers created positive relationships with students (3.6). Of the major categories within the survey, equality (3.1), leadership (2.9), and family involvement (2.7) had the highest means, indicating that teachers had positive responses to their school's leadership in regard to the professional development efforts at these schools, and had a strong commitment to student learning and family involvement in student learning. The three categories with the lowest means were evaluation of professional practice (1.8), data-driven professional development practices (2.0), and learning communities (2.0) which suggested these teachers had less support for the belief that their schools practiced characteristics of professional learning communities.

Qualitative Findings

In this section I report qualitative data collected from Christian teachers on their professional development. These data came from written reflections, audio transcriptions, and field notes from focus group interviews. Appendix B lists the focus group questions and the written reflection question. Nine schools agreed to allow me to interview their teachers; however, due to scheduling difficulties, data were collected from only seven of the nine schools.

My research questions are as follows: (a) How do Christian school teachers professionally learn and develop, and (b) What school processes and practices and individual and professional experiences support their professional learning and why?

I coded interview field notes, transcripts, and written reflections into themes. I discovered key words and ideas, as Merriam (1988) suggests, watching for issues such as regularity, distinctiveness, and previously unfamiliar ideas. I then identified the overarching themes, categories, or patterns that gave insight into the professional learning of teachers at Christian schools (Saldana, 2009). The data collected were nuanced and interesting and helped inform educational leaders at Christian schools of the professional development experiences of Christian school teachers.

The following sections describe the results through four categories that organize the data well. The four categories for consideration are as follows: (a) personal beliefs and influences, (b) types of professional development experiences, (c) challenges to professional growth and learning, and (d) school leadership and the professional development experiences of teachers. Subcategories were also developed for each area.

Personal Beliefs and Influences

I used the category personal beliefs and influences to capture items related to the teachers' personal experiences, including their faith experiences that influenced their professional learning. I identified two relevant secondary themes: (a) teachers' personal religious beliefs, and (b) personal experiences and nonprofessional experiences, including family contributions. I report briefly on each of these.

Personal Religious Beliefs

A couple of themes consistently emerged from the various focus group interviews. One of the themes was directly related to the teachers' personal faith commitment. A few areas that seemed to become clear are as follows: (a) teachers' personal faith impacted their professional growth as teachers, and (b) these teachers felt called to the teaching profession. A number of teachers referred to their personal religious experiences as influential to their call to teaching, in their preparation to teach, and in their continual growth as teachers. Phrases like "God preparing my heart," "trusting God," and "growing as an individual in my relationship with Christ" were common in the written reflections.

Personal faith

One teacher, while reflecting on the experiences that contributed to her being the teacher she is today, wrote that it was "my Christian upbringing and personal experience with Jesus Christ" that influenced me as a teacher. Another stated, "God continually gives me strength." In a number of written reflections God was the first thing mentioned. Referring to God, a teacher stated, "He has blessed my efforts to become a better teacher.

He is the one who gives me the strength and ability I have.” While discussing the importance of content-specific professional development, one teacher interjected:

Obviously, preparation in content areas is foundational in being able to teach, but in our Christian context, I think that serves as just a starting point in terms of having the impact that we desire to have on young people. Your walk with the Lord, your growth in your own personal, spiritual faith, I think, has a big impact on the overall commitment that it takes to stay with Christian education. This is my 35th year of teaching in Christian schools. And when I started in the late 70’s, the Christian school movement was just beginning to blossom. There was a great enthusiasm among people of my generation for Christian education. There was a, ‘this is where we’re going. This is it.’ you know. And over the intervening years, there’s been a quite a bit of ‘ups and downs’ in the Christian school movement. And there are a number of people in my generation, who’ve been in Christian education for that amount of time, but there’s a large number that have gone in other directions. And, you know, there’s so many things that are involved in enabling that kind of thing to continue. It’s more than just knowing your stuff that makes that possible.

A sense of calling

Not only have teachers considered their personal faith vital to their personal and professional growth, they entered teaching as a calling to ministry, a calling that was evident by the gifts God had given them. One teacher, while listing several things that impacted her teaching journey, wrote:

God has gifted me to teach. It was clear from a young age that my God given gifts lend themselves to this profession. The gift of teaching coupled with administration, compassion, mercy, and wisdom work together to give me an ability to explain things, teach concepts clearly, and interact with people. These gifts play out in teaching school children as well as the ministry of teaching adults in a Christian setting.

A number of teachers believed God called or directed them into Christian school ministry. One gentleman wrote, “God put a desire in my heart to help others learn and understand when I was in elementary school.”

Christian school teachers' faith experiences played an important role in their development as teachers as well. One teacher reported:

Well one thing is a personal growth in my walk with the Lord. And I know we all could say that. And as I've taught through the years, my walk with the Lord [has been very important]. I can see how the Lord has worked inside me to bring more of his character into my life and more of his wisdom to be a better teacher, have better relationships with my students, my parents, and see how to work effectively, through His Word. . . . A lot of times I can see things out there that are beneficial in the world, so to speak, you know what I mean, but unless the Lord is there it's not going to be effective. It's not going to make a change in my life. So, that's really the biggie, probably the most important factor for me.

Prayer, Christian educational experiences, godly role-models and colleagues, God's grace, and personal religious experiences contributed to the overall professional growth and learning of these teachers.

Personal Experiences

Besides the influence from the teachers' religious background, personal experiences played an important role in the development of these teachers. One teacher stated, "Life experiences continue to shape and change how I operate in the classroom." Two themes that came to light in this area are as follows: (a) parental influences, and (b) educational experiences, including people and travel experiences.

Parental influences

Parenting made an important contribution to these teachers' growth as teachers. A good number of teachers referred to "being a parent" and/or being influenced "by their parents" as an important aspect of teacher growth and development.

Teachers reported that being parents affected their teaching positively. Being a parent has helped some teachers to be more confident, relaxed, and patient. For one

teacher being a parent changed her whole professional outlook. She wrote, “A key event that helped to shape my teaching was having my own children. From the moment they were born, I saw teaching differently.” Being a parent helped some of these teachers be more compassionate and understanding. One teacher, a single dad raising three girls, wrote that he had become more creative and a better classroom manager because of being a parent. He returned to this topic during the focus group interview and stated:

I think for me it’s got to be a combination of a lot of things. . . . I didn’t even start in education until I was about 40 yrs. old, or 45, so I didn’t have the early introduction to the stuff. Part of my education was raising my own 3 daughters by myself and learning what worked for them and what didn’t.

Being a parent assisted another teacher with classroom management skills by giving her techniques for working with students that she lacked before having children. “Being a parent has helped me to better relate to the frustrations and fears that parents naturally have,” one teacher stated. Having children of her own helped one teacher “see the big picture.”

A smaller group of teachers referred to their parents as very influential in their teaching. This group spoke of their parents as mentors. These teachers indicated that they became the people they were raised to become. One teacher’s father taught high school for 30 years; another’s parents were both teachers at the school he attended. He wrote,

I was influenced from an early age by my parents who were both Christian school teachers. I had many outstanding examples as I went through school that gave me good examples of how to conduct myself in a professional manner and more importantly a Christ-like example.

Another teacher wrote, “My parents are teachers by profession. I grew up watching and learning good teaching habits and practices.”

Educational experiences

Life experiences have played a large role in the professional learning of these Christian school teachers, particularly educational experiences. One teacher stated it well:

I heard this from another teacher once. I don't remember who it was even. It kind of eludes me at the moment. But, he called it, 'what can I do with this?' And it was just about anything that he was doing was just focused on how he could apply it in some meaningful way in the classroom environment. And it doesn't always work out at all. Sometimes you're watching something on television and you notice something that could definitely be used in a math class or in some other kind of setting that might not have otherwise noticed if you weren't always kind of attuned to that sort of thing. And I think that kind of mindset that you're always looking for something that you could actively use in the class that might be beneficial, or educational. In some way spur people on in their education. I think this is what you have to do, I guess. And that, like [teacher] said, is very independent. And I think that's the way I look at it. I guess in short, kind of our own experiences. And we share those with others and apply what works, I guess.

High-school and college experiences, even after years of teaching experience, influenced these teachers. Pre-professional learning experiences helped shape these Christian school teachers and indicated why and/or how they learn as professionals today.

These teachers' early educational experiences played a strong role in their development as teachers. A good number of teachers reflected on their K-12 and/or college education by expressing how they became the teacher they are today. One teacher, reflecting on her college experience, voiced:

Well teacher training had a bit to do with it, if you classify that as professional development. You know, just the college you went to. I don't know about everyone else's experience, but mine was really, really positive. And at a critical time in my life, it really meant a lot as I was able to interact a lot with the professors, and got on board with the staff there. So that beginning launch is really, really important time for teachers, and I think that can be a positive experience and you're really motivated and feel like you're being well trained—you know you go into a lot of schools and see different things and are well connected. I think for me that was the initial step in professional development that we don't often think about, but it's kind of the critical one at the beginning.

Whether it was examples of good teaching or bad teaching, these experiences shaped them. The most vivid recollections were the teachers' high-school and college experiences. Teachers' student teaching experiences were fundamental in the direction taken in future growth and learning. A couple of teachers mentioned travel as an important educational experience.

When these teachers reflected on their professional growth as teachers, life experiences, particularly educational experiences, seemed to be a primary contributor to their learning. Educational experiences, including childhood teachers and parents, played an important role in their growth as Christian school teachers.

Professional Development Experiences

Two secondary themes emerged within this very broad category, which are as follows: (a) school-sponsored professional development activities, and (b) teacher self-directed learning experiences. In this section, I report in detail the professional development and learning experiences of the Christian school teachers studied, since my research findings were directly related to my research questions.

School-Sponsored Activities

Teachers reported some variations in the school-initiated professional development activities from school to school; however, the professional development efforts at the schools were, for the most part, very similar. Schools either hosted teacher in-service days and dedicated staff meeting time to facilitate professional development opportunities, or encouraged teachers to attend conferences and workshops away from the school campus. One Christian school teacher reflected, "Opportunities to attend

seminars and workshops have added to my development [and] give me fresh and new ideas.” She continued, “School also provides opportunities to build on professional development by bringing in special speakers to share new and different ways of teaching.” Another teacher stated:

I know workshop seminars [and] conferences are very, very helpful, whether they’re at a national level [or] a regional level. ACSI has done a lot of them. We’ve done a lot of conferences and local workshops and seminars, some that are presented through the local public school systems.

One school, because of severe financial restraints, did not offer any school initiated professional development. The teachers, at this school, initiated their own professional learning experiences. Teachers reported time and finances were major factors in these schools’ ability to provide quality professional development. For the most part, professional development opportunities were limited to school in-service days, and to a lesser extent, regular staff meetings. A teacher mentioned that she grew professionally by “attending professional development seminars” and continued by stating, “The teachers are encouraged to go to seminars about writing with the Six Traits, math, reading, science, and social studies topics.” Concerning the practice of using staff meetings for professional learning, a teacher stated, “We use our Wednesday teachers meetings to develop our educators.” Teachers reported their professional learning opportunities normally centered on workshops, book discussions, and educational videos geared towards all teachers. Another teacher explained:

I have gotten lots of teaching ideas from attending professional development sessions. The instructors are usually friendly and willing to share their information. I am always looking for new ideas in teaching a particular skill or in learning new games for variety.

She continued:

Our school has done a variety of professional development days. We have done all school biblical training, special speakers have been brought in to share a topic, as a staff we have all attended a conference or gone to another school to learn and share ideas, and we have been encouraged to go to workshops/conferences that will offer development in our area of teaching.

Teachers reported that other opportunities for professional growth were tied to changes in curriculum materials (e.g., new textbooks) or with changes in instructional approaches (e.g., Singapore Math). “Our administrator,” a teacher commented, “challenges us to improve ourselves by reading books and improving the school’s curriculum. New curriculum materials have changed how I teach, especially Singapore Math and now FIE (i.e., critical thinking curriculum).” A teacher commented:

One thing that has helped me is the books that we have to read for in-service. As boring as they are, it’s made me think, especially with projects they give us, to redo things, to look at things in a different light, perhaps. Even if you don’t necessarily agree with . . . I don’t know if that’s the best way to do this or not. The fact about looking at it from a different angle is helpful, because it makes you think about your thinking.

The teacher continued:

I wrote that in my journaling, about the books we’ve read. And our teaching is kind of like our Christian walk. We’re always growing, need to be reminded of things, need to go back. And in-service seems to be a good time for that. We’re getting ready to go again. We’re rethinking things. . . . We’re evaluating, ‘is what we’re doing the best way?’, ‘are there ways we can tweak it?’ and of course, a lot of that we do on the fly when we’re in the classroom. If something’s not working, ok, we got to—you know—we don’t have time to wait until next year, we got to do it now. But these are all kind of . . . all the things are factors into making us into what we are and what we do every day.

It was reported that some of the schools tied teacher observations and performance evaluations to professional growth and learning. One teacher listed “professional performance evaluations” as influential to her professional growth and development. Many of the school-initiated professional learning experiences at these schools fell into the “traditional” category.

Teacher Self-Directed Learning Experiences

Teacher responses indicated that time and schedule limitations, combined with financial constraints, encouraged these Christian teachers to look beyond the school walls for professional learning opportunities. Concerning these important issues, a teacher reflected:

Like what [teacher] said with the time . . . it seems that at Christian schools, we're pulled in a little bit more directions, because it goes back to finances. You don't have this big staff, so you may be teaching classes you're not as familiar with. So you're trying to stay up with that. So you don't have time to research new ideas or whatever. You're just trying to get the basics down so that you can, you know, do that. . . . You know, you're doing sports. You're also involved in your church. So, the time outside is cut and in school you may have lots of different directions. So, it's like, I don't have time to read that book to be able to develop further like I would like.

Some teachers reported that their schools eased the financial pressures associated with professional learning by utilizing government funding through their local school districts; however, funding was still limited and available only for core content areas.

Teacher self-directed professional learning experiences mentioned by the teachers were divided within two broad areas: (a) professional learning experiences, and (b) non-formal learning experiences. Learning activities appeared to include, but were not limited to, attending workshops and seminars, learning through the Internet, working towards graduate degrees, and reading professional literature. As reported by the teachers, professional learning experiences typically included such things as teacher self-reflection, teacher discussions, student input, and classroom experience (i.e., trial and error).

Professional learning activities

Teachers reported that most of their professional learning activities were teacher initiated. Although a number of these learning activities were school initiated, the majority of time the teachers studied took on these learning activities on their own.

The most common form of professional development at these Christian schools was workshops, seminars, and conferences. Most of these learning events took place off the school campus. A majority of teachers preferred off-site conferences and workshops. One teacher commented, “Outside conferences are better and preferred, because it is a different environment.”

Teachers reported they preferred conference settings, and they enjoyed these opportunities for a variety of reasons. Some teachers enjoyed growing closer to the other teachers. They considered it a time of bonding and building community among colleagues. The time away with the other teachers, the automobile rides to and from the conferences, and the meals together, all contributed to the sense of Christian fellowship that created a greater sense of community. For others, it was a great way to refresh their teaching by being introduced to new concepts and methodologies. “I am always looking for new ideas,” a teacher stated. Another wrote, “I have become a better teacher by attending/participating in professional training.” A number of teachers reported enjoying educational conferences particularly geared toward Christian school teachers. Teachers said these events gave them an opportunity to grow spiritually. A major benefit to attending larger conferences was the teachers received opportunities to choose the workshops and seminars they attended. While reflecting on choice a teacher stated,

I prefer a more specialized approach to the individual needs of a teacher. Perhaps a list of what we need like technology training, classroom management, or topics

in our field that we would like to explore more. After a few years of teaching, the one size fits all doesn't work very well. I would like to be more involved with the decision of my development, rather than the administration making those decisions.

A good number of teachers believed the greatest benefit to their professional learning was attending content- or subject-specific conferences. These national or state content-specific conferences had the most potential for professional growth, according to a number of these teachers. A secondary science teacher commented that one's "content area is the starting point" of professional growth and development. Another teacher suggested that schools pay for professional memberships for content-area teachers.

These teachers believed it was important to learn from the experts in their fields; therefore, attending individual seminars and workshops or taking graduate courses that have knowledgeable presenters was a priority. The importance given to quality instructors was seen in the following quote:

Probably my best teacher in grad school in education was Harvey Daniels, who is an author who does a lot with literature circles. He did literature circles with us, so he laid out books and said pick what you want because choice is important. He then paired us up by what [book] we picked. Then we met in literature circle groups and went through stuff, so he was teaching us the process while we were doing it. And then the thing he did which I was never able to do as a teacher is he wrote sticky notes on our paper to leave comments which they always say to do for kids. So when you get your paper back it wasn't this paper with red all over it, it was sticky notes with constructive comments. It was a back and forth dialogue. The fact that he took the time to model instruction and to teach us to do it (was important). I mean that just sticks. I remember that more than anything, because he modeled the teaching strategy while teaching [it]. That process sticks with you as much or more so than the actual content you get; you see it fleshed out. Give me the knowledge, but come on. How is it really going to apply [in the classroom]? If you do it, you're kind of like, oh, it can be done . . . this is a good model.

Furthermore, teachers wanted the presenters to model effective teaching and to give plenty of examples.

Teachers reported the Internet and online learning represented a large portion of their professional learning. The Internet gave the teachers access to ideas and instructional practices that were not available too many years ago. Many of these teachers routinely searched the Internet for instructional ideas and supplemental materials. A secondary science teacher utilized the Internet on a daily basis to improve his science knowledge and teaching skills. He was a member of an email list-serve that allowed fellow science teachers access to blogs, to teachers' questions and answers about effective teaching practices, to teacher thoughts on various content-specific issues, to professional and scholarly articles, and to teacher-created materials like lesson plans and instructional materials. He stated, "Professors and teachers report articles, thoughts and lesson plans." He continued by stating:

I'm on something called a list serve. I don't know if you know . . . it's an email where you sign up an organization and if one person sends to a central server it gets sent to everyone that's on the email list. Through the NSTA (National Science Teachers Association) and anyone who's a member can put a question out there at any time and anyone who has an answer will respond to it. So there are people from all over the country who will respond to it: professors, high school, elementary. And they're sending both their ideas, articles that might relate to their ideas and then what I think is the most helpful is their lesson plans for how they would attack that, whatever 'that' is. And so I probably get in the neighborhood of 25 emails a day through that, sometimes more, sometimes less. And so, sometimes they're not anything that I need and I can just delete them all because they're all on a thread of something that I think I have. But at other times it's been very helpful to me...to see, 'oh this person is doing this, this, and this' . . . 'How am I doing it?' . . . you know.

Another teacher commented on the benefit of technology:

I think with the addition of technology there are a lot of blogs and other things that come in that you can just gather so much knowledge from what's out there. In a nutshell, pick what you want, read it, boom, you're there. In 5 to 10 minutes you've gathered another thing and another thing, another thing and you have it. There are some list serves out there that have been real helpful to me in the last year or two . . . just catching the trends that are out there. Because when you're in

your office, you don't know what's going on out there unless you can catch on that way.

Therefore, the Internet has opened a much larger teacher social network through social media and chat rooms for a number of teachers.

The second most common type of professional learning activity among these teachers was working on master's and other advanced degrees. To the best of my knowledge, none of the schools participating in this study required teachers to work on their master's degrees, although at one school it was strongly encouraged and most of the teachers either had a master's degree or were working on one. A number of these teachers reported their graduate education key for them becoming the teacher they are today. One very experienced science teacher, who recently completed her doctorate, stated:

No doubt in my later years it was getting my advanced degree. You know that I've always loved what I do . . . always. But I felt that I needed a bit of a vitamin shot. So people say why in the world did you start your degree, but it was about what it was going to lead me to but what it was going to enable me to do where I am right now. And people say 'would you do it again' 'in a minute. I would do exactly the same way. It was just for me professionally; it was an incredible experience.

While speaking about her personal learning and growth as a teacher, one teacher mentioned that she grew professionally as a teacher because of her master's experience.

Another teacher responded during the same interview by stating:

I think for me it was probably my master's degree experience at Wayne State [University]. Not because of Wayne State. Let me clarify that, but me digging into the teaching of Math. And especially with the papers and projects, whatever that I did, looking at how students learn . . . kind of a constructivist point of view.

As mentioned earlier a number of teachers believed learning from scholars (and experts) was important, particularly if the instructional material was modeled by the professor.

Independent reading and research were a consistent and strong theme throughout the data. Teachers reported reading books, periodicals, and online research. A number of teachers were members of professional organizations that emphasized their particular content area. One teacher stated her aspiration “to change, update, and improve” through reading “articles, research, ideas and posts” from the Internet. As reported by these Christian school teachers, there was a desire to participate in independent self-study and learning. “Exploring, learning on my own” as one teacher concisely put it. Another commented that she was always “seeking out opportunities to improve.” One teacher explained her progress from formal learning opportunities to self-directed studies:

I know for me, probably, I know workshop seminars, conferences are very, very helpful whether they're at a national level, a regional level. . . . ACSI has done a lot of them—we've done a lot of instructional conferences and local workshop and seminars and some that are presented through the local public school systems. As I've progressed as an educator, my own independent self-study is probably the thing I learn from the most. I mean the books that I read, the research I do in the summertime and apply in the classroom, because it's something that I've selected that I know will help me; I think that's probably where I get the most professional development. . . . It's kind of what I initiate on my own in addition to all the other things I've mentioned.

Non-formal learning experiences

Teachers reported encountering a number of learning experiences during the school day. These were often unplanned, spontaneous, and included experiences such as teacher self-reflection/classroom experiences and teacher conversations/discussions.

Concerning learning experiences, one teacher asked two quality questions, which are as follows: (a) “What can I do with this information?” and (b) “How can I apply it to my class?” She continued, “Learning never stops, pursue learning and growth.”

For many of these teachers, reflecting on their instruction and evaluating their teaching were a part of their professional learning. One teacher recognized early in his career the importance of reflection and continued growth. He reported:

It's funny! I haven't been out of school all that long, but even in a short period of time you settle into this is the way I've done it. This has been successful. I don't want to vary from that, and then to have other ideas and think—wow—I could be doing this. I should be going to this, and I'd forgotten about this. So for me it has not been a particular class or seminar, but just getting back into pressing yourself and seeing that you can continue to grow. Working in education is an ongoing [process]. Things are always changing. You are finding new methods. Finding new teachers with wonderful ideas that may or may not work, but you think wow that's worth a try, so I absolutely love it.

One teacher mentioned that reflecting on her experiences was a daily and yearly event. She reflected on a daily basis, yet reflected, at the end of the year, on the whole year to evaluate her teaching. A couple of teachers referred to the process of self-reflection as “trial and error.” For another, experience determined what “ideas work, didn't work.” As one teacher mentioned, she learned “day by day, trial and error, learning by teaching.” Reflection was intimately tied to experience as recognized in this quote which stated, “Years of experience have shown where things need to be modified, eliminated, changed.”

Teachers reported that another very common theme in the professional learning experiences of these Christian school teachers was growing by having meaningful conversations with other teachers. One teacher, as he explained the learning that takes place among teachers, said:

I could see ‘yep that would be nice to know’ and for me a lot of networking has been helpful because I can read things, but then to see someone actually apply that, and say this has worked this way or I've tweaked it a little bit this way, or just sitting with other teachers and saying, you know, I'm kind of struggling with that and they say ‘oh I know I did that and here's how we did it’, so we're just bouncing ideas off of people and saying ‘well what would you think of this’ and

then ‘well let me tell you why that won’t work or why that may not work’. . . .
The seminars that [another teacher] has mentioned have been wonderful to go to and bounce ideas off of people. I’m back in school again, and to hear of the latest methods that are being used and to be in a room full of teachers that have different perspectives than you do and to hear different things, for me that’s just been the constant exposure.

Teachers reported that sharing and learning from other teachers played a big role in how these individuals grew as professionals. Therefore, interaction with other teachers played a key role in the learning and development of teachers. Phrases like “sharing ideas with colleagues,” “sharing and listening to colleagues,” “casual conversations with other teachers,” “faculty conversations/interactions,” “bounce ideas off each other,” and “ideas from other teachers/individuals’ knowledge,” were common throughout the interview process. One teacher commented:

I have found it helpful to connect with other educators through recertification hours and just a perspective from outside of Christian schools is kind of interesting. . . . Just touching base with them I’ve gotten a lot of good insight from them that I can incorporate into my teaching.

Another stated, “Interaction is very important. That’s why it’s nice being in a [graduate] class. You get so many ideas when bouncing things off each other that add to your knowledge base.” Teachers newer to the profession liked to hear from their more experienced colleagues. One teacher mentioned that she developed professionally by “talking to teachers who are more experienced.” One teacher explained that “personal experience and advice from other teachers is what helps me the most.” Another stated:

I feel like a lot of the learning I do comes from just talking to other teachers. Asking them, what to do about this? How did you teach that? Just the one-on-one talking to them, because they have more experience than I do.

Challenges to Professional Growth and Learning

A number of secondary themes emerged within this category of inquiry, which are as follows: (a) money and funding concerns, (b) lack of quality time for professional learning, (c) the necessity for quality professional development that was relevant and timely, and (d) the desire for well-planned out and communicated professional learning activities.

A constant theme that emerged among these Christian school teachers was the limited funding available for professional development activities. Many schools do not have the resources to cover the expenses of attending workshops and conferences. Not only did the workshops and conferences cost money, but there were costs related to traveling, lodging, and hiring substitute teachers. Bringing in an educational expert was often too costly, reported these teachers. While some of the Christian schools welcomed government funding through their local school districts, many preferred to reject any federal support. For those who accepted federal funding, the grants were limited to professional development in the core subject areas, such as math, science, social science, reading, and writing. Often, teachers who specialized in art, physical education, Christian studies, and world languages were left dependent on local school funding, which was limited or non-existent. Teachers who attended conferences or took graduate course work found it difficult to do so financially because of their salaries, which were normally lower than others in the profession. One teacher said:

I think the second thing [challenge] is money. Conferences are expensive. Going to graduate school is expensive. . . . So to try to pay your way to a master's [degree] on a Christian school's salary is pretty difficult, especially if you have a family.

Besides the need for quality professional development that was relevant to the needs of teachers (which is discussed in the next section), time for quality professional learning was the most discussed issue. The need for more quality time was normally one of the first things mentioned during the focus group interviews. A teacher explained that there was “not a lot of professional development time during the school day.” Many of these teachers, particularly those at the smaller schools, were asked to perform additional duties that required even more time that could be dedicated to professional growth initiatives. Many had multiple and different course preparations, whereas their public school counterparts had multiple preparations of the same course or subject. Many of the teachers had children, job-related after-school commitments, and church responsibilities that consume their after-work hours. One teacher responded that at her school there was a “smaller body of people to get things done.” Even among the time restraints, teachers voiced the need and desire for more time for professional learning. Teachers spoke of desiring time to learn together, of scheduling fewer staff meetings and more professional development opportunities, and of designing school calendars and schedules to accommodate professional learning opportunities during the school work day. A teacher mentioned, “We need time to plan and develop amongst ourselves; learn together.” Other teachers reported the “business of the day,” “projects,” and “more things than public schools” as activities that take away from time for teachers’ professional learning.

When sitting down with these teachers for any amount of time, I quickly realized that timely and relevant professional learning was vital to their professional growth and development. These teachers referred to time and relevancy early and often during the interview process. These Christian schools, primarily due to time and finances, plan

professional development activities designed for all K-12 teachers. Although a limited number of teachers thought that professional development should be general and broad enough for all faculty members, a majority of the teachers interviewed believed that most professional development activities were too broad. Three teachers had this verbal exchange:

I think it's hard to do professional development for K through 12 at the same time. When I go to workshops, usually they're geared towards middle school students or high school students. They're more focused. So, professional development in the building with the entire teaching staff, I think, can be kind of difficult. When you have a teacher in-service that's supposed to be geared toward everybody, it's not. You can't, because it's too broad. Sometimes it's too broad, too general, too much general information.

However, most of these Christian schools were not large enough to have multiple content area or grade-level teachers. It was not cost effective to offer workshops for a limited number of teachers, say for math or sciences teachers. Therefore, school administrators opted for the "one size fits all" approach. However, this approach did not always meet individual teacher needs. As one teacher mentioned while discussing her favorite professional learning experiences, "I prefer a more specialized approach to meet the individual needs of a teacher." Another teacher, speaking about a non-relevant professional development experience, said:

It was a waste of time. You want to train me and that's wonderful, but use that time [well], because they did this while we were supposed to be setting up our classrooms. We'd much rather been taking a test. Ask us [or] give us a series of questions and we'll give the exact answer the man is going to give us and then we can be back in our classroom working and doing things that are going to make a difference for our students. If you're going to have seminar, have something that's going to make me a better teacher.

He continued later in the conversation:

And what has been mentioned here, don't just lecture me about it. Give me examples; show me [how] it's done. The seminar is run like what they're teaching

you, they're showing you exactly it. . . . For me I'm like give me examples. Don't just stand up there and talk. I want something that I'm going to be able to say I understand, and I see what you're doing and why is it important to do it this way.

In the context of discussing the need for content-rich professional development, another teacher chimed, "Whole school workshops are not helping out in particular, material is too general." One teacher contributed to the discussion on this issue by stating, "Most professional development is a buffet of different things, random stuff." Another teacher added, "Generalized professional development is a weakness—we need content area professional development." Many of the teachers considered content area and age-appropriate conferences and workshops the most useful and relevant. One teacher spoke about the importance of content-rich professional development by stating:

Well I think, at least in my very short career, that attending some national conferences and some state level conferences that were here (like the National Science Teachers Association or the Michigan Science Teachers Association). They had one that was in Detroit a few years ago. [They] have had a big impact for me in introducing me to new concepts that I have not heard of in college. Then, that's made a significant impact at least in my science teaching, because of them.

Most complained that "broad" and "generalized" workshops were not very helpful, though some liked the larger regional conferences, like those offered by The Association of Christian Schools International. One teacher lamented, "The problem with it was the lack of any type of focus on specific subjects." These conferences offered enough choices to make them worthwhile. Content-rich professional learning seemed to be a priority for these teachers. However, most teachers recognized the difficulty in meeting the needs of all teachers.

Although I address the issue of well-planned professional development efforts in more detail in the next section, I want to at least mention it briefly here since it was a

concern to many of the teachers interviewed. A major challenge to the professional development of Christian school teachers was well-planned learning programs and activities. One teacher mentioned the need for good planning when she stated:

I think carefully planned in-services and pre-services are important. [School administrator] I think he plans things very meticulously, and it's very focused and target-specific. As opposed to, I have friends in other places, their in-service and pre-service is just kind of, there's no real target. So the flip side of that is, you know, leaves us less time but I think in the long run, it is a good thing.

Teachers reported that sometimes they did not see or understand "the big picture."

Teachers thought professional development was often last minute and poorly planned.

These teachers were not angry or frustrated, because they understood that school leaders were busy and that sometimes school "management trumps professional development goals." Therefore, time and schedules were often problems. On-site professional development was normally after school, when teachers were "tired" and learning was "rushed." Furthermore, teachers noticed "weaknesses in the coordination, purpose, and communication" of professional development efforts. A teacher mentioned:

We talked about this; a few of the teachers were talking about this. You know that as we get more and more into the book *Teach Like a Champion* [and] we're not teaching it like a champion. You guys got the picture of it; we are all very busy. And sometimes that happens to professional development. We have the best of intentions, but we all get very busy. The daily requirements take over, and we're not as prepared as we otherwise could be.

School Leadership and the Professional Development Experiences of Teachers

The secondary themes that emerged under this category of inquiry were related to school leadership, and they are as follows: (a) leadership characteristics that contributed to strong professional learning experiences at Christian schools, (b) professional teacher/leader relationships that encouraged growth and learning, (c) planning and funding

professional development activities that established a climate of learning that ensured quality professional growth and development, and (d) the establishment of quality professional development programs and activities.

Leadership Characteristics

A few leadership characteristics emerged from the focus group interviews that addressed the research question: What school and personal practices and processes help their professional development and why? There were a number of characteristics of educational leaders that influenced teacher growth and development which are as follows: (a) good communication, (b) leading by example and being an encouragement, and (c) support of teacher professional growth and learning.

Teachers reported that good communication played a vital role in teachers' growth and development. One aspect of communication that was consistently discussed among the teachers from each of the schools was the need for administration to hear from the teachers themselves. "Requesting teacher feedback" or "asking for teacher input" were common themes among these Christian school teachers. One teacher mentioned school leaders should practice "just talking to the teachers" to have an idea of the teachers' learning needs. Another suggested administrators asking the teachers, "What do you need?" One teacher suggested, the "Principal [should] speak with teachers on a regular basis." Therefore, "listening," an important aspect of communication, became a key component to "understand teacher needs." According to one teacher, a "good question for administration to ask is: what do teachers need to be better teachers?"

Teachers reported that this understanding has led to teachers looking for greater involvement and communication from administration, and there seemed to be a desire

among these Christian school teachers for school administrators to have a “close connection to teachers and their classrooms.” “Administration needs to understand classroom dynamics—its impact on the classroom and instruction,” asserted one focus group member.

Another important aspect of communication was for administrators to communicate their plans and goals well. One teacher believed that being prepared and communicating well were key aspects of effective professional development. Therefore, a key thought or idea that has arisen was the need to communicate one’s vision for professional growth and learning. When it comes to professional development, “teachers need to see the big picture.”

An important dynamic that emerged occasionally from the focus group interviews, yet seemed to carry a lot of weight was the idea of administrators leading by example. One teacher commented, “Lead by example—it’s encouraging for leaders to be growing too.” Another stressed the importance of learning new ideas from others, like principals.

One school administrator has had an amazing impact on his teaching staff. He strongly encouraged professional growth by growing professionally himself. He completed a number of graduate degrees, including a doctorate. One teacher at his school stated, “A master’s degree is strongly encouraged—unofficially required.” He was an innovative leader, learner and has led his school into serious school improvement efforts for the sake of student learning.

Teachers appreciated administrative initiative in the area of professional growth and development. Most of the teachers interviewed were positive about school leaders

who encouraged faculty members to grow professionally, and some would like administrators to take a more active role in this area. One teacher mentioned that administrators should “encourage each teacher to attend one content area workshop each year.”

There were various ways in which school administrators could support teacher professional learning. One teacher confirmed:

Well, in my context, to finish up my master’s. There was, at least, one day per week for a full school year that I had to be gone and [school administrator] facilitated this for me. There was a lot of subbing and different things like that, but he facilitated that for me and I think he does that for, pretty much, anybody that wants to go do something. He’s willing to facilitate that, but it is taxing. You know, sometimes other teachers will have to sub or that kind of a deal. But he’s always been very good at making sure that we are developing you know, in the different areas, the way that we should be.

I mention a few ways educational leaders can support teacher learning below; however, I discuss more of them under subsequent sections. School administrators supported teachers by developing strong professional relationships with them, by budgeting for professional learning experiences, and by planning and offering quality staff development opportunities.

Professional Teacher Leadership Relationships

The teachers interviewed believed that learning relationships were important to their professional growth and development. Three aspects of effective learning were at the center of the faculty conversations: (a) teacher trust, (b) teacher interactions and conversations, and (c) the understanding of teacher needs.

It was evident during the focus group interviews that trust was a main factor in “how” and “what and why” teachers grow professionally. Teachers who participated in

my study believed that they needed “time to plan and develop amongst themselves.”

Speaking of the importance of this, a teacher reflected:

I think one of the things is having people to—kind of what we’re doing—bounce ideas off of. For example, we’re doing this great books thing. There are two sponsors per grade, so you have someone to bounce ideas off of that you can both do the assignment ‘quote, unquote’. Then maybe your answers are little bit different, then you’ll go, ‘Oh I’ll take that part’, and ‘I’ll take this part.’ And then just put them together. We’ll go forward that way. So that’s been helpful for me this year.

Teachers thought administrators needed to trust teachers to take ownership of their own growth and learning, and teachers should be trusted to do what is right concerning their own professional development. Since teachers knew their shortcomings, they should be able to learn by taking areas of weakness and, by working together, improve instruction and student achievement. They thought administrators should “schedule time for teachers to learn together.” One teacher summed this up well by stating:

I think when you have choice in what you can do, because then you can pick what you want, and just as you pick the books that you read. I mean, that’s what motivates you, cause you’re self-motivated, so I think that’s real important that you’re allowed options in what you do because that’s going to create the relevancy. I like personally when people talk. It’s more stimulating and then I would say reading a book . . . online, webinars . . . they just don’t do it for me . . . audio or cd’s of conference just don’t do it for me.

Teachers reported that this was especially true in the content areas. Teachers wanted opportunities to initiate their own learning. One teacher suggested allowing teachers to create a “book club.” She thought that teachers should be able to initiate discussions about books that they deemed appropriate. Trusting the teachers to choose quality and timely professional development materials was a positive professional growth idea. These teachers believed that trust encouraged freedom and empowerment, and motivated teachers to pursue instructional excellence. Therefore, accountability played an important

function in these endeavors, and many of the teachers interviewed favored being held accountable for their own professional learning.

Teachers reported that having confidence in their educational leaders was another aspect of trust. Teachers needed to be able to trust their administrators for their growth and development. Concerning trust, one teacher believed that leaders should be looking out for teachers.

Another key component of developing professional relationships was the interaction and conversations that teachers had together. Teachers wanted school administrators to schedule “times [for them] to learn from each other” and “time to plan and develop amongst themselves.” Teachers wanted to interact with each other and have quality faculty conversations. This was reflected well when a teacher stated:

One of the things that I think is particularly valuable that’s come into play, and it’s kind of been alluded to here. It’s come into play this year. I think the easiest thing for an administrator to do is to kind of get up and set it out there and say, ‘this is what I want you to do.’ But the opportunities where faculty members have to interact with each other are great growth opportunities. The fact that we’re doing the great books, we are pairing up, we are working through things together, and we have had more conversations, I would think, this year among teachers in general, as it relates to great books because it’s a common thing that we’re dealing with. I’ve talked to [teacher] about great books. I don’t usually talk to him about Bible class. I’ve talked to [another teacher] about great books because it’s something that we’re all dealing with and I think it’s been helpful to get that interaction among the faculty members.

As stated previously, teachers reported a major source of professional growth among teachers was sharing among themselves. Teachers’ comments like “relationships, interactions with others on a day-to-day basis,” “informal discussions,” “listening to teachers,” “learning from fellow teachers,” “sharing among other teachers,” “talking to teachers who are more experienced,” and “advice from other teachers is what helps me the most,” were examples of the importance that relationships play in these teachers’

professional growth and why they would like to see school leaders nurture this type of learning.

As one experienced science teacher explained, administration must “understand faculty needs” and must understand the “keen pulse of the faculty.” She stated:

The administration also has to have a keen pulse of the faculty to assess what they need. You don’t just say ‘oh we have a professional development day and fill it with something’ but really be sensitive and aware of what the faculty needs in the way of professional help.

Another teacher mentioned school leaders should practice “just talking to the teachers” to have an idea of the teachers’ professional growth requirements. Another suggested that school administrators ask the teachers, “What do you need?” One teacher recommended that the “principal speak with teachers on a regular basis” to best understand teacher needs. According to one teacher, a “good question for administration to ask is: what do teachers need to be better teachers?” One teacher concluded, “I would like to be more involved with the decision of my development, rather than the administrator making those decisions.”

Planning and funding

Teachers thought that planning and funding professional development activities that established a climate of learning that ensured quality professional growth and learning were vital, particularly at Christian schools. One teacher mentioned:

I think it’s helpful. I know some schools [study] one book a year. The teachers read that one book and talk about their ideas, and it’s something that’s really relevant whether it’s lower elementary or upper elementary. Or just having somebody come in and talk about something that’s relevant to your particular area and discussing it as a staff. . . . Books are a great resource.

Since administrators at these schools played numerous roles and since finances were limited, teachers reported professional learning often was not prioritized. Although teachers understood this dilemma, they still maintained the need for better planning and funding for professional learning.

Finding and making quality time for professional learning was a key component that emerged from the focus group interviews. Furthermore, planning successful professional development activities and following through with the plans were seen as critical. It seemed that lack of planning was the primary concern. Although teachers from one school mentioned that planning was not the problem, it was with following through with the plans. One teacher said, “Management of the school sometimes trumps professional development goals.” Yet, the main issue seemed to concern the lack of planning, which for some teachers began with the lack of professional development goals. Teachers wanted more thought and preparation to go into staff development. They wanted administrators to establish goals and communicate them to the teachers. As mentioned above, teachers would like to be consulted in the process. One teacher concluded, “I would like to be more involved with the decision of my development, rather than the administrator making those decisions.” Therefore, “the establishment of professional development goals” and “better planning” played a key role in teacher growth and learning. One teacher stated, “Be prepared and communicate well—someone should be looking ahead and planning effective professional development activities.” Another believed professional development activities and teacher in-services needed careful planning to meet the most needs.

Another key insight that emerged from the teacher discussions was the need for thoughtful scheduling. Since teachers at Christian schools had very busy schedules, time for quality professional learning needed to be strategically thought out. Busy teachers think that it was up to the schools to provide this time during the work day. “We might switch things around to make the academic calendar work more effectively, which the administrators wouldn’t even think about because they’re not looking at it that way.” One teacher believed that leadership needed to carve out quality time for professional development. Many believed this time should be regular or weekly. Teachers believed that administrators needed to create academic calendars and develop both school and professional development schedules that maximized teacher growth and learning. One teacher requested schedules that made professional development a priority. Another teacher believed that school schedules should be developed to facilitate teachers to attend professional development activities and to take graduate courses. It was evident that Christian school teachers thought that school administrators should establish positive professional development schedules within a favorable school calendar. They should prioritize teacher growth and learning by finding or making time for quality professional development without overwhelming the teachers.

Although planning and facilitating quality professional learning opportunities was a priority within the minds of these teachers, funding professional learning was another important issue. Next to meeting the teachers’ learning needs and providing quality time for learning, funding was the key issue. Although some schools utilized federal funding for professional development in the core subject areas, many did not. Even schools that

did accept government funding had a difficult time supporting their faculty learning needs.

The teachers I interviewed expressed a number of ways that Christian school leaders could help fund their professional growth and learning. A number of teachers suggested that school administrators fund professional development through the school budget. Teachers reported they should have budgeted funds available for workshop and conference attendance and to work on their graduate degrees. Furthermore, these teachers encouraged schools to pay for professional memberships, and to subscribe to professional development journals and magazines. Many of the teachers wanted to grow professionally; however, their salaries did not afford them the opportunity to do so. The personal cost of graduate school was prohibitive for many.

Quality professional development

The Christian teachers interviewed stressed the importance of quality professional development programs and activities. Since Christian schools had a limited number of teachers and funds, the teachers felt that many times attempts to provide quality professional learning were ineffective. To curb this trend, a few key suggestions arose in the discussions. They are as follows: (a) relevant workshops and studies, (b) summer activities and assignments, (c) book and video studies, (d) networking with other Christian schools, and (e) deeper discussions on practice and practical application of things learned.

Besides the need for more quality time for professional learning, relevance and meeting the needs of diverse staffs were the most challenging aspects of teacher professional growth and learning reported by these teachers. A major concern was

meeting the needs of diverse teaching staffs at these smaller Christian schools. There were typically a limited number of colleagues within disciplines or subjects being taught (at some schools there were no same-subject colleagues or departments). With limited time and funding, many administrators planned professional development activities “broad enough for every teacher.” However, most of the teachers believed that this kind of thinking and planning was ineffective. One teacher lamented, “Generalized professional development is a weakness—need content area professional development.” Another teacher quipped, “Whole school workshops are not helping out in particular; material is too general.” While another believed that “one size doesn’t usually fit all.” Therefore, many of these teachers were searching for professional learning activities that were relevant to their situation or content areas. One teacher recalled a particular instance:

There was one time. One time we were involved in a professional development [program] for a year, and it had no purpose. And half of the teachers didn’t even agree with it. I think if the administrators would just come to the teachers right away and say ‘these are our ideas for professional development’ and had a discussion right off the bat, we could play a part in discussing what professional development could be for the year, instead of being surprised. We could plan ahead, and we could bring ideas. I just keep thinking ‘effectiveness,’ because I don’t think the random thing is good. It needs to have some kind of follow-up, because all teachers could have good ideas; but it’s a good teacher to actually have follow-up and enact something in their classroom. But I do think we have a lot of good ideas as a school. But I think we need to do follow up.

Many of the teachers, particularly the secondary teachers, desired professional development experiences that were “content heavy” or “content rich.” One teacher mentioned that the “content area is the starting point.” Another teacher speaking about the importance of subject area professional learning stated, “As an experienced teacher, I

think the significant professional development always had something to do with my content area, learning the content area more thoroughly.” A teacher elaborated that “my favorite type of professional development would be something that is specialized to my field of study.” The teachers, over all, favored conferences and/or learning opportunities that helped them teach their subject area better. One experienced teacher explained the importance of her early content-area professional learning by stating:

In my early experience, I think attending science conventions was vital; I think those were the highlight of helping me doing better in the classroom. I would come home with bags of things. You know; it would take me months to go through afterwards and glean the ideas that I could use. I think that was really a highlight, and I was very thankful for the school paying our way for an entire department to go to a science convention. It was just phenomenal.

Since this was hard to accomplish broadly, many teachers believed that individualized professional learning may be the solution.

With the heavy demands that many of these Christian teachers encountered during the school day, including the number and variety of course preps, various duties, and other school day responsibilities, school projects, and extra-curricular commitments, a number of the teachers studied suggested utilizing summer break more for professional learning. One school that I studied actually assigned summer reading and required professional training in the areas the administrator deemed necessary. Although some teachers were hesitant to give up time during their summer break, most thought it was one of the best times to learn, grow, and prepare for the coming school year.

Two of the most common professional development practices reported by these teachers at these Christian schools were reading and discussing teacher educational books and watching professional development videos and DVDs. Using these materials was an economical means to support teacher growth and learning; however, employing these

methods fell into the category of irrelevance or too generalized. Yet, a good number of teachers enjoyed these types of learning experiences. The only criticism, besides the ones mentioned above, was for the learning to move beyond mere discussion to implementing the things learned into classroom practice. As one teacher explained, she would like “targeted, practical applications.”

Many of the teachers from most of the schools believed networking and observing teaching practices of other Christian schools were very important to their professional growth and learning. One teacher suggested that Christian schools “network more with other Christian schools” and encouraged “classroom observations at other Christian schools.”

One teacher elaborated on the importance of meeting with other Christian school teachers who taught in their field or content area. She believed that collaboration with teachers from other schools was important, particularly if one does not have a same-content-area colleague at the school.

Many of these Christian schools provided professional development activities through workshops and seminars and books and DVDs, and/or offered learning opportunities through graduate studies or day-to-day professional experiences; however, a number of teachers desired deeper discussions and more opportunities to practice their professional learning. Therefore, teachers thought administrators and educational leaders could best facilitate professional growth and learning by planning serious discussions on instructional practice and encouraging (or requiring) implementation of newly discovered knowledge.

The teachers I interviewed were honest in their desire to become better teachers. I believe, further, that the Christian school administrators at these schools would like their teachers to experience the best professional learning opportunities available. The suggestions reported above were some ways these teachers felt may help support their professional learning.

Summary

This chapter reviewed data on Christian school teachers' experiences of professional growth and development from their responses on the NSDC surveys, focus group interviews, and written reflections. It provided descriptive statistical analysis of the NSDC survey, and grouped the focus group and written reflection data into themed areas. One teacher summed up the learning experiences of these teachers well when she stated:

Just realizing it never stops. It's just ongoing. You should always be looking for something new or updated, not doing the same thing all the time. So each year, whether it's the Internet, whether it's a conference, whether it's books, whether it's with other teachers, finding out, 'How can I improve what I'm already doing? How can I get better? So it doesn't become stale.'

Chapter 5 summarizes the data by reviewing it in relationship to the study's research questions and then discussing and interpreting these findings related to the literature and professional practice.

CHAPTER FIVE

SUMMARY, DISCUSSION OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

Introduction

Change and reform are not new to education in America. However, there has been a renewed interest in school improvement and reform, quality instruction, and student learning that is qualitatively distinct from previous trends (Garet et al., 2001). Embedded within this challenge to reform professional practice has been a call for quality and effective professional development of K-12 teachers (Borko, 2004; Buchholz & List, 2009; Christie, 2009; Guskey & Yoon, 2009). Christian schools have not been left out of this important discussion (Ackerman, 2009; Edlin, 2007; Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010).

This study expanded the knowledge concerning the professional experiences and practices of Christian school teachers in evangelical, Protestant Christian schools. While many Christian schools promoted their quality education programs, little had been discussed about the teacher professional learning at these schools (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010). Most information available about the professional learning practices at Christian schools had been anecdotal (i.e., knowledge based on personal experiences); however, some recent research literature had

reflected research based upon Headley's (2003, 2008) professional development checklist. All of these studies related to professional development at Christian schools that had been built upon Headley's work and had utilized the survey instrument he developed in 1997 (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010). These research studies were limited to schools that were members of the Association of Christian Schools International (ACSI) and studied teachers' and administrators' involvement in professional development activities. The results from these studies provided an overview of the professional development activities most common to these Christian schools.

Hence, I approached my study differently. The purpose of the study was to examine the professional development of teachers in select Christian schools through a survey based on national professional development standards and interviews with the teachers themselves which would contribute to the general knowledge base for understanding teacher learning and institutional practice, particularly at Christian schools. Therefore, I researched and analyzed the professional learning experiences and practices of Christian school teachers to understand these practices in light of the professional development literature, particularly reflected in school-based professional learning and the National Staff Development Council (NSDC) professional development standards (2001). The two major questions that drove my research were: (a) How do Christian school teachers professionally learn and develop, and (b) What school processes and practices and individual and professional experiences support their professional learning and why? Therefore, this timely study focused on the professional development practices and experiences of Christian school teachers.

This chapter summarizes my study. It is organized into six sections. I will first present the research design. Second, I will review the conceptual framework that guided the study. Third, I will summarize the findings of the study. Fourth, I will discuss the findings in light of the literature. I will organize the discussion according to my research questions and by key components of the NSDC professional development standards. Fifth, I will discuss my conclusions of the study, and last, I will offer recommendations to Christian schools for future consideration and will provide suggestions for further research.

Research Design

Christian school teachers have had many learning experiences that they have brought to their professional growth and development. Job, family, and church activities have had a significant influence on the professional learning of teachers. This study examined the professional development practices and learning experiences of these teachers by having them complete the NSCD--SAI online survey and by a smaller number participating in focus group interviews that contained a written reflection piece. Therefore, this study was a multiple-case, mixed-methods inquiry that combined the strengths of quantitative and qualitative methodologies. The quantitative phase granted me the ability to make statistical generalizations, while the qualitative aspects gave me the opportunity to consider individual explanations of professional growth and learning. Together these two approaches expanded the knowledge base by going beyond a general survey and directly hearing from the teachers who were involved in professional growth and learning.

Conceptual Framework

The conceptual framework that provided the infrastructure of the study was derived from the research and practitioner literature devoted to quality and effective professional development of K-12 teachers, particularly as represented by National Staff Development Council Standards (2001) of professional development. This study was guided by professional development literature and recent research findings on the professional learning experiences of K-12 teachers and effective professional development practices of K-12 schools (Darling-Hammond et al., 2009a; Guskey & Yoon, 2009). The National Staff Development Council with its Standards and Standards Assessment Inventory (SAI) played a central role in guiding my understanding of the literature and were the central conceptual grid that guided my data collection.

The NSDC with its Standards and Standards Assessment Inventory had played an important role in analyzing the validity of school-based professional development practices that were aligned with the current literature on the topic. It seemed that literature on school-based professional development at K-12 schools in general and NSDC's standards in particular offered a solid basis to guide this study. Furthermore, more research was being requested in this important area of study (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010; Vaden-Kiernan et al., 2009).

Therefore, this study was guided by professional literature and recent research findings on the professional learning experiences of K-12 teachers and effective professional development practices of K-12 schools, particularly as reflected in the NSDC professional development standards.

Summary of Findings

The findings of the study revealed that Christian school teachers developed as professionals through various means, primarily through traditional staff development activities, informal learning experiences, and self-directed learning. Headley (2003) had similar results, namely that Christian schools' professional development experiences were mostly traditional with some collaboration opportunities. An explanation of my findings follows the tables. It was best to organize my findings using a table to connect NSDC standards and qualitative findings and an explanatory narrative guided by qualitative themes, since the qualitative themes were the heart of my finding. Therefore, the chart connects the qualitative and quantitative findings, yet the qualitative themes which are distinct from the findings summary drive my discussion. Qualitative themes are: (a) personal experiences, (b) professional experiences, (c) challenges to quality professional development, and (d) school leadership and professional growth.

Tables 15 and 16 tie the qualitative data to a recognized national standard and visually connect the data to give a whole picture of the research findings.

Although the data comparison tables connect the qualitative and quantitative data, particularly in relationship to recognized professional development standards, the heart of the findings was discovered in the qualitative interviews. Therefore, the qualitative themes that emerged from the focus group interviews (i.e., personal experiences, professional experiences, challenges to quality professional development, and school leadership and professional growth) seemed to be the best place to center the discussion.

Table 15

Data Comparison for Research Question 1: How Do Christian School Teachers Professionally Learn and Develop?

NSDC National Standards	Survey Findings	Interview/Reflection Themes	Alignment	Interpretation
Context				
1. Learning Communities	Low means with classroom observations being the lowest item mean on the entire survey and examining student work was also very low.	Teacher comments indicated need for greater collaboration and more effective professional development.	Both survey and interview data indicate teachers reported schools rarely operate as learning communities. Most elements of learning communities were rarely reported. Collaboration was weak.	The absence or low means on common components of learning communities may explain why teachers felt need for more quality professional development (PD).
2. Leadership	High means indicated teachers believed principals understood need for continual teacher learning and that principals fostered a culture for learning- but teachers report moderate empowerment.	Teachers reported principals understood and encouraged professional development; But did not report feeling empowered.	Both data sources indicate teachers felt principals supported aspects of PD, yet qualitative data differed on survey findings related to empowerment.	Teachers believed that school leaders recognized and believed in quality professional learning. However, teachers expressed their frustration in not having a stronger voice in planning PD.
3. Resources	A moderate means suggest that resourcing was less than ideal.	Schools supported professional development, yet time and funding were a hurdle to its successful implementation.	Focus group findings echoed survey findings that indicated more resources were needed. Factors like lack of quality time and limited funding hindered PD.	

Table 15—Continued.

NSDC National Standards	Survey Findings	Interview/Reflection Themes	Alignment	Interpretation
		Process		
4. Data-driven	The standard had second lowest mean suggesting poor systematic use of data in planning and assessing PD.	Comments indicate little or no use of data in planning or evaluating PD.	Mixed data aligned, showing use of PD data missing at these schools.	Teachers did not raise the issue of data-driven decision making, yet reported that more thought needed to be given to the planning of PD.
5. Evaluation	This standard had lowest mean suggesting PD was not widely evaluated by these teachers.	Teacher comments did not mention assessing PD as part of their professional learning.	While data between survey and interview did not align, the absence of this topic in teachers' interviews may corroborate the survey data by showing this vital area was not necessarily "on the radar" of the teachers.	Since professional development was rarely assessed, it was not a major concern while discussing professional development with the teachers.
6. Research-based	Moderate mean reflected research was sometimes used in PD decisions and determining the effectiveness of teachers and student learning.	Educational research was not mentioned in any interviews.	Findings did not align well. Teachers did not refer to utilizing or consulting educational research.	Schools did not seem to be informed by current trends in the PD of teachers, including what constitutes quality PD.
7. Design	Moderate mean showed that PD design did not consider teacher experience or knowledge; yet did support learning goals.	PD were very traditional, mostly conferences and workshops. PD was broad and general – geared for all subjects, K-12.	PD design data was aligned. PD was not often based on data, research or teacher need.	Due to time constraints, limited funding, and lack of familiarity with current PD literature, little thought was reflected.

Table 15—*Continued.*

NSDC National Standards	Survey Findings	Interview/Reflection Themes	Alignment	Interpretation
8. Learning	Moderate mean indicated PD was passive; lacked active learning experiences that included variety and choice.	Focus group interviews reported PD was workshop based with little active learning.	Data from both sources aligned supporting traditional PD regularly occurs with these teachers.	Learning among these teachers was more passive than active with little choice which seemed to reflect the realities of meeting the needs of K-12 teachers with little time and limited funding.
9. Collaboration	Moderate mean suggested teachers collaborated with encouragement from principals, yet time was rarely allocated for this type of learning.	Collaboration was mostly informal; administrators rarely scheduled time for teacher collaboration.	Data aligned well. Collaboration was normally teacher initiated – not scheduled into the school’s PD plans.	With the time, money, and learning constraints (i.e., providing PD to a broad range of teachers within budget) teacher collaboration was self-initiated.
Content				
10. Equity	High mean reflected the teachers’ desire to respect and meet the learning needs of all students while maintaining high standards and building strong relationships.	Teachers discussed their concerns for student learning and the difficulty students have with the many pressures students experience.	Both data sources supported the idea of meeting the needs of all students, academically, spiritually, and socially.	Teachers recognized all students are created in God’s image; therefore, believed students have intrinsic worth and varying learning styles.

Table 15—*Continued.*

NSDC National Standards	Survey Findings	Interview/Reflection Themes	Alignment	Interpretation
11. Quality Teaching	Moderate mean supported teachers limited opportunity for deep understanding of content area strategies based on research and modeled for them. Teacher conversations about student learning are encouraged; however, student assessment is rarely a part of PD.	Teachers only rarely experience opportunities for a deep understanding of content area strategies; therefore, they take ownership of their own learning and utilize informal learning opportunities like teacher conversations and self-reflection to grow professionally.	Data from both aspects of the study aligned well. An emphasis on PD that may lend to quality instruction is often lacking.	Teachers have often turned to directing their own learning through self-reflection, online opportunities, graduate course work, and teacher conversations to facilitate the greatest learning.
12. Family Involvement	High mean reflected schools worked well with families in the education of their children.	Family involvement was not mentioned in interviews, suggesting that it was not considered as a component of the teachers' PD.	There was not any alignment with this area of inquiry.	Religious educators seem to put a high priority on family involvement in children's education which accounts for the high mean of the survey.

Table 16

Data Comparison for Research Question 2: What School Processes and Practices and Individual and Professional Experiences Support Their Professional Learning and Why?

NSDC National Standards	Survey Findings	Interview/Reflection Themes	Alignment	Interpretation
Context				
1. Learning Communities	Low means with classroom observations being the lowest item mean on the entire survey and examining student work was also very low.	Teacher comments indicated need for greater collaboration and more effective professional development.	Both survey and interview data indicate teachers rarely operate as learning communities. Most elements of learning communities were rarely reported. Collaboration was weak.	The absence or low means on common components of learning communities may explain why teachers felt need for more quality professional development.
3. Resources	A moderate means suggests that resourcing was less than ideal.	Schools supported professional development, yet time and funding were a hurdle to its successful implementation.	Focus group findings echoed the survey findings that indicate teachers felt more resources were needed. Factors like lack of quality time and limited funding hindered PD efforts.	
Process				
7. Design	Moderate mean showed that PD design did not consider teacher experience or prior knowledge; yet did support school improvement goals.	PD was very traditional, mostly conferences and workshops. PD was broad and general–geared for all subjects, K-12.	PD design data was aligned. PD was not often based on data, research or teacher need.	Due to time constraints, limited funding, and lack of familiarity with current PD literature, little thought is reflected in the PD design.

The study discovered teachers' personal experiences played a big role in their professional growth and development. Personal religious experiences played a major role in this growth. Personal faith was their starting point, including their Christian upbringing and their personal encounters with Jesus Christ. Many considered their choice to become teachers as a professional calling, which in turn contributed to their desire to be quality teachers. This desire influenced their overall professional development. Furthermore, life experiences shaped the learning of these teachers, especially the influence of their parents and children. Their education experiences, both formal and non-formal, have impacted professional learning of these teachers. These educational experiences included, but were not limited to, their K-12 and college experiences, positive and negative role models, and travel.

The findings revealed that professional learning experiences, formal and non-formal, dominated the discussion. These experiences fell into two broad categories of learning, school sponsored and teacher-directed. Most of these teachers learned, primarily, through traditional school-initiated professional development programs and activities that took place during scheduled times, like in-service days and staff meetings. These opportunities typically centered on workshop presentations, book discussions, and other professional development materials, like multimedia professional development kits. Furthermore, due to time limitations and financial constraints, many teachers initiated their own learning and/or found other avenues for professional development. Traditional approaches to professional learning were still the most popular. Therefore, teachers commonly attended teacher conferences, workshops and seminars, and/or worked on graduate degrees. Non-formal, teacher-directed learning was a very common

phenomenon. Similar to other professions, there were a number of avenues teachers pursued in their development as educators. The most widely experienced form of learning by these Christian school teachers was non-formal in nature. These were activities and practices that were experienced during the work day and/or during one's personal time that reflected professional learning. Some non-formal learning activities that were common among these teacher participants were learning via the Internet and by consulting and reading professional literature. These teachers, also, referred to learning through self-reflection, teacher conversations, student feedback, and trial and error as important aspects of their professional growth and learning.

As with most schools, public and private, there are challenges to quality professional development. A number of challenges emerged that affected the professional learning of these Christian school teachers. Funding and time concerns led to the most challenges, yet the lack of timely, relevant, and well-thought-out professional development programming was also recognized as an important challenge. Low to moderate means within the professional development process, as defined by NSDC, may explain why the teachers learned the way they did. These challenges compelled many of these teachers to seek alternative ways to grow professionally.

School leadership played a vital role in the professional development of these teachers. A number of leadership characteristics emerged from this study: good communication, positive examples, encouragement, and support for teacher growth and learning. These match many of Hardy's (2010) research findings on the important role of leadership in the professional learning of teachers. The presence of relational trust, supportive leadership, and quality teaching and professional learning were characteristics

of the leadership expectations these teachers expressed as important aspects of professional learning communities (F. King, 2011). Due to budget limitations and time restraints, many of the Christian schools did not offer substantive professional learning opportunities. One school offered no school-based learning opportunities. Most of the professional learning that took place with these teachers (and within these Christian schools) was very traditional; however, some had taken advantage of Internet learning opportunities, including social media tools. Why did these teachers learn this way? The primary reasons that teachers learned the way they did seemed to be that they: (a) had limited financial support, (b) had time restraints, (c) had inadequate resources, and (d) had unique personal and religious experiences.

Discussion of Findings

This section discusses the findings by summarizing them in relationship to the two main research questions guiding this study. Where the earlier data comparison tables (Tables 15 and 16) connected the quantitative and qualitative findings, this section is guided by the qualitative themes that drive this study. I will discuss both the quantitative findings, which explored the teachers' professional development experiences in relationship to NSDC national standards (2001), and the qualitative findings, which gave these teachers a reflective voice, thus, weaving a holistic understanding of the professional learning experiences of these Christian educators. This section is organized according to qualitative themes with the key quantitative findings, NSDC standards, integrated into the discussion.

Research Question 1: How do Christian school teachers professionally learn and develop?

Many results from this research mirror findings from other research on professional development, especially studies using the National Staff Development Council (NSCD) standards. In a similar study to my own, Chandler and Chan (2012) examined the implementation of the NSCD standards in the professional learning of 55 K-12 teachers in Georgia public schools using the NSDC Standards Assessment Inventory (SAI). The Georgia teachers reported above-average means in the content and context domains. They reported below-average means in the process domain.

Overall, the Christian school teachers fared better than their public school colleagues in aligning NSDC standards. The SAI results of the Christian school teachers reflected higher means in the three broader categories: context, process, and content. Christian school teachers responded with higher means in 11 of the 12 domain standards. The only domain that reflected a lower mean was the Data-Driven one. Even though the Christian schools studied were not familiar with NSDC standards, they fared very well compared to the public school teachers studied by Chandler and Chan (2012). We now look at aspects of these findings compared to specific findings, starting first with the discussion on school-sponsored professional development.

The Christian school teachers in this study professionally learned and developed through three means which are as follows: (a) through school-sponsored professional development programs and activities, (b) by teacher self-directed learning experiences, and (c) by informal job-related learning experiences. I will discuss each one of these in the sections below.

School-Sponsored Professional Development Activities

A lot of attention has been given to schools becoming professional learning communities (Barth, 2002; Blankstein, 2010). Christian schools have not been exempt from these discussions (Ackerman, 2009; Neuzil, 2010). However, many of the characteristics of professional learning communities that were represented by the NSDC standards and reflected in its survey were not common in the professional learning of these Christian school teachers. Senge et al. (2000) wrote of the importance of a school's culture, one that is not static, but continually learning. They stated, "In high performing schools, a nurturing professional community seems to be the 'container' that holds the culture. Teachers feel invigorated, challenged, professionally engaged, and empowered, just because they teach there" (p. 326). Only one school where I interviewed the teachers seemed to reflect this sentiment. Teachers at these schools only occasionally discussed teaching and learning as a staff, and rarely observed each other in classroom settings. Collaboration was present among the teachers and administrators; however, it could have been nurtured more. Again, Senge et al. (2000) made a great point, "A strong professional community encourages collective endeavor rather than isolated individual efforts. Faculty members say, 'It is important not to hide ideas.' They see sharing ideas and approaches as valuable, instead of as 'stealing another's intellectual property'" (p. 327). Collaboration often encourages feedback from each other. However, these teachers reported limited opportunities for feedback from their peers. Gajda and Koliba (2008) suggested that creating time and space for teachers to meet is enough. They wrote, "Principals need to help their teachers learn how to spend their time together wisely" (p. 143). Furthermore, these teachers seldom examined student work together, another

feature deemed important by the research literature (Kazemi & Hubbard, 2008). Kazemi and Franke (2004) reported that teachers who regularly analyzed student work, over time, came to understand their students' thinking and learning strategies well and were more able to design classroom strategies to best advance their students' learning. Teachers were more likely to be engaged in thoughtful reflection that helped them make sense of their experiences and make decisions about their future classroom practices if they had spent more time working on their instruction with colleagues (Camburn, 2010). One study concluded that polite, congenial conversations were superficial, whereas collegial dialogue was more apt to probe deeply into teaching and learning (Nelson, Deuel, Slavit, & Kennedy, 2010). Learning-enriched environments encouraged individual learning, which created a shared interest among other members and encouraged further growth (Gallucci, 2008). Darling-Hammond et al. (2009b) explained:

Research shows that when schools are strategic in creating time and productive working relationships within academic departments or grade levels, across them, or among teachers school wide, the benefits can include greater consistency in instruction, more willingness to share practices and try new ways of teaching, and more success in solving problems of practice. (p. 44)

The literature on professional learning communities indicated that characteristics like collaborative learning, personal and professional learning, shared vision and commitment, and strong, informed leadership are key factors in teacher and student learning (Blankstein, 2010; Harris & Jones, 2010). Kilbane (2009) rightly observed:

Just as the environmental factors can promote or hinder the ability of a natural ecosystem to flourish, the system of relationships or culture in a school can be supported or hindered by the actions and activities of key personnel. A school's leader's attention to these factors can increase the chance of success in building and maintaining a professional learning community within a school. (p. 202)

As I will recommend later, it may be that Christian school leaders need to nurture more of these characteristics within their schools. Positive learning cultures may be nurtured more by empowering teachers, planning research-based professional learning opportunities, assessing the effectiveness of the learning activities, allowing teacher choice, and encouraging collaboration and teacher conversations (Grangeat & Gray, 2007; Haigh, 2005). The one school I studied that seemed to espouse the characteristics of a professional learning community was the one school where leadership modeled and expected quality professional learning that was intensive, sustained, job-embedded, active, collaborative, and was content focused (Wayne et al., 2008). Gajda and Koliba (2008) concluded:

School leaders go a long way towards improving the caliber of teacher collaboration and reducing resistance by “walking the walk” in their own practice. Teachers are more likely to engage in high-quality cycles of inquiry when their administrators model what is expected of them. (p. 150)

The role of leadership in developing and sustaining professional learning communities was an important finding in this study. Harris and Jones (2010) stated: “If professional learning communities are to support changing teachers’ practice, they need to be an integral part of routine school development” (p. 179). F. King (2011) focused on the specific contributions that leaders have made to the sustainability of the professional learning in schools. F. King (2011) concluded:

The implications for leadership from this research are to develop an enabling or transformational style which empowers teachers through distributed leadership, based on trust, to participate in professional development, collaboration and professional learning communities as a means for school improvement. It highlights the centrality of teachers in the change process towards school improvement and the significant role of principals in leading and supporting that change. (p. 153)

School leadership is foundational to establishing learning communities that reflect quality professional development (Harris & Jones, 2010; Kimball, 2011). Gallucci (2008) reported that individual and collaborative learning were created by the principal who encouraged a learning-enriched environment and took advantage of one professional learning opportunity to encourage or create others. Findings also indicated that teachers felt that leadership played an important role in teacher practice and student achievement (Blankstein, 2010; DuFour, 2002). The Christian leaders I studied fared well in this regard. The survey results indicated that the teachers strongly agreed that the principals believed that teacher learning was essential for student classroom success and that their principals fostered a culture of learning. This was equally supported by the teachers' written reflections and the focus group interviews. Yet, survey results reflected that principals only occasionally committed to planning and implementing regular, relevant professional development opportunities. This was also supported within the qualitative findings.

Furthermore, survey results supported the idea that teachers have received above-average support for their professional learning while data collected from the focus group interviews painted a different picture. Kilbane's research (2009) supported this thought.

He concluded:

This research suggests that the environmental factors of administrative support, collaborative structures, relational integrity, enablers, and coherence, which support professional learning communities, must all be present and fostered because of their interrelated nature. Leadership and administrative support play a more critical role than others given the concentration of power and decision making in the office of the principal. (p. 201)

Teachers believed that most of their professional learning lacked relevancy.

Therefore, teachers found creative ways to learn and to be resourceful. They, oftentimes,

initiated their own learning through reflecting on their own classroom experiences and conversing with colleagues (Borko, 2004). Eraut (2000) believes that most professional learning is informal and has stated “that most human learning does not occur in formal contexts” (p. 114). McNally (2006) wrote, “In the particular context of teacher education, it became clear to us that informal experiences are a key yet under-theorized and under-valued element of learning by teachers” (p. 2). Another important factor, according to the qualitative data, was that principals made most staff development decisions without the influence of the faculty, and many of the teachers did not feel empowered by their educational leaders. Teachers rarely had opportunities to choose their own forms of professional learning. They believed that the educational leaders at their schools needed to find the pulse of their teachers to truly understand their learning needs and expectations. This idea is supported by Hoekstra et al. (2009) and Hill (2009). Referring to the practical implications of their research findings, Hoekstra et al. (2009) wrote:

The most important implication of this study is that teachers differ in the way they learn informally within the context of the reform [school improvement efforts]. Support for teacher learning should therefore be differentiated. Those teachers, who are continuously experimenting and collaborating, should be encouraged in their endeavors. Their learning should be facilitated by giving these teachers ample opportunities to interact with peers, to report about their learning and to access resources for learning. As for the teachers who work more isolated and who experience more unexpected events and struggle, we believe these teachers should be able to experiment with new practices in a safe learning environment, where their interpretation of classroom situations is guided and where their immediate concerns are addressed. (p. 672)

However, there seemed to be a disconnect between the quantitative data, which reflected a strong belief that principals’ professional development decisions are influenced by teacher input and in turn teachers felt empowered by the contributions to their learning; and the qualitative data, which suggested that they rarely contribute to

professional learning decisions. Survey results revealed that 130 of 148 teachers somewhat to always felt empowered. Yet, this was not expressed in the focus group settings.

Teachers, further, believed that their leaders wanted what was best for teachers and students, yet the busyness of the day and more pressing demands of the day limited the effectiveness of the principals and other school leaders, which in turn hindered the quality of the schools' professional learning (Kilbane, 2009). Furthermore, Printy (2008) concluded that principals and other school leaders, like department heads, were instrumental in shaping teachers' professional learning experiences. However, since principals were often well removed from the classroom and its concerns, it was important for leaders to stay connected to teacher needs. The implications of her research suggested that leaders establish solid expectations, create conditions for rich interactions for all teachers, differentiate professional learning, model their own development, and design quality learning activities. Hill (2009) suggested that professional development should be individualized and be based on the professional needs of the teachers. This would connect professional learning and teacher evaluations into a more coherent whole. Hill (2009) wrote:

Professional development will be more effective and more efficient if we link specific teachers' weaknesses with the learning opportunities most likely to remedy those weaknesses. For instance, teachers scoring below a cutoff in math knowledge would be required to attend math-focused coursework. Or, teachers who fail over several years to perfect classroom management routines would be paired with others who are expert in this area. This entails a much more nuanced and intrusive system of teacher evaluation than we now have. (p. 475)

After coding and comparing each school's qualitative data, there were some variations in the school-sponsored professional development activities of each of the

participating schools; however, most were very similar. Teachers enjoyed a limited variety of learning activities. These activities primarily covered traditional methods of teacher learning; examples were workshop and conference attendance, book discussions, and educational videos.

Low to moderate means within the professional learning process standards may explain why teachers were provided very traditional professional development offerings. The literature suggested professional learning activities should be research-based and data-driven, which lead to professional development activities that are well designed and assessed for effective teacher learning (Luke & McArdle, 2009). These professional learning experiences would be varied and designed to meet the learning needs of the schools in general (Wayne et al., 2008) and the individual teachers in particular (Hill, 2009).

How do teachers learn best? Research has indicated teacher professional development should be active (Easton, 2008), intense and continuous (Kazemi & Hubbard, 2008), and content focused (Darling-Hammond et al., 2009a). This conclusion was supported by the survey data collected. The survey data support that teachers sometimes learned (60%) through a variety of methods or strategies. A group of prominent professional development scholars (Garet et al., 2001) defined the most common forms of traditional professional learning as “workshop” which included such things as “institutes,” “courses,” and “conferences” (p. 920). These types of learning, prominent among the public schools, were just as prominent among the Christian schools studied. Professional development experiences were primarily limited to school in-service days and staff meetings. Other professional learning opportunities were tied to

learning new curriculum or, to a lesser extent, to learning new instructional approaches. Teachers received limited support on implementing new skills and/or curriculum. It seems to me, however, that Christian school educators, teachers, and administrators should be more cognizant of current research and literature that promotes a variety of professional learning options, including peer coaching, demonstrations, lesson practice with feedback, group problem solving, action research, and examination of student work (Borko, 2004; Darling-Hammond et al., 2009a; Guskey & Yoon, 2009; Yoon et al., 2007) that meets individual teacher needs (Hill, 2009).

Teachers reported that learning opportunities were normally generic and broad and at times poorly planned. These staff development activities were often scheduled after school (when teachers are tired) or crammed into pre-service or in-service days. Although a small number of teachers considered these types of learning opportunities positive experiences, the majority did not. These learning experiences did not provide many opportunities for deep understanding of the topics being studied or implemented (Guskey & Yoon, 2009). Bailey's (2010) study revealed major gains in content and pedagogical knowledge from sustained, standards-based professional learning experiences. Bausmith and Barry (2011) argued that professional development, generally, and professional learning communities, in particular, would benefit from the extensive literature available on teacher expertise that has been centered on teachers' understanding of subject content and pedagogy. Guskey and Yoon (2009), who synthesized recent professional development research, wrote:

The professional development efforts in every one of these investigations centered directly on enhancing teachers' content knowledge and pedagogic content knowledge. The activities were designed to help teachers better understand both

what they teach and how students acquire specific content knowledge and skill.
(p. 497)

Survey results supported the qualitative findings (Wayne et al., 2008). A minority of those surveyed (30%) believed that professional development activities at their Christian schools promoted deep understanding of the topics studied. Keller (2010) wrote concerning the lack of specificity in the professional development content of teacher learning activities and the need for researchers to identify the most beneficial information to give to teachers to help them in their professional growth. Therefore schools, and their leaders, should encourage professional growth focused on content-specific learning activities that are well planned and offer teachers an opportunity for optimal learning and practical application. Guskey (2003) analyzed 13 lists from various educational associations that named characteristics of effective professional development practices and concluded that content knowledge and related strategies were the most mentioned characteristic. He wrote:

The most frequently mentioned characteristic of effective professional development is enhancement of teachers' content and pedagogic knowledge. Eleven of the 13 lists emphasized this characteristic. Helping teachers to understand more deeply the content they teach and the ways students learn that content appears to be a vital dimension of effective professional development. (p. 9)

A consensus, derived from recent studies of professional learning, had suggested an important role for content emphasis in high quality and effective professional development (Wayne et al., 2008). Wayne et al. (2008) wrote, "For example, it is generally accepted that intensive, sustained, job-embedded professional development focused on the content of the subject that teachers teach is more likely to improve teacher knowledge, classroom instruction, and student achievement" (p. 470). The teachers who

participated in this study suggested that staff development activities: (a) be content specific, (b) be timely (i.e., when teachers are well rested, are ready for optimal learning, have opportunities to reflect on their teaching and to apply new knowledge and learning to their classroom settings), (c) be consistent (i.e., weekly or monthly learning activities as opposed to activities that take place once or twice a year), and (d) have an accountability component. This understanding of effective professional development aligned well with the research and practical literature on quality and effective professional learning experiences which suggested that the core features of positive professional development activities include: (a) a focus on content knowledge, (b) opportunities for active learning, and (c) sustained and coherent professional learning experiences (Garet et al., 2001). Garet et al. (2001) wrote, “Teachers must be immersed in the subjects they teach, and have the ability both to communicate basic knowledge and to develop advanced thinking and problem-solving skills among their students” (p. 916). Based on survey and interview results, these Christian schools did not seem to be familiar with the professional development literature and only occasionally did they consult other schools about effective professional learning practices (Blankstein, 2010; Kilbane, 2009). The topic of research-based professional development was rarely, if ever, mentioned during the focus group discussions (Desimone, 2011). I do not believe research-based professional development was a matter of practice or discussion at these schools; however, it should be a part of the professional learning process (Hedges, 2010). Furthermore, not much thought went into the design of their professional development programs and activities (Carter, 2011). The lack of the thoughtful design of quality

professional learning activities was supported by both the survey data and the focus group reflections and discussions.

The professional development practices reported by teachers did not seem to be data-driven, or assessed. Survey data indicated that data-driven professional development was weak, and this was further supported by the lack of interview data collected on the topic of data-driven decision making. The topic of evaluating or assessing professional development programs and activities was not a part of any interview discussions. It appeared that it was not regular practice for these teachers to use student data to further their learning or to improve student achievement (Best, 2011). Furthermore, data were rarely used to determine the effectiveness of their professional development efforts. The research literature reflects this trend, and Goren (2012) wrote about the need

for a deeper and better understanding of data, the conditions that are most conducive for using data well, how individuals and groups of practitioners make sense of the data before them, and the intended and unintended consequences of data use for school improvement. (p. 233)

Survey data indicated the teachers occasionally used data when discussing instruction and student learning and rarely did these teachers formally evaluate the quality or effectiveness of their professional learning; although they were not shy in voicing their critique of their professional learning in the focus group setting. Christian schools need to grow in their understanding of the use of data and their interpretation for developing effective professional learning activities that increase teacher learning (Coburn, 2012; Goren, 2012).

Data should be used regularly to help inform Christian schools of what professional learning activities support best practices in teacher growth and development. Furthermore, approaches to professional teacher learning at Christian schools should not

exclude traditional staff development practices. Designing effective professional development activities is more complex than embracing progressive approaches and rejecting the more traditional ones (Opfer & Pedder, 2011). Schools need to approach their professional development design understanding the complex nature of teacher learning (Kazemi & Hubbard, 2008). Lieberman and Pointer Mace (2008) determined that “there has been a burgeoning of both research and experience teaching us to move in a different direction with more long-lasting results and a deeper understanding of the kinds of conditions needed to improve teacher practice” (p. 227). Like Christian school students, Christian school teachers learn differently. Therefore, professional learning at Christian schools should be differentiated (Hoekstra et al., 2009). This perspective allows for endless professional learning possibilities, including utilizing teacher choice and self-directed learning experiences as well as encouraging informal learning (Camburn, 2010; Carter, 2011; Desimone, 2011; Eraut, 2000).

Teacher Self-Directed Learning Experiences

Time and budgeting limitations of these Christian schools have encouraged many of these teachers to initiate their own professional growth and learning.

The most common professional development experiences were centered around workshops, seminars, and conferences. Teachers enjoyed these learning experiences for a variety of reasons. Some were as follows: (a) change of environment, (b) relationship building with other faculty, (c) teacher choice, (d) content specific information, and (e) knowledgeable presenters/experts in their fields.

As the study showed, workshops and conferences gave teachers the opportunities to experience professional learning that was supported by the research literature. Personal

and professional relationships encouraged continued learning. Teacher choice, since teachers recognized their learning needs better than anyone else, was well supported within the literature for adult learning and motivation. Furthermore, many teachers desired content-specific learning opportunities from knowledgeable and experienced educators.

A few other learning experiences that were relevant and worthy of discussion are as follows: (a) online learning, (b) graduate education, and (c) independent reading and research. The Internet and online learning, including social media experiences, played a major role in teacher professional growth and learning (Brooks, 2010). Teachers accessed content-specific knowledge, instructional ideas, current research, best-practice methods, and practical information (e.g., lesson plans) for their professional learning. Educational leaders were encouraged to inspire teachers to interact with types of online opportunities. The Internet was considered to be a prime area of professional growth and learning. Duncan-Howell (2010) reported teachers who were members of online communities were committing 1-3 hours a week to their professional learning. This online learning was relevant, allowed for teacher choice, and was content rich. Internet professional learning communities provided teaching professionals an accessible and flexible learning experience that is more learner-centered. This approach also helped enrich and improve the interaction of teachers, especially those who lived in secluded areas (Salazar et al., 2010). The Internet has introduced quality and cost-effective professional learning that has led to increased portability of training and the exchange of creativity, information, and dialogue (Villar & Alegre, 2008).

One study suggested that the Internet has facilitated the creation of virtual learning experiences that have complemented traditional learning and encouraged collaboration (Stevens, 2008). E-learning has provided innovative ways of structuring teaching, learning, and the management of learning experiences.

Graduate studies allowed teachers to gain expert knowledge of their field and granted them the professional credentials many parents and politicians expect of professional educators. Master teachers have exerted the additional time, money, and effort to prepare themselves for educational ministry. Independent reading and research was a strong aspect of these teachers' professional learning experiences. These types of learning experiences afforded the teachers the opportunities to grow in their content area, to learn new and different teaching methods, and to choose their own areas of learning.

Informal Learning Experiences

These Christian school teachers experienced many informal learning opportunities during the school day. Parise and Spillane (2010) wrote concerning on-the-job learning opportunities:

While formal learning opportunities have taken center stage in the policy arena, some researchers have also focused on how teachers learn from their colleagues on the job, outside of formal professional development activities. Work addressing on-the-job learning opportunities suggests that learning is fostered when professionals work alongside others, asking questions and gathering information, observing colleagues, and giving and receiving feedback. (p. 326)

These often unplanned and spontaneous events were a major factor in their professional growth and development (Camburn, 2010; Eraut, 2000). Survey results supported the qualitative findings. Over 66% of the surveyed teachers frequently or always had to find creative ways to learn professionally. Two themes that were common among the teachers

interviewed for this study are as follows: (a) classroom experiences and self-reflection, and (b) teacher conversations. Both of these played an important role in these teachers' professional growth and learning. Teacher reflection and their classroom experiences afforded the teachers opportunities to learn from the positive and negative aspects of their practice (Chetcuti, Buhagiar, & Cardona, 2010; Ryan, 2005). Hedges (2010) wrote, "Teacher reflection is encouraged to develop practice and guide professional learning" (p. 300). Teacher reflection is an often missed aspect of professional learning, yet reflection was a common theme of the focus group interviews. Thoonen et al.'s (2011) research into transformational leadership practices suggested that teachers' involvement in professional learning experiences, in particular experimenting and reflecting, was a strong influence on teaching practice. Camburn (2010) wrote:

There is a growing recognition that professional development that engages teachers in active reflection on their teaching, either through joint work with fellow teachers or by working with instructional experts, can be particularly effective in supporting the adoption of new instructional practices. (p. 464)

Camburn (2010) connected the importance of day-to-day interactions to reflective learning. Furthermore, casual, yet meaningful, conversations played a big role in how these teachers grow as professionals (Brown & Kennedy, 2011; Simpson & Trezise, 2011). McCormack and Kennelly (2011) reflected on the potential of teacher conversations to positively influence self-understanding and teacher practice. The quantitative results of this study supported the notion that school leaders frequently encourage and model effective collaboration; however, teachers seem to accomplish this informally, since these schools seldom planned time for teachers to learn together. Therefore, online learning experiences have played an increasing role in professional development and teacher collaboration (Richardson, 2011).

Kern and Levin (2009) studied the benefits of online learning systems like opportunities for teacher professional learning and online teacher conversations. Anderson (2011) discussed that teachers can best use the social networking and micro-blogging service Twitter as a means for professional learning. Teachers gleaned ideas, knowledge, advice, and teaching tips from listening and sharing with one another (Scribner, 1999). Lieberman and Pointer Mace (2008) concluded, “We are coming to understand that learning rather than being solely individual (as we have taken it to be) is actually also social. It happens through experience and practice” (p. 227). Survey findings reflected this strong desire for sharing and modeling. Although informal learning has had a major impact in these teachers’ professional learning, formal professional development has played an equally important role. Parise and Spillane (2010) concurred that both formal and on-the-job learning play a significant role in changing teachers’ instructional practices.

Research Question 2: What school processes and practices and individual and professional experiences support their professional learning and why?

The primary reasons that these teachers learned the way they did was that they: (a) had limited financial support and resources, (b) had time restraints, and (c) had unique personal and religious experiences. Christian schools had two of the same major barriers to overcome as do most public schools (Mizell, 2011). These two barriers, money and time, had forced schools and individuals to approach professional learning the way they did. Kilbane (2009) lamented that any form of professional learning is dependent on teachers giving energy and time. Workloads, time constraints, and personal commitments

all create barriers to the ongoing learning; and lack of resources for professional learning activities limits the deepening of teacher learning.

Limited Financial Support and Inadequate Resources

Teachers in this study reported similar issues to other Christian schools studied that little financial incentive was given to grow professionally (Christie, 2009). These Christian schools, like others, had very limited budgets, and professional development was normally lacking. Survey results supported this point, that financial resources were not readily available or in some cases not even budgeted. If teachers would like to attend workshops, take graduate course work, join professional organizations, or purchase magazine subscriptions or books, they normally had to finance them on their own. It should be noted that one school studied paid for teachers' master's-level coursework and covered conference fees, and some of the schools studied provided books for all staff professional development and paid for all school workshops, usually utilizing government funding. Those schools that were more proactive in their professional development efforts and financially supported staff learning and scheduled times for professional growth often found time as their greatest enemy.

Time Constraints

Some of the schools' intentions were valiant. However, time constraints for teachers and administrators forced undesired outcomes. This was reflected in both the survey and focus group findings. Guskey and Yoon (2009) wrote, "Professional development advocates have long lamented the lack of sufficient time for staff members to engage in high-quality professional learning. Obviously, educators need time to deepen

their understanding, analyze students' work, and develop new approaches to instruction” (p. 497). Many of these teachers had workloads that impacted much of their days. For example, many of the secondary teachers had four or five different class preparations. Public school secondary teachers may have had the same number of preparations; however, they normally taught the same course at four different times. Furthermore, at Christian schools teachers were often required (or strongly encouraged) to assist with various duties that took away from time that could have been used for class preparations or professional learning. It was very common for teachers to be involved with after-school activities, like coaching and tutoring. Of course, these activities prolonged the day and diminished the time that could have been spent on professional learning. School administrators often scheduled professional development sessions late in the work day, which stressed already tired minds. Many teachers participated in these staff development activities; however, no real learning took place. Furthermore, some administrators planned yearly professional development programs for their teachers and staff, but never saw them through to completion. The busyness of the school days kept many administrators from following through with their plans. These Christian schools need to explore ways to provide more quality time for professional development. Some schools schedule early-release days to provide more time for professional learning. One local Christian school, which did not participate in this study, scheduled an early-release day each week to facilitate professional development and other school improvement efforts. This allows teachers 2 hours a week for professional development-related activities.

Unique Personal and Religious Experiences

Christian school teachers had unique personal and religious experiences that influenced their professional growth and learning (Parker, Carlson, & Na'im, 2007). Many grew professionally the way they did because of their personal religious beliefs. This may have been true of Christian public school teachers as well; however, many of the teachers interviewed made it a point to refer to their Christian faith as vital to their professional growth. Since many of these teachers felt called to teaching, they naturally (or should I say “supernaturally”) wanted to fulfill their calling as well as possible—this included their growth as professionals. Palmer (1998), reflecting on “the teacher within,” wrote:

Encounters with mentors and subjects can awaken a sense of self and yield clues to who we are. But the call to teach does not come from external encounters alone—no outward teacher or teaching will have much effect until my soul assents. Any authentic call ultimately comes from the voice of the *teacher within*, the voice that invites me to honor the nature of my true self. (p. 29)

Many of these teachers believed that God, through Jesus Christ, is the teacher within. Many believed that God had gifted them to teach; therefore, they wanted to be the best teachers possible. McNeal (2000), continuing this line of thought, concluded:

Every leader will admit to having some sense of destiny, whether great or small. In spiritual leaders, we can refer to this as the awareness of a call. The call is the leader's personal conviction of having received some life assignment or mission that must be completed. The call orders the leader's efforts, affecting decisions in every area of life. How the leader comes to an understanding of the life mission and how to pursue it provides a significant subplot for the leader's life drama. (p. xiii)

These teachers' life drama was largely consumed by their calling to Christian education.

This call gave direction and purpose to their vocation: being a Christian school teacher.

This call has contributed to their educational and personal perspectives (G. Knight,

1989). The survey results seemed to support this important aspect of their teaching. The content area survey results were the strongest, especially the areas of equality and family. This supports the religious commitment of the teachers' theme well. Teachers respected students as individuals created in God's image and understood that each student had unique learning styles. Teachers also had a high regard for family and the role that families played in the education of their children. Again, I believe this is directly related to the religious beliefs of these Christian school teachers.

Conclusions of the Study

These Christian school teachers, like their public school counterparts, desired to be the best teachers possible. They wanted to grow and learn as professionals. Therefore, this study concluded:

1. Most teachers took advantage of the school-initiated learning opportunities afforded to them, which were mostly traditional.
2. Due to time and monetary constraints, many of these teachers learned by the best means possible. Oftentimes these learning experiences were limited to generalized book discussions and/or workshops presentations.
3. These teachers desired to be a part of professional learning communities that offered relevant and timely professional learning opportunities based on research and teacher learning needs (Luke & McArdle, 2009; Wayne et al., 2008).
4. Often, daily informal learning experiences of these teachers, including faculty conversations and self-directed professional learning, became the primary source of growth and learning (Grangeat & Gray, 2007; Haigh, 2005; Wilson & Berne, 1999).

5. Although learning from one another and from personal experiences was a valid and good means of professional growth and learning, these teachers needed more, well-planned and designed, timely and quality professional learning opportunities that were content-specific (Darling-Hammond et al., 2009a; Kazemi & Hubbard, 2008; Kimball, 2011).

6. These teachers needed more opportunities to collaborate or network with other teachers, particularly from other Christian schools, additional support to attend conferences and workshops and/or complete advanced degrees, and extra time during the school day for using student data to make collaborative decisions.

7. The role of the principal was a highlight of my findings. Teachers expressed an appreciation for their leadership's positive understanding and attitude concerning the vital role of teacher professional learning (F. King, 2011).

8. Teachers were accustomed to passive learning. As Easton (2008) wrote, "Teachers will have to move from being trained or developed to becoming active learners. Significant change will require educators to alter their attitudes and behaviors" (p. 755).

9. Personal beliefs, particularly religious ones, have played such an important role in the professional lives of these teachers that it seems natural for the educational leaders at these schools to integrate the Christian faith, with its moral vision and social imperatives, into the school's professional development goals to better tie faith and learning together (Brown, 2002; Pazmino, 1988).

I conclude this paper with the limitations of my study which will, in turn, lead to some recommendations for practice and some suggestions for future research at Christian schools and K-12 schools in general.

Limitations

This research had some limitations, since it focused on select K-12 Christian schools and their teachers from the Detroit metropolitan area. Participants and schools were chosen for proximity convenience, and the quantitative tool utilized was selected for its validity, ease of implementation, and national reputation. The geographic area, the nature of the study (e.g., Christian schools), the survey that was implemented, and the number of participants and schools that were studied necessarily limits the degree to which the findings can be generalized to other schools in general and Christian schools in particular. Since this research examined teachers' perceptions and personal understandings of the professional development practices at their schools, it was understood that personal recollections carried all the limitations of self-reported data.

Recommendations for Practice

Planning and designing effective professional development activities were at the heart of my study. The findings mentioned above gave a good starting point of discussion for Christian school teachers and administrators in their pursuit of strong, Christian learning communities. I will discuss recommendations for the following groups of educators: (a) teachers, and (b) school administrators and other leaders, including policy makers—which may be administrators, pastors, and/or school board members.

Teachers

I recommend that Christian school teachers nurture their God-given desire to be life-long learners. Christian school teachers, though busy and underpaid, should continue to take ownership of their own learning and find innovative ways for active and reflective learning (Easton, 2008; Wayne et al., 2008; Yaman, 2005). Unfortunately, if teachers wait until they have the time, energy, and funding or wait until their schools provide the much needed learning to grow as professionals, they may never reach their God-given potential. Although many teachers rely on the school to develop them, many do not. Easton (2008) wrote, “They must become learners, and they must be self-developing” (p. 756). Teachers who take their own professional learning seriously should encourage their colleagues to do the same. I encourage teachers to plan and budget well. Every teacher can make reading professional journals and books a daily habit. It does not take a great deal of money or time to visit your local library or school district to secure and read current works on classroom practice that can positively impact their professional practice. Furthermore, every Christian teacher should consider earning a master’s degree or better. Many people, especially those in public education, believe that Christian schools and their teachers offer an inferior education. Christian teachers should be the best trained and professionally developed educators in society. Carter (2011) wrote, “Research shows that the highest performing education systems in the world rely on the high quality of their teachers” (p. 3). It is imperative that Christian schools, also, rely on this high quality of teachers. Since the Internet is a good tool for professional learning, it should be utilized to its full potential (Brooks, 2010). Furthermore, teachers should be trained well in all forms of technology as to implement it in their classrooms. Teachers should engage in

deeper conversations with one another concerning teaching and learning, and they should be open to self-reflection and professional growth and improvement (Camburn, 2010; Eraut, 2000; Wayne et al., 2008). Wilson and Berne (1999) wrote, “And every school experience, whether it be in elementary or middle or high school, in a college or university, has the potential for teaching them a lesson about what school is, what teachers do, and how people learn” (p. 173).

School Administrators and Other Leaders

It seems imperative that if Christian schools are to become learning communities, school leadership has to facilitate good and effective professional development programs and activities (Borko, 2004; Reynolds, 2006). Easton (2008) wrote, “The least educators can do is become learners themselves by engaging in a process of professional learning” (p. 761). From the feedback I have received during this study, most teachers respect and understand the time constraints and financial limitations their administrators are under. However, a number of important themes arose from the faculty conversations I had with these teachers. My recommendations arise from the learning challenges that the teachers face and from their desires for effective professional learning at the school level. I will make and discuss a number of recommendations that I believe are vital for Christian leaders to grasp and employ, if their teachers are to grow to be the teachers they need to be. School leaders would do well to (a) create professional development funding in their budgets and time in their schedules, (b) plan quality professional learning activities in cooperation with teachers that have content-rich and relevant strategies, (c) share current literature on quality and effective professional practices, (d) model life-long, professional

learning, and (e) encourage informal, teacher-directed learning that includes experimentation and reflection.

School leaders should budget funds for professional development (Christie, 2009). Money should be set aside for school-initiated professional development programs and activities, yet funding should also be available for off-site conferences and workshops and for graduate studies. The more money budgeted, the better. If the school's educational philosophy and policy allow it, explore using federal funding through the local school district to generate professional development funds. Christian schools receive thousands of dollars a year from federal funds for the professional development of teachers in the core disciplines.

Since the lack of quality time for professional learning was a major challenge at public and private schools alike, I recommend that school leaders provide quality time throughout the year that is used effectively. Leaders need to be creative and flexible to schedule these times of professional learning. This may mean creating a weekly school schedule or a well-thought-out school calendar to accommodate this. Since one of the chief vehicles Christian teachers employ to learn professionally is sharing ideas with one another, administrators should plan times for faculty conversations. Professional learning may be made a more collective endeavor (Kazemi & Hubbard, 2008). This may be planned with teachers from their schools or with groups of teachers from other Christian schools. It has been suggested "that when diverse groups of teachers with different types of knowledge and expertise come together in discourse communities, community members can draw upon and incorporate each other's expertise to create rich

conversations and new insights into teaching and learning” (Putnam & Borko, 2000, p. 8).

Teachers’ voices should be heard. Lieberman and Pointer Mace (2008) recommend establishing professional learning communities that reflect openness and collaboration, an environment that encourages teachers’ voices to be heard. What do the teachers think about their professional learning? In what areas do they believe they need growth? Since a major theme that arose from the data was the need for relevant and timely professional development, and this normally meant, content-specific professional development, it is recommended that administrators allow for a number of things when planning professional development activities (Carter, 2011; Desimone, 2011). They are as follows:

1. Allow as much teacher choice as possible.
2. Focus primarily on content-specific learning. If general topics are planned, make sure every teacher can benefit from the experience.
3. Schedule times and days that facilitate the greatest learning. Cramming professional development activities into one in-service day or at the end of a long school day may not be the most beneficial times.
4. Plan each learning activity well and communicate any goals or vision equally as well. Teachers want to support administrative goals and initiatives. Give them the opportunity to do so by planning and communicating well.

School administrators and leaders should be familiar with the current research and practical literature dealing with high-quality and effective K-12 professional development (Clarke & Hollingsworth, 2002). Over the last decade, there has been a professional

consensus emerging about what constitutes high-quality and effective professional learning (Desimone et al., 2002). Christian school leaders should know and understand effective professional learning practices.

School administrators and other educational leaders should model life-long professional learning. They should be readers and should be attending relevant workshops and conferences. They should be up-to-date on the current issues and ideas within the field. They should be setting examples by continuing their education through graduate courses or working towards an advanced degree. Good leadership is vital for vibrant learning communities.

Furthermore, research and, in some cases, policy are adding a new component to the design of professional learning activities. Instead of designing professional development activities based merely on learning subject-specific content and new instructional practices, some schools and state departments of education are using data (e.g., standardized test scores and teacher knowledge and skills) to design professional development activities (Best, 2011; Coburn, 2012). Others (Klein & Riordan, 2011) are recommending experiential methods for teaching adult educators. Educational leaders purposefully engage teachers in direct learning experiences and focused reflection in order to expand knowledge and develop skills. I believe Christian school administrators and other school leaders should do the same.

In addition to these recommendations to teachers and administrators, another recommendation for practice is to continue to encourage professional educators to make their decisions data-driven. The research and practical literature suggests that professional learning experiences be data-driven, which lead to professional development

activities that are designed with the school and its teacher in mind (Luke & McArdle, 2009). Various forms of data are the foundation for designing professional development activities that play an important role in quality teacher learning. These professional learning experiences would be varied and designed to meet the learning needs of the schools in general (Wayne et al., 2008) and the individual teachers in particular (Hill, 2009). Data should be used regularly to inform Christian schools of what professional learning activities support best practices in teacher growth and development at their particular schools. Furthermore, approaches to professional teacher learning at Christian schools should include a variety of professional learning practices. Designing effective professional development activities is more complex than embracing progressive approaches and rejecting the more traditional ones (Opfer & Pedder, 2011).

Data-driven design has served as a good guide to set measurable, yearly learning and instructional goals (Marsh, Pane, & Hamilton, 2006). Salpeter (2004) wrote that a key aspect of data-driven decision making in schools involved being immersed in data over an extended period of time. Putting data-driven decision making into practice, especially among teachers, has been a very recent and important research endeavor.

Coburn and Turner (2012) wrote:

Investigating the practice of data use directly is important if we are to understand what is happening at the ground level of one of the most prominent strategies for educational improvement in the country. Understanding the practice of data use not only can help us explain the outcomes of the data use but also provides insight into when and under what conditions data use acts as a productive pathway to educational improvement and when it does not. (p. 100)

The literature has been recommending a more robust, methodologically sophisticated, and extensive use of data-driven professional learning design (Goren, 2012; Little, 2012; Moss, 2012; Spillane, 2012). Schools may begin their use of data by

exploring data already available to them, such as standardized test scores and/or any local assessments employed by the school. Given this discussion, it is crucial that all educators and those helping them design professional development experiences base these learning experiences on a variety of data that meet the learning needs of both teachers and students.

Suggestions for Future Research

In this last section, I discuss my suggestions for further research. Inquiry into professional development and teacher learning at public schools is maturing and beginning to reach its potential. Recently, ideas have arisen to improve the quality of research into teacher professional learning (Desimone, 2009). However, inquiry into the professional learning of Christian teachers is in its infancy. Very little has been published concerning Christian schools, and even less about professional development at Christian schools. Until recently, nothing has been available on this subject. Very recently, a few research articles have been published. These studies that have focused on professional development at Christian schools have been limited to schools that are members of the Association of Christian Schools International (Finn et al., 2010; Headley, 2003, 2008; Neuzil, 2010; Neuzil & Vaughn, 2010) and have utilized Headley's survey (Headley, 2004). These studies were geared toward teachers and administrators and were also very foundational. I thought it would be foundational to explore the professional learning practices of Christian school teachers. Therefore, I intentionally focused my research on "how" and "what and why" Christian school teachers learn the way they do. Now that we have an idea of "how" these teachers grow and "what and

why,” I believe there are other research avenues that can be explored from here. A few of them are:

1. Are current professional development practices at Christian schools working? Are they quality and effective programs?
2. Should non-formal, teacher-directed professional learning activities be encouraged or even preferred due to the time and funding limitations?
3. What is the impact of school and/or church leaders on the professional growth of Christian school teachers?
4. What role does leadership play in developing learning communities at Christian schools?
5. Does a leader’s personal professional learning practices impact faculty growth and learning?

I believe this area of research and study is a wide one, and minds much greater than mine may explore many avenues that may assist Christian schools and educators in becoming what God desires them to become. Hilda Borko (2004) aptly summarized my thoughts:

My challenge to the educational research community is this: We have much work to do and many questions to answer in order to provide high-quality professional development to all teachers. It will take many different types of inquiries and a vast array of research tools to generate the rich source of knowledge needed to achieve this goal. (p. 13)

Final Thoughts

As a new classroom teacher at a small Christian school, I vividly remember my desire to make my instruction interesting and relevant. I was introduced to the classroom

without any formal training, which is common among smaller Christian schools. My sense of calling and my determination to be a good teacher, substituted for my lack of skills and knowledge. I found my greatest joy in researching, studying, and preparing my own teaching materials. A highpoint of my early teaching career came when a student of mine approached me after class and stated, “You really like this stuff, don’t you.” As I thought about that statement, I came to realize that teaching was an integral part of who I was as a person. I was enthusiastic about teaching, because I was created to be a teacher. I have reflected on this statement numerous times over the years, and it has become a teaching milestone. As a Christian school teacher, I wanted to continue to develop innovative ways to reach students and have always desired to enhance my own teaching skills. This desire has continued as a Christian school principal.

My research has revealed that many Christian school teachers have a similar drive and calling as I do. Teachers utilize various forms of professional learning from more traditional means like workshops and book studies to more progressive means like action research and classroom observations. They learn from their personal and professional experiences and from self-directed inquiry and exploration. They learn from professional conversations and from blogs and emails. Christian school leaders need to continue to nurture the calling and desire that many of these teachers possess helping them utilize the experiences and activities that facilitate the greatest professional growth and learning.

APPENDIX A

Survey Questions

Standards Assessment Inventory (SAI)

Respondents reflected on their professional learning experiences at their schools. Their choices were as follows: 0-Never, 1-Seldom, 2-Sometimes, 3-Frequently, and 4-Always.

1. Our principal believes teacher learning is essential for achieving our school goals.
2. Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school.
3. We design evaluations of our professional development activities prior to the professional development program or set of activities.
4. Our school uses educational research to select programs.
5. We have opportunities to practice new skills gained during staff development.
6. Our faculty learns about effective ways to work together.
7. Teachers are provided opportunities to gain deep understanding of the subjects they teach.
8. Teachers are provided opportunities to learn how to involve families in their children's education.
9. The teachers in my school meet as a whole staff to discuss ways to improve teaching and learning.
10. Our principal's decisions on school-wide issues and practices are influenced by faculty input.
11. Teachers at our school have opportunities to learn how to use technology to enhance instruction.
12. Teachers at our school learn how to use data to assess student learning needs.
13. We use several sources to evaluate the effectiveness of our professional development on student learning (e.g., classroom observations, teacher surveys, conversations with principals or coaches).

14. We make decisions about professional development based on research that shows evidence of improved student performance.
15. At our school teacher learning is supported through a combination of strategies (e.g., workshops, peer coaching, study groups, joint planning of lessons, and examination of student work).
16. We receive support implementing new skills until they become a natural part of instruction.
17. The professional development that I participate in models instructional strategies that I will use in my classroom.
18. Our principal is committed to providing teachers with opportunities to improve instruction (e.g., observations, feedback, collaborating with colleagues).
19. Substitutes are available to cover our classes when we observe each other's classes or engage in other professional development opportunities.
20. We set aside time to discuss what we learned from our professional development experiences.
21. When deciding which school improvement efforts to adopt, we look at evidence of effectiveness of programs in other schools.
22. We design improvement strategies based on clearly stated outcomes for teacher and student learning.
23. My school structures time for teachers to work together to enhance student learning.
24. At our school, we adjust instruction and assessment to meet the needs of diverse learners.
25. Teachers use research-based instructional strategies.
26. Teachers at our school determine the effectiveness of our professional development by using data on student improvement.
27. Our professional development promotes deep understanding of a topic.
28. Our school's teaching and learning goals depend on staff's ability to work well together.
29. We observe each other's classroom instruction as one way to improve our teaching.
30. At our school, evaluations of professional development outcomes are used to plan for professional development choices.

31. Communicating our school mission and goals to families and community members is a priority.
32. Beginning teachers have opportunities to work with more experienced teachers at our school.
33. Teachers show respect for all of the student subpopulations in our school (e.g., poor, minority).
34. We receive feedback from our colleagues about classroom practices.
35. In our school we find creative ways to expand human and material resources.
36. When considering school improvement programs we ask whether the program has resulted in student achievement gains.
37. Teachers at our school expect high academic achievement for all of our students.
38. Teacher professional development is part of our school improvement plan.
39. Teachers use student data to plan professional development programs.
40. School leaders work with community members to help students achieve academic goals.
41. The school improvement programs we adopt have been effective with student populations similar to ours.
42. At my school, teachers learn through a variety of methods (e.g., hands-on activities, discussion, dialogue, writing, demonstrations, practice with feedback, group problem-solving).
43. Our school leaders encourage sharing responsibility to achieve school goals.
44. We are focused on creating positive relationships between teachers and students.
45. Our principal fosters a school culture that is focused on instructional improvement.
46. Teachers use student data when discussing instruction and curriculum.
47. Our principal models how to build relationships with students' families.
48. I would use the word, empowering, to describe my principal.
49. School goals determine how resources are allocated.
50. Teachers analyze classroom data with each other to improve student learning.

51. We use students' classroom performance to assess the success of teachers' professional development experiences.
52. Teachers' prior knowledge and experience are taken into consideration when designing staff development at our school.
53. At our school, teachers can choose the types of professional development they receive (e.g., study group, action research, observations).
54. Our school's professional development helps me learn about effective student assessment techniques.
55. Teachers work with families to help them support students' learning at home.
56. Teachers examine student work with each other.
57. When we adopt school improvement initiatives we stay with them long enough to see if changes in instructional practice and student performance occur.
58. Our principal models effective collaboration.
59. Teachers receive training on curriculum and instruction for students at different levels of learning.
60. Our administrators engage teachers in conversations about instruction and student learning.

APPENDIX B

Focus Group and Written Reflection Questions

Written Reflection Question:

How have you become the teacher you are today?

Some of the Focus Group Interview Questions:

What role has professional development played in you becoming the teacher you are today?

What does your school do for professional development?

Describe your most successful professional development experience? What made it a positive experience?

Describe your worst professional development experience? Why did the experience fail?

What are your favorite professional development experiences? (If teachers are slow to give you categories, suggest adding formal (i.e., school-initiated) and/or informal (teacher-initiated)?)

Describe challenges faced by teachers wishing to develop professionally in Christian schools?

How can principals and educational leaders best facilitate teacher professional growth?

How could professional development activities make your school a better school? Make you a better teacher?

What is your definition of professional development?

Are there other questions I should have asked you about professional development?

Is there anything anyone would like to add?

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Education

<i>Present</i>	Ph.D. (Candidate), Andrews University (Instructional Leadership)
2002	M.S., Concordia University (Education)
1992	M.A., Trinity Evangelical Divinity School (Christian Thought)
1987	B.A., Central Bible College (Theology and Pastoral Ministry)

Vocational Experience

<i>1997- Present</i>	Principal/Christian Studies Teacher, Franklin Road Christian School
<i>1993- 1997</i>	Principal/ Secondary Teacher, West Bend Christian School
<i>1993- 1997</i>	Christian Education Pastor, Calvary Assembly of God
<i>1987- 1990</i>	Associate Pastor/ Youth Pastor, First Assembly of God

Educational Leadership and Teaching Experience

<i>Curriculum</i>	Development and implementation school/ church educational materials Development of K–12 curriculum standards
<i>Leadership</i>	Leadership of successful Christian school ministries Hiring and supervision of school faculty/ staff Supervision of daily school operations School promotion and development School athletic director and coach School Chaplain/ spiritual life coordinator Coordinator of faculty professional learning activities Director of development
<i>Teaching</i>	Adult/ Youth- Religious education classes College- Christian Studies, Humanities and English courses Middle and High School- English/ History/ Christian Studies