THE CATHOLIC UNIVERSITY OF AMERICA

Factors that Influence the Development of
Professional Community in Catholic Middle Schools

A DISSERTATION

Submitted to the Faculty of the

Department of Education

School of Arts and Sciences

Of The Catholic University of America

In Partial Fulfillment of the Requirements

For the Degree

Doctor of Philosophy

By

Kurt Nelson

Washington, D.C.

2012

Factors that Influence the Development of
Professional Community in Catholic Middle Schools

Kurt Nelson, Ph.D.

Director: Merylann J. Schuttloffel, Ph.D.

This study of Catholic middle schools examined the human, environmental, and cultural aspects of school climate; the development of professional community; the implementation of national middle school recommendations; and identified correlations between these variables. General school climate was conceptualized through Tagiuri's (1968) elements of climate, which have demonstrated an enduring quality within research literature. The work of Hoy and Sabo (1998) helped further conceptualize middle school climate. Professional community was conceptualized through the work of DuFour and Eaker (1998) and conceptualization of the components of professional community was based on the work of Bryk, Camburn, and Louis (1999). Middle school practices were conceptualized from the most recent national report on middle-level education (National Middle School Association, 2010).

Data for this study came from the survey responses of principals and teachers in Catholic schools in the state of Wisconsin that educate early adolescents. The final sample included 73 schools, representative of all five (arch)dioceses. Data were analyzed through descriptive statistics, multiple regression, and stepwise regression.

The results of these analyses indicate that the norms of professional community were further developed than professional community practices. The major finding of this study is that principal leadership and total school size were predictors of the overall

measure of professional community. Further analysis revealed that principal leadership, particularly supportive leadership, is a consistent and significant predictor of all six subscale measures of professional community. This study found no correlations between climate factors and the implementation of nationally recommended middle school practices.

This study provides a comprehensive look at teachers, environments, and culture in Catholic schools serving early adolescents. It also measures the development of professional community and the implementation of middle school recommendations in these schools. Finally, this study helps leaders of Catholic education better understand the importance of supportive principal leadership in the promotion of higher levels of professional community. This finding gives important insight to diocesan superintendents, pastoral leaders, and school principals in fostering Catholic school improvement.

This dissertation by Kurt Nelson fulfills the dissertation requirement for the doctoral degree in Catholic Educational Leadership and Policy Studies approved by Merylann J. Schuttloffel, Ph.D., as Director, and by John J. Convey, Ph.D., and Leonard DeFiore, Ed.D. as Readers.

Merylann J. Schuttloffel, Ph.D., Director

John J. Convey, Ph.D., 1st Reader

Leonard DeFiore, Ed.D., 2nd Reader

This dissertation is dedicated to my wife and five children who have shown an abundance of patience in this endeavor. I am most grateful to my amazing wife who has encouraged and supported me, despite the demands of managing a large family. Thanks also to my children who, for nearly eight years of classes and dissertation work, have cheered me on and accepted less of dad's time than they would have liked. I also express my appreciation to our extended family members for their care and support to me and my family during this process.

TABLE OF CONTENTS

TABLES

FIGURES

ACKNOWLEDGEMENTS

CHAPTER 1

INTRODUCTION

The schools of the late nineteenth century were predominantly based on the factory model with students progressing through a compartmentalized assembly-line of grades and teachers (DuFour & Eaker, 1998). While the junior high school was created in the early half of the twentieth century, it still did not provide the optimal educational setting for early adolescents (Lounsbury, 1992). In the 1960's, the middle school movement emerged in recognition of the unique developmental needs of early adolescents and the importance of redesigning classrooms and schools to be more responsive to these needs (George, Stevenson, Thomason, & Beane, 1992).

One of the central recommendations of the middle school movement was the creation of teams of students and teachers (Carnegie Council on Adolescent Development, 1989; George & Alexander, 1993; Jackson & Davis, 2000; National Middle School Association, 1995). In reality, teamwork among teachers was often confined to planning schedules and common events, not critically examining instruction (Anfara Jr. & Waks, 2000; DuFour, DuFour, Eaker, & Many, 2006; Epstein & MacIver, 1990). It was ironic that while attempting to create a more social environment for students, teachers carried on the core of their work in much the same isolated way as before. While teamwork became a *structural* part of the middle school (Thompson, Gregg, & Niska, 2004), it was not yet part of its *cultural* fabric.

1

The concepts of the learning organization and professional community gained wider attention in the 1990s (Senge et al., 2000), but have roots in work on organization development that emerged in the 1960s (Owens, 2004). The purpose of a professional community, sometimes also known as professional learning community (PLC), is to strengthen and focus teacher collaboration around the core issue of improving student learning (DuFour & Eaker, 1998; Vescio, Ross, & Adams, 2008). While professional communities are advocated for all grade levels, they provide the opportunity for middle school teachers in particular to recapture the full potential of teamwork – for their students and themselves (Angelle & Anfara Jr., 2008).

This dissertation study investigates the influence of factors related to teachers, environments, and cultures on the development of professional community among middle school faculties. This research looks for correlations between these factors and the development of norms and practices associated with professional communities. In addition, it uses the implementation of national middle school recommendations as a measure of the level of collaborative community specifically called for in schools educating early adolescents.

THEORETICAL FRAMEWORK

This study draws upon large bodies of research on teachers, school climate, Catholic school culture, learning organizations, and middle-level education. Each highlights the importance of teachers and the power of community. The conceptual framework will incorporate major findings from this theoretical base as they relate to one

another in the study of middle grade faculties and the development of professional

communities.

Teachers

While many school-based factors affect student outcomes, none is as powerful as

the teacher (Goodlad, 1984; Hoy & Sabo, 1998). Studies consistently find that, "teachers

constitute the one single element of schooling most influencing students' learning"

(Goodlad, 1984, p. 167). This is because while many other factors influence schools,

"ultimately, only teachers improve instruction" (Hoy & Sabo, 1998, p. 119). Lee and Loeb

(2000) found that school climate not only affected students directly, but also did so

indirectly through its effect on teachers. Since teachers' attitudes are clearly critical to

school effectiveness, it is important to know what factors of school climate empower

teachers and which create frustration and dissatisfaction.

Positive student outcomes provide a strong case for studying school climate and

culture, but students are not the only persons substantially affected. The study of

educational environments needs to take into account that both students and teachers are

members of the school environment and are affected by it (Lee & Loeb, 2000). Hoy and

Sabo (1998) argue that teacher satisfaction is improved by healthy school climate and they

advocate focusing the study of school climate not just on school effectiveness, but

systemic quality and internal processes. Hank Levin agrees, "if you can't make a school a

great professional place for its staff, it's never going to be a great place for kids" (as quoted

in Brandt, 1992, p. 21).

Teachers have a strong individual influence on students in classrooms and together teachers have a powerful role in shaping the overall climate and culture of their schools. This study of school faculties acknowledges that teachers exist in "nested layers" within classrooms, schools, and the wider community (Senge et al., 2000). The quality of processes at each level will influence the levels below (Purkey & Smith, 1983; Roach & Kratochwill, 2004). Goodlad (1984) argued that any school improvement effort must recognize that teachers not only shape their school environments, they are influenced by them:

> Teachers both condition and are conditioned by the circumstances of schools. Schools are, first, for students. But to ignore the fact that students are influenced by teachers, who in turn are influenced by their workplace, would be to lead us once again to simplistic diagnoses and inadequate proposals for school improvement (p. 29-30).

This study correlates human, organizational and cultural factors of Catholic schools with the development of professional community among middle grade teachers. Understanding the influence of these factors is important because the development of professional community and distributed leadership benefits both teachers and their students (Angelle, 2010; DuFour & Eaker, 1998; Lee & Smith, 1996).

School Climate

Schools are complex organizational and social systems that are shaped by many internal and external factors. Education, just like other human social behavior, is influenced by the interaction between personal needs and characteristics and the nature of the environment (Owens, 2004). "The way an individual carries out a given task depends upon what kind of person he is, on the one hand, and the setting in which he acts, on the other" (Tagiuri & Litwin, 1968, p. 11).

Tagiuri's (1968) definition of organizational climate and its components has endured and is still widely accepted today (Hoy & Sabo, 1998; Johnston, 1992; Owens, 2004; Stockard & Mayberry, 1992). Tagiuri defined organizational climate as, " a relatively enduring quality of the internal environment of an organization that (a) is experienced by its members, (b) influences their behavior, and (c) can be described in terms of a particular set of characteristics (or attributes) of the organization" (1968, p. 27). Organizational climate is interpreted by its members and their perceptions shape their actions.

Tagiuri identified four components that taken together create a climate, much as a combination of personal characteristics make up an individual's personality (Hoy & Sabo, 1998; Tagiuri & Litwin, 1968). *Milieu* describes the personal characteristics of individuals in the organization and *social system* describes the patterns of how they interact with one another. *Ecology* and *culture* both describe the arenas in which this interaction occurs. In each organization there is a physical arena (ecology) and a values arena (culture).

Milieu describes the presence or absence of individuals and groups and the characteristics they bring to an organization. The impact of students' background characteristics, particularly socioeconomic status, on achievement was first identified by Coleman in 1966 (Purkey & Smith, 1983). In addition to their socioeconomic level, students also bring internal developmental characteristics with them to school. During early adolescence these characteristics are in a state of flux and require schools that are aware of and designed to meet these changing needs (Eccles & Midgley, 1991; George & Alexander, 1993; National Middle School Association, 1995). But students are not the only members of schools. The personal and professional background of teachers also contributes to the organizational milieu.

The social interactions between members of an organization rely on three primary facilitating factors: stability, communication, leadership (Purkey & Smith, 1983). Constant turnover requires frequent renegotiating of social networks, whereas a stable faculty enables more trusting relationships. Communication is especially important for teachers who have historically worked in isolation. A culture of teamwork is facilitated by leaders who share responsibility and decision-making with faculty members.

The ecology of an environment describes the physical arena of interactions and includes the size of the organization. In school settings, size can refer to overall enrollment, enrollment in each grade level, and even class size. Today's schools-within-schools models are used to produce smaller communities within schools that are too large overall (Howley & Bickel, 2002; Littky, 2004; National Middle School Association, 2010).

The culture of an organization refers to the values and behavioral norms shared by members. These are commonly developed over time and reinforced to existing and new members. In Catholic schools, the values arena is quite broad with parents, the parish, the diocese and the Universal Church having significant influence in shaping the culture of a school.

Catholic School Culture

In the years following the Second Vatican Council, many documents were promulgated to further define the role of the Church and its ministries. During this time, the United States Conference of Catholic Bishops (USCCB) took the opportunity to publish its pastoral letter, *To Teach As Jesus Did* (1972). In this document the bishops define the three dimensions of the educational ministry of the Church as message, service, and community. In particular they point out that, "community is central to educational ministry both as a necessary condition and an ardently desired goal" (no. 13).

This central and dual reality of community comes directly from the Gospels. Jesus invited others to share in his ministry and taught them about caring for their brothers and sisters in community. Jesus did not just preach about community, He and his disciples lived it.

Community is at the heart of Christian education not simply as a concept to be taught but as a reality to be lived. Through education, men must be moved to build community in all areas of life; they can do this best if they have learned the meaning of community by experiencing it. (United States Conference of Catholic Bishops, 1972, no. 23)

Several years later, the Vatican published *The Catholic School*, which again reminds educators throughout the world that community is at the heart of Catholic schools, not by virtue of their educational programs, but precisely because they are Catholic (The Sacred Congregation for Catholic Education, 1977).

Building this type of community in Catholic schools requires the efforts of many, including pastors, parents, and parishioners. But teachers play an especially critical role in this mission. The Second Vatican Council called for teachers to, "recognize that the Catholic school depends upon them almost entirely for the accomplishment of its goals and programs" (Vatican Council II, 1965, no. 8). Teachers model and reinforce the mission of the school and are therefore key cultural players (T. J. Cook, 2007, p. 85).

Bryk, Lee, and Holland (1993) argue that not only is the internal culture of Catholic schools different from that of public schools, but that students are also influenced by a different external culture surrounding the Catholic school. The wider community of faith provides a continuity of support for students between school, parish, and home. They attribute this communal organization for much of the success of Catholic high schools. More recently, research has even affirmed the benefits for public schools when they are surrounded by communities with strong religious participation (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010). This larger functional community supports students with a tremendous amount of social capital (Coleman & Hoffer, 1987; Fortna, 2004).

Research demonstrates that, on average, Catholic schools have better outcomes than their public school counterparts (Convey, 1992; Hunt, Joseph, & Nuzzi, 2002).

However, there are limitations to comparative studies such as these. First, there is the potential for self-selection bias, that students who choose Catholic schools may be substantially different from those in public schools in unmeasured ways (Convey, 1992). In addition, such studies treat Catholic and public schools as monolithic entities and fail to examine differences among schools within each group. By examining only Catholic schools, this dissertation study avoids both of these limitations and allows a deeper look at the differences among Catholic schools and teachers serving early adolescents. This will be an important contribution in better understanding middle level education in Catholic schools.

Learning Organizations

Over the past two decades, the recommendation to create teams of professionals in schools has expanded from its initial reference to small groups of grade level teachers. Today, schools are called to become learning organizations with the entire faculty working together as a team. The whole faculty should be focused on the core mission of schooling and working together to produce school wide improvement (Purkey & Smith, 1983). This call to create and nourish professional community is built on the reality that schools are, by their nature, communal organizations and the benefits of collaboration have a significant influence on teachers, students, and schools (DuFour & Eaker, 1998).

Senge, et al. argue that, "schools can be re-created, made vital, and sustainably renewed not be fiat or command, and not by regulation, but by taking a *learning orientation*" (2000, p. 5). Research consistently finds that high expectations for students,

common focus, shared leadership, and collaboration among teachers drive school improvement and impacts student achievement (Purkey & Smith, 1983). Bryk, Camburn, and Louis (1999) found that "In general, an environment that supports innovation and experimentation was found to be much more prevalent in schools in which professional community has developed… In fact, professional community was by far the most powerful predictor of this outcome." (p. 771).

While individual teachers are important, this study focuses primarily on the interactions of faculty members. These interactions include collaborating with each other, working with building administrators, and sharing leadership and responsibility for school effectiveness. Lambert (2003) found this collaboration produces definitive results, "Student achievement can now be directly and unmistakably traced to the presence or lack of conditions that create high leadership capacity in schools," (p. 55). Marzano (2003) defines collaboration and shared leadership as school-level factors because they influence far more than individual classrooms.

The research arm of AdvancED, the world's largest education community, argues that one of the key ways schools improve student learning is by using the learning community concept to produce a culture of continuous improvement (National Study of School Evaluation, 2005). Numerous other studies also confirm professional community as a key component in school effectiveness (Convey, 1992; Hunt, Joseph, & Nuzzi, 2002; Zmuda, Kuklis, & Kline, 2004). The National Board for Professional Teaching Standards has long included "Teachers are members of learning communities" as one of its five core

propositions defining accomplished teachers (National Board for Professional Teaching Standards, 1989).

In many schools, "teachers, like their students, to a large extent carry on side by side similar but essentially separated activities" (Goodlad, 1984, p. 188). By contrast, Arhar (1992) notes that in effective schools, "teaching is defined as a collective rather than an individual responsibility" (p. 150). Arhar argues that when teachers feel more connected and place greater value on their membership in the profession and school, they are more likely to provide the support students need to feel more connected as well. Other research supports the finding that collaboration among educators has a significant impact on school effectiveness (Bryk et al., 2010; Irvin & Farr, 2004; National Middle School Association, 2010; National Study of School Evaluation, 2005; Purkey & Smith, 1983).

The development of professional community is described by numerous researchers (Bryk, Camburn, & Louis, 1999; DuFour & Eaker, 1998; Hord, 1997; Thompson, Gregg, & Niska, 2004; Vescio, Ross, & Adams, 2008). All agree on the importance of changes in both attitudes and practices of teachers and administrators. Central to a professional community are a shared vision focused on student learning, collective responsibility, collaboration, reflective dialogue, and a willingness of teachers to open up their own classrooms to outside critique – what many researchers identify as the 'deprivatization of practice' (Bryk, Camburn, & Louis, 1999; Lee & Smith, 1996; Vescio, Ross, & Adams, 2008). These changes increase satisfaction and commitment among educators and improve school effectiveness (Hord, 1997).

Middle Schools

For over a century, there has been debate about how to provide the most appropriate education to early adolescents (Lounsbury, 1992). This debate is an ongoing search to understand the developmental needs of early adolescents and provide the school organization, curriculum, and pedagogical practices that best meet those needs (McEwin, Dickinson, & Jacobson, 2004; National Middle School Association, 2010). It is now widely recognized that the development of children between the ages of 10-15 is one of the most rapid times of change in the human life span and includes changes in the physical, social, intellectual, and emotional lives of these students (Irvin, 1992; Milgram, 1992; Seghers, 1995).

School climate is especially important during the middle school years when students are making many decisions about themselves, their values framework, and their identity as individuals and members of the community (Johnston, 1992). "Research, practice, and common sense tell us that middle level education is the crucial link in the pre-K–16 continuum" (National Middle School Association, 2010, p. 1).

In making the historic recommendations contained in the report *Turning Points*, the Carnegie Council on Adolescent Development argued that, "the success of the transformed middle grade school will stand or fall on the willingness of teachers and other staff to invest their efforts in young adolescent students" (1989, p. 58). This is no easy task. The type of rigorous curriculum called for by middle school reformers coupled with programs to meet the developmental changes experienced and expressed by young adolescents,

makes the role of a middle school teacher one of the most challenging in education (George & Alexander, 1993).

Reform documents such as *Turning Points*, *Turning Points 2000,* and *This We Believe* call on middle level schools to create learning communities to meet the needs of early adolescents as a unique developmental group. The recommendations include creating small learning communities, fostering trusting and caring relationships, a robust curriculum, responsive pedagogy, local decision-making, and adopting flexible organizational structures (Carnegie Council on Adolescent Development, 1989; Jackson & Davis, 2000; National Middle School Association, 2010).

To make these elements a reality, national recommendations for the education of early adolescents have consistently called on schools to develop collaborative school cultures (Carnegie Council on Adolescent Development, 1989; Jackson & Davis, 2000; National Middle School Association, 2010). Collaborative cultures empower teachers and lead to more effective classroom interactions and learning (DuFour & Eaker, 1998). Irvin and Farr (2004) found that when the sense of community at a school decreased, there was a simultaneous shift toward less engaging curriculum and activities (i.e. worksheets) – hardly the type of middle school instruction called for in national recommendations. "Collaboration results in the construction of empowering communities within schools, which is subsequently reflected in classroom interactions and student learning" (p. 344).

These recommendations require a commitment by professional educators to students, but also to each other. Teachers cannot accomplish these goals individually – they must do so as a team. This study determines the extent to which middle school

teachers have developed shared norms and practices, including the implementation of national recommendations for developmentally-responsive middle schools. These indicators will serve as evidence of the establishment of professional community.

CONCEPTUAL FRAMEWORK

The conceptual framework for this study begins with the organizational context of the school, conceptualizing it into three categories: teacher predictors, environmental predictors, and cultural predictors. These factors have been derived from the literature (Bryk, Camburn, & Louis, 1999; Purkey & Smith, 1983; Tagiuri & Litwin, 1968) and will be discussed further in chapter two. The development of professional community is the dependent variable in this study and is measured in terms of the norms and practices identified as components of professional community (Bryk, Camburn, & Louis, 1999; DuFour & Eaker, 1998). Because this study deals exclusively with teachers that educate middle school students, it also includes the implementation of national middle school recommendations (Carnegie Council on Adolescent Development, 1989; Jackson & Davis, 2000; National Middle School Association, 2010) as a specific measure of professional community among middle grade teachers.

At the center of the conceptual framework is the middle school faculty of the Catholic school. This study focuses on the middle school faculty as a group and examines their collective influence on a school through the development of professional community. Moreover, in addition to creating professional community, faculties are also positively affected by its presence (DuFour & Eaker, 1998). This creates a feedback loop that

reinforces a faculty's collaborative work and culture. The norms and practices of

professional community increase faculty satisfaction and motivation, leading to higher

levels of implementation (Hunt, Joseph, & Nuzzi, 2002; Vescio, Ross, & Adams, 2008).

Figure 1 provides a visual representation of the elements and relationships that make up

this study's conceptual framework.

Figure 1: Conceptual Framework

**Factors That Influence the Development of
Professional Community in Catholic Middle Schools**

TEACHER FACTORS

Demographics
- Gender
- Age

Professional Preparation
- Certification Level
- M.S. Training
- Experience
  - Total years
  - Middle School
  - Catholic School
  - Current School

ENVIRONMENTAL FACTORS

Student Milieu
- Student Diversity
- Grade Configuration

Ecology
- School Size
- Cohort Size

Social System
- Principal Leadership
  - Collegial
  - Supportive
  - Directive
  - Restrictive
- Staff Stability

CULTURAL FACTORS

Academic Community
- Academic Press
- Environmental Press

Faith Community
- Catholic Profile
- Sponsorship

Catholic Middle Schools

PROFESSIONAL COMMUNITY

Norms
- Shared Mission Focused on Student Learning
- Collective Responsibility
- New Teacher Socialization

Practices
- Reflective Dialogue
- Deprivatized Practice
- Collaboration

Implementation of National Middle School Recommendations
- Organizational Structures
- Curriculum
- Pedagogy
- Student Supports

Individual Factors

This study of school faculties begins with the acknowledgement that individual teachers come into any school setting with their own personal and professional backgrounds. A teacher's professional background has a profound effect on their pedagogical philosophy and practice. These backgrounds affect the attitudes and practices of individual teachers and influence the culture of the school faculty to which they belong (Angelle & Anfara Jr., 2008).

This study includes two personal demographic variables (gender and age) and three professional variables. The professional factors are certification level, middle school training, and experience. Middle school teachers in particular have great variation in certification and training (Epstein & MacIver, 1990). Many are certified as elementary teachers or secondary specialists, but only about one fourth are specially prepared to teach students in the middle grades (Necochea, et al., 2001). In addition, the length of teaching experience (overall, in Catholic schools, in middle schools, and in the current school) may affect a teacher's approach to colleagues and students. This study investigates the impact the variability in teacher preparation has on a faculty's norms and practices related to professional community and the education of young adolescents.

Environmental Factors

Environmental factors include the structure of, and social relationships within, schools. These factors influence teacher's relationships with students, administrators, and

colleagues. The three groups of factors addressed in this block include student milieu,

ecology, and social system (Tagiuri & Litwin, 1968).

Student milieu identifies the composition of the student body. Demographic

information related to student racial and economic diversity serves as a control variable in

this study to isolate the true effects of individual, environmental, and cultural factors. The

composition of a student body also includes the grade levels present in a particular school.

Schools educating seventh grade students are organized in more than 30 different grade

configurations (Epstein & MacIver, 1990). In recent years, the K-8 school – the traditional

organizational pattern for Catholic schools – has received renewed attention in public

schools, particularly in large urban areas (Abella, 2003; Gewertz, 2004; McEwin,

Dickinson, & Jacobson, 2004; Offenberg, 2001).

McEwin, Dickinson and Jacobson (2004) argue that, "it would be shortsighted, at

best, to believe that the grade organization of a school does not affect programs and

practices. One might say that grade organization per se may not make *the difference*, but it

does make *a difference*" (p. 55). Yet, no study to date has sufficiently examined the impact

of grade configuration from the perspective of Catholic schools. By including grade

configuration, this research is able to measure the impact this variability has on teacher

attitudes and practices in Catholic schools and make a significant contribution to the field.

Ecology refers to the physical aspects of the environment. This dissertation study

focuses on two specific factors; school size and cohort size. Research has shown that

school size can make a tremendous difference in the educational experience of young

adolescents (Lee & Loeb, 2000). In particular, it has been demonstrated that small size can

decrease the influence of socio-economic factors on student achievement (Howley & Bickel, 2002), one of the core principles behind the San Miguel and Nativity Catholic middle school models for urban youth.

Many individuals and organizations associated with middle school reform have long called for small learning environments for students (Carnegie Council on Adolescent Development, 1989; Jackson & Davis, 2000; National Middle School Association, 2010). Interdisciplinary teams, houses, and advisor-advisee programs are all ways to create small 'schools-within-schools' and decrease cohort size (George & Alexander, 1993). Lee and Smith concluded that "small schools are better environments for learning" (1996, p. 130). Research also supports the idea that they produce better environments for teaching as well. Bryk, Camburn, and Louis (1999) found that teachers in smaller schools have more compact social networks, easier communication, and are more likely to engage in common endeavors. In short, small school size facilitates the development of professional community.

However, much of the existing small school research presents a problem in that it uses size definitions that do not translate adequately to Catholic schools. Most of this research has been performed in public schools where small schools are commonly defined as less than 350 students (Bryk & Schneider, 2003). However, many Catholic elementary and middle schools are already below this level. This dissertation study evaluates school size as a continuous variable to determine whether additional benefits can be distinguished with even smaller sizes.

The final set of environmental factors is the social system among the educational professionals. Teacher attitudes and behaviors are influenced by school leadership and the level of stability among the adults of the school. Professional community is positively influenced by principals who maintain focus on a shared vision (Morrissey, 2000), believe in shared leadership (Hord, 1997; Thompson, Gregg, & Niska, 2004), and use facilitative leadership styles (Bryk, Camburn, & Louis, 1999). Staff stability increases long-term interaction among a faculty, increasing trust and common expectations (Bryk, Camburn, & Louis, 1999). Seghers (1995) found that a lower teacher turnover rate was correlated with a higher level of implementation of the Carnegie recommendations in Louisiana public middle schools.

Cultural Factors

Culture describes the shared norms, values, and beliefs of an organization's members. The culture of a Catholic school is strongly and simultaneously influenced by its twin roles. First, it is an academic institution with a duty to promote educational excellence. Second, it is a small faith community within a larger faith community with a mission to promote spirituality and holiness.

School communities are shaped by the academic expectations of their members. Academic press is the extent to which the school is driven by a quest for excellence, is characterized by orderly learning environments, has respect for academic success and hard work, and responds positively to challenges (Hoy & Sabo, 1998; Tschannen-Moran & Hoy, 1998). Schools are also influenced by environmental press (Hoy & Sabo, 1998;

Tschannen-Moran & Hoy, 1998). This describes the pressure parents and community members exert to influence the functioning of the school. The school needs to be able to cope with its environment in a way that maintains the educational integrity of its programs. The school should be responsive to its community, but also protect teachers from unreasonable community demands.

A Catholic school is also a faith community and is influenced by factors at the local and universal level. Since the Second Vatican Council, the Pope and bishops of the Roman Catholic Church have created numerous documents affirming the mission of the Church's schools to promote the faith and defining Catholic identity. While schools are called to be academically excellent, their primary mission is to advance the faith (The Sacred Congregation for Catholic Education, 1977; United States Conference of Catholic Bishops, 1972; Vatican Council II, 1965). A middle school's Catholic profile is measured by the prevalence of Catholic students, proportion of Catholic teachers, and the presence of clergy or vowed religious in the faculty and administration.

The faith community immediately surrounding the school is a powerful force in creating a functional community that generates supportive social capital for students and teachers (Bryk, Lee, & Holland, 1993; Coleman & Hoffer, 1987). Catholic schools have a variety of governance models, including single parishes, interparish schools, regional school systems, diocesan schools, and private/religious order schools (Hunt, Joseph, & Nuzzi, 2002). One of the variables investigated in this study is the influence these different sponsorship models have on school culture and the development of professional learning communities.

Professional Community

Educators are all too familiar with educational innovations that are the *fad du jour*, but quickly fade away. Because of this revolving door of initiatives, teachers often become cynical about new programs. However, professional community is not a program or prescription for schools. Instead it is a *process* whereby professional educators come together to review information and make decisions focused on supporting students and supporting one another (DuFour & Eaker, 1998). "Rather than becoming a reform initiative itself, a professional learning community becomes the supporting structure for schools to continuously transform themselves through their own internal capacity" (Morrissey, 2000, p. 10).

This dissertation adopts the definition of professional community as, "schools in which the interaction among teachers is frequent and teachers' actions are governed by shared norms focused on the practice and improvement of teaching and learning" (Bryk, Camburn, & Louis, 1999, p. 753). The conceptual framework of this study identifies the normative (values) and behavioral (practices) elements of professional community. These categories and the elements of each are drawn from a variety of research on professional community, but most significantly from Bryk, Camburn, and Louis (1999).

The normative elements consist of a shared mission focused on student learning, collective responsibility, and the socialization of new teachers. A vision is not simply shared through statements posted throughout a school, it reflects high expectations for student learning and teaching (DuFour & Eaker, 1998; Hord, 1997; Morrissey, 2000). Socialization is the overt way that new teachers are brought into the community and learn

what norms are held by the community and what practices are valued (Bryk, Camburn, &

Louis, 1999).

The construct of collective responsibility was first developed by Lee and Smith

(1996) and describes a shared commitment to student learning, improvement, leadership,

and school operations (Bryk, Camburn, & Louis, 1999; Lee & Loeb, 2000). Teachers in

such schools do not see the principal as the sole leader, but work with the principal to

improve teaching and learning. "When leadership is distributed across the organization and

teachers and administrators collaborate on decision-making, teacher-leaders emerge and

professional communities grow" (Gamoran, 2002, p. 5). While studies have investigated

collective responsibility in public schools, there is a lack of research on this construct

among Catholic school faculties. This study will fill in this gap as recommended by Chard

(2003).

There are three components that describe the practices of educators engaged in

professional community. The first practice is that teachers have extensive and meaningful

conversations about issues central to student learning and effective teaching. This shift

from discussing 'administrivia' to topics essential to school improvement has been labeled

reflective dialogue (Bryk, Camburn, & Louis, 1999) or collective inquiry (DuFour &

Eaker, 1998).

The second practice of professional community is the sharing of classroom

practices. This is a significant shift from the traditional isolation of teachers within their

classrooms (Schuttloffel, 2008). Deprivatized practice (Bryk, Camburn, & Louis, 1999;

Lee & Smith, 1996) involves teachers discussing their philosophies and methods through

discussions and opening up their classrooms to peers and other non-administrative observers.

Collaboration is the third element of practice in professional community. The importance of putting into action what is learned collectively is not new. More than twenty years ago, the *Turning Points* report argued that improved teaching and learning would come when teachers used shared knowledge to improve instructional programs (Carnegie Council on Adolescent Development, 1989). Collaboration should be viewed only as a means to the desired end result. "Working collaboratively is the process not the goal of a PLC. The goal is enhanced student achievement" (Vescio, Ross, & Adams, 2008, p. 89).

Vescio, Ross and Adams argue that "a key element of successful PLCs is their pervasive attention to meeting the learning needs of their students" (2008, p. 88). Therefore, this dissertation on middle level teachers in Catholic schools includes another group of outcomes to measure the development of professional community; the implementation of practices that have been nationally recommended for teachers and schools that educate early adolescents. The recommendations issued in *This We Believe* (National Middle School Association, 2010) are measured in four outcome clusters: organizational structures, curriculum, pedagogy, and student supports.

While many of the factors on the conceptual framework are connected through direct relationships, the school faculty and professional community enjoy a reciprocal relationship. While the faculty creates the professional community, its development creates a feedback loop that further reinforces teachers' levels of satisfaction and commitment to

each other. This two-way relationship reflects the phenomena of "the creation and influence of social contexts in organizations" (Denison, 1996, p. 646).

PURPOSE

Research shows that the presence of professional community has a positive effect on both teachers and their students. The purpose of this correlational study is to determine the factors of school context that are most closely associated with the development of professional community. This research focuses on the professional relationships among educators in Wisconsin Catholic schools that serve early adolescents.

This research study describes the current state of human, environmental, and cultural factors in these schools and identifies quantitative similarities and differences among these factors using survey data obtained from teachers and administrators. The study also identifies the current level of implementation of professional community and national middle school recommendations in these schools. Finally, the research investigates the correlations between the sets of factors that make up school context, the development of professional community, and the implementation of national middle school recommendations.

RESEARCH QUESTIONS

This study investigates how human, environmental, and cultural factors are related to the development of professional community among middle grade faculties in the Catholic schools of Wisconsin. The research design takes into account characteristics of students,

teachers, school leaders, school organization, and the culture of Catholic schools and their

surrounding faith communities. The degree to which professional community has

developed is assessed through the level of shared norms and the implementation of

professional community practices and national middle school recommendations. The

research questions are:

1. How do Catholic middle schools in Wisconsin vary in regards to teachers, school
   environment, and school culture?

2. What is the level of professional community and the implementation of national
   middle school recommendations in Wisconsin's Catholic middle schools?

3. Which teacher, environmental, and cultural characteristics best predict the
   development of professional community and middle school practices in Catholic
   middle schools?

HYPOTHESES

Based on the review of relevant literature, this study makes the following hypotheses in

regards to the research questions:

1. Catholic middle schools will vary to the greatest degree in school environment
   factors.

2. Catholic middle schools will have lower variability in the norms associated with
   professional community and greater variability in the implementation of
   professional community practices and the implementation of national middle
   school recommendations.

3. The best predictors of the development of professional community in Catholic middle schools will be teacher preparation, small school and cohort sizes, principal leadership, and staff stability.

SIGNIFICANCE

This research simultaneously addresses several areas that, while studied extensively in public schools, have been conspicuously absent from the body of Catholic school research. These include the development of professional community, the impact of school contexts, and grade configuration. Catholic schools make up an important segment of the national educational landscape and have been models of success in a number of areas. A deeper understanding of the relationships between these concepts in Catholic schools not only helps Catholic educators, but also enhances and enriches the larger body of research in these areas.

To date, there is little research that has addressed professional community in the Catholic school, nor has there been much attention given to investigating professional community specifically in middle schools. Professional community is important at the middle school level because it is a vehicle to accomplish a central goal of middle school reform – teachers acting together collaboratively.

Studies of school climate have largely ignored Catholic elementary and middle schools, despite the large number of students they enroll. Hohl (2005) found that studies of Catholic school climate were rare, often qualitative, usually focused on Catholic high schools, and focused on a small number of schools. Convey (1992) also found that the

preponderance of research on Catholic schools has involved high schools, despite the fact that Purkey and Smith (1983) called for a better understanding of "just how various elements (or characteristics) are combined to produce effective schools across the full range of school types in the United States" (p. 447-8). Most research on middle level schools focuses on public schools. Investigations that do include middle level grades in Catholic schools almost uniformly study students in K-8 buildings. As a result, separate Catholic middle schools have no comparable research of their own. This study addresses that gap.

Research has suggested the need for further investigation of the relationship between grade configuration and various elements of school climate and culture (Midgley, Feldlaufer, & Eccles, 1988; Seghers, 1995) . This study is the first to investigate middle-level grade configurations in Catholic schools. It compares the traditional K-8 Catholic school model to other grade configurations such as 7-12 models and separate middle schools. The recent increase in the number of separate Catholic middle schools (due to consolidations, the creation of regional Catholic school systems and the San Miguel and Nativity models) provides new avenues for research into the quantitative differences between Catholic school grade configurations.

The site of this research study is also significant due to the variety of school factors. One of this study's variables is grade configuration. Demographic data show that Wisconsin Catholic schools serving middle school students utilize a great variety of grade configurations including K-8, 6-8, 7-8, 7-12 (National Catholic Educational Association, December 2006; P.J. Kenedy & Sons, 2006). In many cases, reconfigured middle schools

were created as a result of consolidation and new sponsorship models such as interparish schools. At the same time that some Catholic school systems have moved away from K-8 buildings and created distinct middle school campuses or separate schools, many urban public schools have been eliminating middle schools and moving back toward K-8 buildings. "It would be ironic if, through various middle school reforms, public schools try to create an atmosphere similar to what Catholic schools have provided while the Catholic schools put in practices and policies that copy what has been happening in public schools" (Fortna, 2004, p. 101).

The state also has a significant number of K-8 Catholic schools in urban, suburban, and rural areas, providing a diverse sample of schools. In order to account for differences among student populations among these types of schools, demographic data are collected about the racial and economic diversity of students. This information serves as a controlling variable to isolate the true effects of individual, environmental, and cultural factors on the development of professional community. This research helps Catholic school leaders critically evaluate the elements of school climate that most affect teachers, and by extension, their students.

LIMITATIONS

This study focuses exclusively on Catholic schools and teachers that educate middle school students. Wisconsin Catholic schools encompass a wide range of grade configurations. Some configurations include middle school grades within a K-8 or 7-12 school configuration. However this study does not include or make generalizations about

the teachers of Catholic elementary school grades nor Catholic high schools. The findings

of this study relate only to Catholic schools in the state of Wisconsin.

ASSUMPTIONS

This research assumes that the recommendations of *Turning Points* (Carnegie

Council on Adolescent Development, 1989), *This We Believe* (National Middle School

Association, 2010), and *Turning Points 2000* (Jackson & Davis, 2000) are

developmentally appropriate for students. Furthermore, it is assumed that the goals

proposed in these reports are equally valid for middle grade students and educators in both

public and Catholic schools.

DEFINITION OF TERMS

Early Adolescence – A time of child development, generally between the ages of 10 and

15, during which children experience a period of significant growth and

change physically, intellectually, emotionally, and socially (Carnegie

Council on Adolescent Development, 1989; National Middle School

Association, 2010).

Middle Level School – A school that educates early adolescents and is called upon to

address their unique needs through purposeful organizational, curricular,

instructional, and relational environments (Dickinson & Butler, 2001). This

dissertation study focuses on Catholic schools that educate early adolescents

and further defines the grade configurations of those schools as elementary,

unit, secondary, or middle schools [see p. 48].

Professional Community – A culture in which professional educators support one another

through shared vision and values, take collective responsibility for student

learning, socialize new members to group norms, engage in collective

inquiry, open up classrooms to scrutiny, and build collaborative teams in

support of students and in support of each other (Bryk, Camburn, & Louis,

1999). This is also sometimes called professional learning community

(DuFour & Eaker, 1998).

Learning Organization – An organization that involves everyone in the system "expressing

their aspirations, building their awareness, and developing their capabilities

together" (Senge et al., 2000, p. 5)

Organizational Climate – "a relatively enduring quality of the internal environment of an

organization that (a) is experienced by its members, (b) influences their

behavior, and (c) can be described in terms of the values of a particular set

of characteristics (or attributes) of the organization." (Tagiuri & Litwin,

1968, p. 27). "[Climate can be used] to express the *character* of an enduring

situation. A particular configuration of enduring characteristics of the

ecology, milieu, social system, and culture would constitute a climate, much

as a particular configuration of personal characteristics constitute a

personality" (Tagiuri & Litwin, 1968, pp. 22-23).

Culture – "A system of orientations (norms, core values, and tacit assumptions) shared by members, which hold he unit together and give it a distinctive identity" (Hoy & Sabo, 1998). Culture is composed of assumptions, values, belief systems, norms, history, tradition and rituals, and belief systems (Owens, 2004).

Functional Community – "A community in which social norms and sanctions, including those that cross generations, arise out of the social structure itself, and both reinforce and perpetuate that structure" (Coleman & Hoffer, 1987, p. 7). Social capital is generated through structural consistency – the relationships between all adults whom students know and relate to – and values consistency between adults, friends, and family.

Collective Responsibility – "A collectively held sense of responsibility for how the core functions of a school are carried out signals that shared norms about teaching and learning exist in a school and that those norms are enacted by a majority of the faculty" (Bryk, Camburn, & Louis, 1999, p. 755). These norms reflect teachers' combined attitudes (including commitment, focus on learning, expectations, efficacy, attitudes). Collective responsibility is an organizational property of schools that reflects the faculty's interest and care for what and how students learn (Lee & Smith, 1996). It also reflects the focus on professional learning and ownership in the process of school improvement (Lambert, 2003).

Reflective Dialogue– A "purposeful attempt to make conscious that which is unconscious"

     (DuFour & Eaker, 1998, p. 135). It involves teachers and administrators in

     collective learning and application of learning – including posing questions,

     collecting data, reviewing research, and identifying best practices

     (Morrissey, 2000). These extensive conversations move beyond classroom

     management to include student learning and school-wide improvement

     initiatives (Bryk, Camburn, & Louis, 1999).

Deprivatized Practice – The willingness of teachers to open their classrooms to non-

     administrative scrutiny and share philosophy, practice, and methods. It is an

     indicator of the faculty's focus on the core of instructional improvement

     rather than working together on unit scheduling, coordination, and other

     superficial matters (Hord, 1997).

Collaboration – "A *systematic process* in which educators work together interdependently

     to analyze and *to impact their professional practice* in order to achieve

     better results for their students, their team, and their school" (DuFour,

     DuFour, Eaker, & Many, 2006, p. 98).

CHAPTER 2

REVIEW OF RELATED LITERATURE

This chapter provides a review of the research literature that forms the theoretical framework on which this study is based. The critical analysis of the literature presents the gaps that are addressed by this study. Separate bodies of literature have developed regarding Catholic schools, middle schools, and learning organizations. Yet, nearly all of the research in the latter two areas has focused on public school settings. No research has been undertaken to investigate different middle level arrangements in Catholic schools, Catholic school size, nor the development of professional community in Catholic schools. This study contributes to the Catholic school research by addressing these relationships for the first time.

School effectiveness and quality is a result of varied and complex variables. Prime among them are school climate (Hoy & Sabo, 1998; Hunt, Joseph, & Nuzzi, 2002) and school culture (Bryk, Lee, & Holland, 1993; DuFour & Eaker, 1998). This study encompasses both of these concepts as major components along with the variables individual teachers bring with them to the school setting.

This literature review has been divided into five sections coinciding with this study's conceptual framework. The first section connects the conceptual framework of the present study to the research on organizational climate. The second section addresses the role teachers play in schools and school reform. The third focuses on school environmental

factors. The fourth section deals with research on school culture. The literature on learning organizations and professional community makes up the fifth section. This final section also deals with the 'best practice' elements of national middle school recommendations and how they demonstrate a professional community in practice at the middle level.

SCHOOL CLIMATE

This dissertation examines the factors of climate in Catholic middle schools and how these elements influence the development of professional community. In approaching this theoretical concept, this dissertation uses Renato Tagiuri's definition of organizational climate as "a relatively enduring quality of the internal environment of an organization that (a) is experienced by its members, (b) influences their behavior, and (c) can be described in terms of the values of a particular set of characteristics (or attributes) of the organization." (Tagiuri & Litwin, 1968, p. 27). Tagiuri's conceptualization of school climate is still utilized as an effective way of describing and analyzing the complex factors in organizations (Denison, 1996; Hoy & Sabo, 1998; Johnston, 1992; Owens, 2004; Stockard & Mayberry, 1992).

Tagiuri identified four components of school climate, "A particular configuration of enduring characteristics of the ecology, milieu, social system, and culture would constitute a climate, much as a particular configuration of personal characteristics constitute a personality" (Tagiuri & Litwin, 1968, pp. 22-23). These four elements describe the individuals and groups present (milieu), the interaction between these individuals and

groups (social system), as well as the physical arena (ecology) and values arena (culture) in which they interact.

In studying teachers and the development of professional community, Bryk, Camburn, and Louis (1999) re-conceptualized these elements into human, structural, and social factors. These categories are useful in the study of professional community because they distinguish the milieu of faculty colleagues from that of students. In this dissertation study, teacher characteristics are considered as a separate group of factors, while student milieu and Tagiuri's ecology and social systems are grouped together to form the environmental factors of the school. Culture remains a separate group of factors, reflective of the social resources of the school community.

Hoy and Sabo (1998) advocate for a shift in focus from school *effectiveness* (student outputs) to school *quality* - the analysis of a system's components and internal processes. It is clear that a positive school climate is critical to developing productive work environments for educators and the effects of these environmental influences are then translated to students through their teachers (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; DuFour & Eaker, 1998; Irvin & Farr, 2004; Lee & Loeb, 2000). This dissertation study, while not directly analyzing student achievement, helps identify the factors that promote school quality through the sustained faculty collaboration of professional community.

INDIVIDUAL TEACHER FACTORS

The United States Department of Education confirms that research identifies teachers as one of the most significant school factors related to student achievement. The

Secretary of Education has acknowledged that teacher quality is more important than class size, funding, and instructional materials (Office of Postsecondary Education, 2002). Teachers have a profound role in influencing the school experience for students through both pedagogy and school climate. They are also in the unique position of both shaping, and being influenced by, school climate. Therefore, it is important to study teachers as members of school communities to better understand how climate and culture impact them.

Research shows that middle school teachers in particular can have a profound impact not only on academics, but on student motivation and self-esteem (Harter, 1996). They are also instrumental in creating learning environments that are emotionally safe and allow students in the middle grades to take academic risks (Irvin, 1992). In short, teachers have a major influence on a school's 'unwritten curriculum'.

Personal Demographics

The demographic composition of a faculty helps determine its homogeneity and affects the development of community among a faculty. Bryk, Camburn, and Louis (1999) found that increased levels of community are found among more homogeneous faculties. This is not to say that diverse faculties cannot build strong professional communities and this study evaluates how other factors interact with faculty demographics. In addition to gender composition, another demographic variable measured is age. Teachers tend to perpetuate the style of education which was modeled for them during their own school experience (DuFour & Eaker, 1998). A teacher who grew up attending a junior high or a Catholic school in the 1960's would have had a different experience than one who attended

a middle school or Catholic school in the 1990's. These experiences are likely to create different conceptions about the way a middle school or Catholic school ought to operate.

The two variables of gender and age are used to establish a demographic profile for the faculty of each school in this study. The profiles are included in the analysis of the development of professional community to determine what correlations occur with personal demographics.

Professional Preparation

The unique development of young adolescents requires that effective teachers understand their physical, cognitive, emotional, and social needs. Middle schools need teachers and other staff members who are trained to be aware of these changes and are able to guide students through this critical time in their lives (Carnegie Council on Adolescent Development, 1989; Jackson & Davis, 2000; National Middle School Association, 2010).

Epstein and MacIver (1990) found that teachers of early adolescents are more variable in their education and certification than teachers at any other level. For many years it was common for states to use overlapping certification levels such as K-8 and 7-12 that permitted teachers to teach at the middle school level without any special preparation for working with young adolescents (Epstein & MacIver, 1990). "This long-standing practice has created, or at least perpetuated, one of the most serious problems in middle level education – that of making middle schools miniature versions of senior high schools or glorified extensions of elementary schools" (McEwin, 1992, p. 369). As a result of this criticism, many states created a special middle-level certification.

Wisconsin was among these states in 1992 when it created a middle level certification. However, in 2004, the Wisconsin Quality Educator Initiative shifted teacher licensure from grade ranges to developmental levels. This change eliminated the separate middle school license and teachers were once again licensed as part of either elementary or secondary licensure. Current licensures eligible to teach middle school in Wisconsin are: 'middle childhood-early adolescence (ages 6 through 12 or 13)', 'early adolescence-adolescence (ages 10 through 21)', and 'early childhood-adolescence (ages birth-21)' (Department of Public Instruction). Since the middle school license was only available for 12 years, it is unclear how many current Wisconsin teachers were specifically prepared to teach middle school students.

As a result of the resurgence of public K-8 schools, McEwin, Dickinson and Jacobson (2004) published findings regarding programs and practices in K-8 schools across the nation. Their public school data reveal that a majority of both K-8 and middle schools reported that less than one-half of their faculty had the specialized preparation called for in the 1989 *Turning Points* report. Meeks and Stepka (2004) found that more than a quarter of middle school administrators in one state reported that their school had *no* teachers with specific middle level licensure and 80% reported that their faculty needed training on middle school programs.

Bryk, Camburn, and Louis (1999) found that teachers with more years of experience report higher levels of professional community. Experience can be viewed from several different perspectives. These include total years teaching, years in Catholic schools, years teaching middle school grades, and longevity in the current school.

In this study, data are collected to determine the licensure, middle school training, and experience of teachers. Analysis is performed to determine how grade-level certification, specific middle school training, and the experience level of teachers affects a faculty's propensity to develop professional community.

ENVIRONMENTAL FACTORS

Student Milieu

While teacher characteristics make up the first major category of factors in this study, students are considered members of a different milieu. The presence or absence of students and certain student traits are considered part of the environment in which teachers work together. Student characteristics can vary by demographic characteristics and the configuration of grade levels within a school building.

<u>Student Characteristics</u>

Studies over the last forty years find connections between student socio-economic status and achievement (Coleman et al., 1966; Convey, 1992). While Coleman attributed 90% of the variance in student achievement to students' background characteristics, a synthesis of subsequent research has concluded that school factors account for closer to 20% of the variance in achievement (Marzano, 2003).

This study gathers data on the racial and economic diversity of each school's student body and uses this profile as a control variable. This procedure provides a way to reliably separate the influence socioeconomic composition has on teacher norms,

behaviors, or the development of professional learning communities. It is also important to

separate the effects of these factors because the influence of other variables, such as school

size, are compounded by socio-economic status (Howley & Bickel, 2002).

<div align="center">Grade Configuration</div>

The debate over the optimal grade configuration for educating young adolescents

has been active for more than one hundred years. By the end of the twentieth century,

schools educating young adolescents were organized in more than 30 different grade

configurations throughout the United States (Epstein, 1990), an indication that the debate

is still largely unsettled. This study utilizes grade configuration as one variable in order to

evaluate how different grade combinations affect teacher norms, behaviors, and

interactions.

From the beginning of the nation, the control of American public schools was left

to each community and as such, they were never organized under a universal grade

arrangement plan. However, by the nineteenth century, the 8-4 pattern (8 years of primary

school and four years of secondary) dominated (Lounsbury, 1992). In 1893, The

Committee of Ten recommended that secondary education begin two years earlier.

Students would attend primary school for six years and secondary school for six years, the

6-6 plan. Within the next fifteen years, a majority of American schools had shifted to this

new plan (Lipka et al., 1998). The subsequent Committee on Economy of Time in

Education in 1913 and Commission on the Reorganization of Secondary Education in 1918

proposed that secondary education be further divided into a junior division (7-9) and a

senior division (10-12) and the 6-3-3 plan was born (George, Stevenson, Thomason, &

Beane, 1992; Lipka et al., 1998; Lounsbury, 1992). The recommendations of these

committees led to the creation of both the 7-12 school and the junior high school.

By the 1960's, dissatisfaction with the junior high school was growing and a new

idea was taking hold – the middle school. Shifting pedagogical thought, along with

changing student demographics, caused a dramatic increase in the creation of public

middle schools (George, Stevenson, Thomason, & Beane, 1992). From 1967-2004, the

number of middle schools exploded from 1,101 to 14,548. By contrast, the number of

public K-8 schools decreased from 5,552 in 1988 to 3,170 in 2001 (McEwin, Dickinson, &

Jacobson, 2004). Many non-pedagogical factors such as finances, student demographics

and desegregation have influenced the grade configuration of schools (Paglin & Fager,

1997). "Throughout the entire middle level educational movement it has been clear that

administrative factors far outweigh educational factors as determinants of how schools are

organized" (Lounsbury, 1992, p. 7).

In contrast, the historical foundation of Catholic schooling in the United States was

the parish. Catholic schools, by and large, continued to utilize the traditional 8-4 or 6-6

arrangements with the parish school as the foundation. However, over the last two decades,

separate Catholic middle schools have become a reality in many dioceses. The

consolidation of parish schools into unified school systems has reorganized building

configurations and the San Miguel and Nativity models promote Catholic middle-level

education for inner-city and low-income youth. These recent developments make it useful

for the first time to include grade configuration as a factor in the study of school climate in

Catholic schools serving early adolescents.

In the last several years, a new body of research has developed documenting the effectiveness of K-8 schools (Gewertz, 2004). In light of these studies, many public school districts in urban areas are looking again at the K-8 model as a way to increase academic achievement, decrease disciplinary issues, and involve parents. Chicago's public schools have long held to the K-8 school model (Lee & Loeb, 2000). Districts implementing the change back to neighborhood K-8 schools include Baltimore, Cincinnati, Cleveland, Miami, Milwaukee, New York City, Philadelphia, and Rochester NY (Gewertz, 2004). A study of Philadelphia Public Schools credited the K-8 model for the academic success of its students. "[The] organizational character of the learning environment is probably the root of the findings of this study" (Offenberg, 2001, p. 29).

Other studies have found that compared to K-8 and elementary schools, students in middle schools and junior highs have lower achievement scores (Abella, 2003; P. J. Cook, MacCoun, Muschkin, & Vigdor, 2007), increased absenteeism (Abella, 2003), higher rates of disciplinary action (Abella, 2003; P. J. Cook, MacCoun, Muschkin, & Vigdor, 2007), and decreased motivation (Eccles & Midgley, 1991). Several studies find that these differences persist into later grades (Abella, 2003; P. J. Cook, MacCoun, Muschkin, & Vigdor, 2007).

Hough (2003) coined the term "elemiddle" school to describe the resurgence of K-8 buildings in public school districts. Ironically, public schools are making this shift toward K-8 models at the same time that Catholic schools, through consolidation and reorganization, are moving toward more stand-alone middle schools. This study helps provide data to Catholic school leaders about the effect on teachers and subsequently their students.

Other researchers argue that these outcomes are a reflection of the nature of the school an early adolescent attends, not simply its grade configuration (Eccles & Midgley, 1991; Epstein, 1990). MacIver and Epstein argue that,

> there is no one 'most responsive' grade span for schools that serve early adolescents…the hard work of developing excellent programs in the middle grades is not accomplished by changing grade spans, but by implementing practices that support the social, personal, and academic development of early adolescents. (1993, p. 522)

While MacIver and Epstein argue that grade configuration is not a direct factor for students, the behavior of their teachers clearly is. Research shows that school factors, including grade configuration, influence whether teachers create responsive environments or whether a 'developmental mismatch' develops between schools and young adolescents (Eccles, Lord, & Buchanan, 1996). Eccles and colleagues (1993) revealed several differences between elementary and junior high school classrooms. Junior high classrooms were more likely to have teachers focused on control and discipline, less student choice and decision-making, less personal and positive teacher-student relationships, lower teacher efficacy, classroom work requiring lower-level cognitive skills, and higher grading standards leading to lower student grades.

Corresponding to these decreases, other studies have also found significant differences between pre-transition and post-transition teachers and classrooms. Particularly interesting are differences found between teachers before and after a transition during early adolescence. These studies found that 7th grade junior high school teachers were more focused on discipline and control and trusted students less than their 6th grade elementary

school colleagues (Eccles & Midgley, 1991; Midgley, Feldlaufer, & Eccles, 1988). The post-transition teachers reported lower personal efficacy, especially with children of diverse learning abilities. Most striking is that students of lower efficacy teachers were found to have lower efficacy themselves (Eccles & Midgley, 1991; Eccles et al., 1993). Cook, MacCoun, Muschkin, and Vigdor (2007) hypothesize that differences between 6th graders' achievement and behavior between elementary and middle schools may be due in part to the degree of freedom given to students, the control of the faculty and administration, and the stability of one teacher/classroom in elementary schools (continuity and connection).

This dissertation investigates the grade configuration variable to determine what effect it has on the norms and behaviors of Catholic school teachers in the middle grades. Under the various grade configurations, middle grade students and their teachers can either be school leaders (in K-8 arrangements), new kids on the block (in 7-12 schools), or an island unto themselves (in 6-8 arrangements). Data are collected to compare the attitudes and practices of middle school teachers who teach in different configurations to see if this relative position has any affect on the development of professional learning community among a faculty. This investigation of grade configuration provides a unique contribution to the body of research involving Catholic schools.

For this study, schools are categorized using criteria modified from the work of Epstein and MacIver (1990). Because Catholic school configurations can be the result of parish school unifications and realignments, a focus on grade configurations encompassing middle school grades must be supplemented by an assessment of the physical and administrative separation middle school teachers have from their colleagues at the

elementary and secondary levels. Under this revised definition, a Catholic school is considered a stand-alone middle school if its students and teachers operate within a distinct facility or under the direction of an administrator designated with authority for those grades alone.

Elementary Schools: mainly K-8 schools but also any school beginning in PreK-3rd grade and ending with 7th-9th grade. The school is housed in one location under the authority of a single principal

Unit Schools: mainly K-12 schools. The school is housed in one location under the authority of a single principal

Secondary Schools: a school beginning in 5th-7th grade and extending through 12th grade. The school is housed in one location under the authority of a single principal

Middle Schools: a school beginning in 4th-7th grade and ending with 7th-9th grade. The school is housed in a location distinct from elementary and high school students <u>or</u> is under the authority of a separate principal.

Ecology

<u>School Size</u>

In the twentieth century, an emphasis was placed on creating larger schools that could offer more comprehensive programs, be more efficient, and offer greater subject-specialization among teachers (George & Alexander, 1993; Stockard & Mayberry, 1992). However, researchers, school administrators, and teachers came to realize that those benefits resulted in the loss of the close relationships so vital to learning. "Modern

industrial nations pioneered the idea of economy of scale… [but] smaller-scale institutions are widely needed in America. This need is especially critical in schools, because ours is the one public institution that affects everyone" (Howley & Bickel, 2002, p. 30).

School size is one factor that can make a difference in the educational experience of young adolescents. Research has shown that larger schools are associated with decreased academic achievement (Lee & Loeb, 2000), more negative attitudes (Clements & Seidman, 2002), decreased motivation, lower self-esteem and self-concept, and an increase in behavioral/discipline problems (Eccles & Midgley, 1991). Trust is an important factor for school climate and student achievement (Hoy & Sabo, 1998). Trust is more likely to flourish in small schools because they are less complex and have fewer social networks. As a result, individuals maintain close ties to the organization as a whole, rather than sub-groups (Bryk & Schneider, 2003; Fortna, 2004; Littky, 2004).

Larger schools don't just affect students, they also impact teachers, who gain larger student loads (Eccles et al., 1993), experience a decrease in teacher efficacy (Eccles & Midgley, 1991), and change teaching practices to focus on maintaining discipline and control rather than promoting active and authentic learning (Eccles & Midgley, 1991; Goodlad, 1984; Midgley, Feldlaufer, & Eccles, 1988). Conversely, small school size increases teacher efficacy and attitudes (Lee & Loeb, 2000) and facilitates the growth of professional community (Bryk, Camburn, & Louis, 1999; National Middle School Association, 2010). "Real professional communities of teachers develop more easily and more naturally in smaller schools whose organizational form is more likely to be communal" (Lee & Smith, 1996, p. 133).

Many K-8 schools are inherently smaller than their 6-8 counterparts and small schools have been identified as "better environments for learning" (Lee & Smith, 1996, p. 130). Flexible scheduling is most common in K-8 buildings, most likely because their smaller size makes such arrangements logistically easier (Epstein, 1990). Smaller school size means that all staff – teachers, administrators, secretaries, and even custodians – know colleagues and students personally and can be more responsive to their needs, "Knowledge [of students] leads to positive affect which, in turn, leads to advocacy" (George & Alexander, 1993, p. 282).

One Catholic school administrator summed up the cost-benefit of small schools, "I believe that our schools should remain small. It isn't efficient, cost wise, but it is the most important thing for the well being of the students" (Fortna, 2004, p. 72). No matter their size, MacIver and Epstein point out that, "The goal for large and small schools alike is to create responsive learning environments that make early adolescents feel a part of a supportive and caring community" (1993, p. 522).

In studying the impact of school size, this dissertation also overcomes the inadequacy of conventional definitions of large and small schools as applied to Catholic schools. Most public school research on school size defines small schools as fewer than 350 students (Bryk & Schneider, 2003). Yet most Catholic elementary and middle schools are already smaller than this threshold. This research uses the actual enrollment of each Catholic school as a continuous variable to evaluate if additional benefits accrue with smaller sizes than those typically investigated in public school research.

Cohort Size

Just as in large schools, studies have found that a larger number of students at the same grade level in a school can also result in students 'feeling lost'. Some research suggests that young adolescents may be more affected by cohort size than overall school size (Offenberg, 2001). If, for example, two seventh grade students attend schools with the same overall enrollment of 450, the student attending a K-8 school will experience an average cohort size of 50. If the other student attends a grade 6-8 middle school of the same overall size, she will be one of 150 students in her cohort. Increased cohort size can lead to negative outcomes, including increased dropout rates (Smith, 1997) and lower academic achievement (Offenberg, 2001). However, Cook, MacCoun, Muschkin, and Vigdor (2007) found that cohort size had little effect on the rate of disciplinary infractions.

This dissertation study evaluates how school and cohort size affects teacher norms, the practices associated with professional community, and the implementation of recommendations for exemplary middle level programs. Variables addressed include the size of the overall student body as well as the average size of middle level grade cohorts and the associated student-load experienced by teachers.

Social System

The relationships that occur between students, teachers, administrators are critical factors in schools, especially those that educate young adolescents (Akos, 2002; Kramer, 1992). Bryk, Lee and Holland point out that, "the social interactions of schooling are not simply a mechanism for accomplishing some other aim; they are education itself" (1993, p. 291).

In fact, half of the eight recommendations contained in the *Turning Points* report deal specifically with strengthening social relationships: create small trusting learning communities, empower teachers and administrators, reengage families, and connect schools and communities (Carnegie Council on Adolescent Development, 1989). That report further acknowledged that "the success of the transformed middle grade school will stand or fall on the willingness of teachers and other staff to invest their efforts in young adolescent students" (p. 58). This study investigates the influence social relationships with colleagues and administrators have on the development of professional community and norms and practices focused on the needs of young adolescents.

<div align="center">Principal Leadership</div>

Hoy and Sabo's (1998) research into the openness and health of school climates identifies school leadership as an important element of both. They propose that, "principals need to find ways to link their leadership efforts with the desires, needs, and efforts of teachers just as teachers must link their efforts with needs and interests of students" (pp. 119-120). Drawing on Ferdinand Tonnie's (1887) historic work on gemeinschaft and gesellschaft communities, Irvin and Farr (2004) describe leadership patterns in schools as either 'power-over' or 'power-with' relationships.

Power-over arrangements focus on the hierarchy in the running of schools. This type of top-down management matches the gesellschaft community first identified by Tonnie. In contrast, power-with arrangements are similar to the gemeinschaft community in which leaders share power with teachers. Irvin and Farr (2004) found that the leadership and power structure of the school had an effect on teacher efficacy. A power-with

community was correlated to better pedagogy and a better ability to meet the needs of diverse learners. Power-over relationships, in which teachers felt a loss of control, were accompanied by more worksheets and standardized curriculum. "The leader has responsibility to create supportive conditions that enable teachers to thrive as leaders too. Collaboration is a key skill, but also an environment that supports collaborative behaviors is essential… It is the principal's responsibility to create those opportunities for collaboration" (Schuttloffel, 2008, p. 32). Facilitative principal leadership has been correlated to the development of professional community (Bryk, Camburn, & Louis, 1999).

Bryk, Sebring, Allensworth, Luppescu and Easton (2010) identify school leadership as one of the five essential supports for school improvement and define the type of leadership needed as strategic, focused on instruction, and inclusive of others. When the National Middle School Association published its fourth edition of *This We Believe* (2010), the major revisions focused on shared leadership. The report calls for principals who are not only committed, knowledgeable and courageous, but collaborative, "for improvement cannot depend on any single person" (2010, p. 29).

The present study considers the power arrangement of a school as a variable describing the relationship between teachers and the principal. Supportive, directive, and restrictive leadership patterns (Hoy & Sabo, 1998) are evaluated for their correlation to the presence of the elements of professional community.

Staff Stability

Teacher's relationships with each other are an important force to accomplish many school outcomes. Relationships within organizations are strengthened when members expect to continue to relate to the same network of people over time (Bryk, Camburn, & Louis, 1999; Tschannen-Moran & Hoy, 1998) and trust develops from these repeated exchanges (Bryk & Schneider, 2003; Littky, 2004). Trust and relationships have been identified as key components of overall school health (Hoy & Sabo, 1998) and climate (Tschannen-Moran & Hoy, 1998). In addition, research also links them positively to teacher satisfaction, success, longevity, and student achievement (Convey, 1992, p. 121). Bryk, Camburn and Louis assert that "by far, the strongest facilitator of professional community is social trust among faculty members" (1999, p. 767).

Just as trust and relationships are built through stable faculty relationships, they are eroded by a lack of stability (Bryk & Schneider, 2003). "Frequent transfers are destructive and likely to retard, if not prevent, the growth of a coherent and ongoing school personality" (Purkey & Smith, 1983, p. 443). Irvin and Farr (2004) found that even in schools where collaborative environments had been solidly established, changeover in the principal and teaching staff were cited by teachers as two of the biggest reasons the changes were not sustained. In middle schools, teacher turnover has also been found to have a inverse relationship to the implementation of national middle school recommendations (Seghers, 1995; Seghers, Kirby, & Meza Jr., 1997).

However, to simply say that stable faculties are positive and changing faculties are not is an oversimplification. If a faculty moves from stable to stagnant, it can lose its desire to collectively question assumptions and practices. In that case faculty stability may

actually be negatively correlated to the existence of professional learning communities.

Bryk, Camburn and Louis (1999) found that principals may intentionally reshape faculty

compositions to effect school reform agendas. This indicates that teacher turnover can be

handled successfully.

The social system variables chosen for this study are faculty stability and the

leadership patterns in these schools. These factors are analyzed to determine how the social

system of educational professionals are correlated to the development of professional

community among a faculty.

CULTURAL FACTORS

Organizational culture is defined by Hoy and Sabo as "a system of orientations

(norms, core values, and tacit assumptions) shared by members, which hold the unit

together and give it a distinctive identity" (1998, pp. 92-93). Values are what is important,

beliefs are what people in the organization think is true, and norms are how things are done

in the organization (Owens, 2004). Although these values, beliefs, and norms are

unwritten, they permeate the organization and can have a powerful effect on climate,

unconsciously influencing the way people perceive and make sense of events. In fact,

cultural beliefs, norms, and values are usually so deeply imbedded in an organization that

they become invisible to participants (Johnston, 1992; Owens, 2004).

Strong community culture is widely acknowledged as "a distinguishing feature of

Catholic schools, an essential ingredient for their effectiveness academically and in terms

of religious formation." (T. J. Cook, 2007, p. 13). Bryk, Lee, and Holland (1993)

conducted an in-depth study of what sets Catholic schools apart in academics, attitudes and

climate. They attribute a large portion of the 'Catholic school effect' to the communal organization and culture of Catholic schools which positively affects the motivation of students and teachers, reinforces high expectations, and places a high value on academics and the business of learning. They propose that the creation of such a community produces a synergistic effect, far surpassing the sum of its individual factors.

Within schools, sub-cultures also exist. "To the extent that these cultures share similar core values, schools succeed. When the groups' values are in opposition to one another, or when the values are unclear or misunderstood, school performance suffers, student achievement declines, and teacher satisfaction evaporates" (Johnston, 1992, p. 84). This study considers two sub-cultures of the Catholic school as predictor variables; its character as both an academic community and a faith community. A third sub-culture, that of the professional community, serves as the dependent group of variables for this dissertation research. Evidence of this culture includes collaborative attitudes about teaching and specific practices to improve student learning.

Academic Community

Research demonstrates that taken as a group, Catholic schools produce better academic outcomes than public schools (Convey, 1992; Hunt, Joseph, & Nuzzi, 2002). However, Convey cautions that individual Catholic schools vary in their degree of effectiveness and must be evaluated individually. The focus of this study is to do just that, investigating similarities and differences between the climate, culture, and programs of different Catholic schools. This work extends the research beyond the Catholic high school, where

most studies have been undertaken to date (Convey, 1992), and investigates Catholic

schools which educate students in the middle grades.

<div align="center">Academic Press</div>

Researchers identify that the seriousness teachers and students give to their

academic business is an important part of a healthy school climate. "The creation of

[learning] cultures for both the adults and the students significantly affects the larger

culture of the school" (National Middle School Association, 2010, p. 46). Academic press

involves teachers setting high goals, administrators providing resources and influence to

support those goals, and students responding to the challenge. In short, "Academic press is

the extent to which the school is driven by a quest for excellence" (Tschannen-Moran &

Hoy, 1998, p. 343). Schools with high student achievement have a strong internal press for

academic excellence among teachers, administrators, and students who accept the

challenge and respect the academic accomplishments of peers (Hoy & Sabo, 1998).

This study determines the level of internal academic press at each of the schools

studied. The analysis looks for correlations between the level of academic press and the

development of shared professional community norms and practices.

<div align="center">Environmental Press</div>

Schools do not exist in a vacuum and internal pressures are not the only forces

acting upon students, teachers, and administrators. There are forces external to the school

that also influence school climate. "Environmental press is strong pressure from the

parents and community to change school policy and influence the functioning of the

school. The school needs to be able to cope with its environment in a way that maintains the educational integrity of its programs" (Tschannen-Moran & Hoy, 1998, p. 343). Healthy schools are able to direct their energies toward their mission and high achievement.

Research shows that schools with higher levels of involvement from family and the community tend to have more positive outcomes in terms of achievement, behavior, and overall school support (National Middle School Association, 2010).

> If there is a surprise in the profile of high achieving schools, it may be the impact of the press that is generated from the outside (environmental press). Pressures from the parents and community seem to facilitate rather than hinder. Teachers often view parents as meddling and interfering, but the consequence of such environmental press is positive. (Hoy & Sabo, 1998, pp. 113-114)

It seems that the involvement of parents and community members keeps the pressure on schools to continue improving. Successful schools result when values are shared not only within the school, but between the school and its community (Bryk, Lee, & Holland, 1993; Johnston, 1992).

When environmental press and academic press are directed toward the same goal, achievement is improved. The elements of the professional community help bring about this alignment. "Our data suggest that collegiality and cooperation among the professionals in the school transform the pressures from the community (environmental press) into positive actions and attitudes that expect and encourage learning (academic press)" (Hoy & Sabo, 1998, p. 116). The development of professional community provides a vehicle to address and balance internal and external pressures.

Faith Community

"At the center of every institution is a set of core values that drives its decisions, practices, and policies" (Johnston, 1992, p. 86). In their 1972 pastoral message *To Teach as Jesus Did*, the bishops of the United States highlight the three dimensions that define Catholic education: sharing the *message* of Christ, *service* to others, and living as a Christian *community* (United States Conference of Catholic Bishops, 1972, no. 14). The bishops expound on each of these three dimensions and spend considerable time addressing the central role of community, "Building and living community must be prime, explicit goals of the contemporary Catholic school" (United States Conference of Catholic Bishops, 1972, no. 108). The Vatican is even more explicit on the importance of communal school culture, "Christian faith, in fact, is born and grows inside a community" (The Sacred Congregation for Catholic Education, 1977, no. 53)

Timothy Cook reinforces this centrality in his monograph, *Architects of Catholic Culture*, "Put simply, there cannot be faith community until there is community first… Only through the building of relationships, in particular, and the building of community, in general, will people in Catholic schools actively construct a faith community" (2007, p. 20). This culture of relationships is a central part of the Catholic schools and "A school is authentically and distinctively Catholic when it fosters relationships that are both human and divine" (2007, p. 16).

The wider community of faith encompassing a school (families, the parish, and the diocese) provides a continuity of support for students, teachers and parents (Bryk et al., 2010). This large functional community supports students with a tremendous amount of

social capital (Coleman & Hoffer, 1987; Fortna, 2004). Bryk, Lee, and Holland (1993), researching Catholic high schools, found;

> Strong empirical evidence that, compared with public schools, Catholic schools are more appropriately characterized by shared beliefs about school purpose, student capabilities, and norms of behavior. They also provide more common activities - both academic and non academic - for students. Teachers in Catholic schools are more collegial and much more likely to exhibit extended teacher roles. It seems safe to conclude that when Catholic school personnel proclaim 'We are a community,' they are describing an organizational reality that does differentiate their schools from public high schools. (Bryk, Lee, & Holland, 1993, p. 283)

When compared to public school students, the statistical analysis by Bryk, Lee, and Holland (1993) showed that 100% of the difference in student interest, 35% of the difference in dropout rates and 33% of cutting class were attributable to the communal organization of the Catholic school. Among teachers, the Catholic school communal culture accounted for 100% of the difference in teacher morale, 95% of the difference in teacher enjoyment, and 37% of the difference in teacher efficacy. Although their salaries are lower than public schools, Bryk, Lee, and Holland contend that these communal elements are more significant motivators and that the presence of these highly committed teachers is contagious, drawing in other faculty and students (1993).

> A normative environment is created in which caring and a sense of hope and purpose come to characterize the personal experiences of both adults

and students… we also maintain that the quality of the social engagement of

adults with one another and with students is foundational to a school's

academic mission… a communally organized school indirectly engenders

positive academic outcomes for students through the increased efforts of

teachers and students. (Bryk, Lee, & Holland, 1993, p. 276)

Catholic Profile

Research has confirmed that the faith community is a tremendously important part

of much of the success of Catholic schools in academics and faith formation (Coleman &

Hoffer, 1987; Convey, 1992; T. J. Cook, 2007). Anthony Bryk and his fellow researchers

found in Chicago that even public schools showed greater improvement when located in

communities with strong religious participation (Bryk et al., 2010). The American bishops

remind us that education within a close-knit community is not just important to the schools

of today, but to our communities of the future;

> Community is central to educational ministry both as a necessary condition and an
>
> ardently desired goal. The educational efforts of the Church must therefore be
>
> directed to forming persons-in-community; for the education of the individual
>
> Christian is important not only to his solitary destiny but also to the destinies of the
>
> many communities in which he lives. (United States Conference of Catholic
>
> Bishops, 1972, no. 13)

Frederickson (1996) found that faith formation in adolescents had the most impact when

they had relationships based on these imbedded cultural values. Christianity is a way of life

and Catholic schools depend on teachers as key cultural players to model and reinforce this way of life daily (T. J. Cook, 2007).

Although Catholic schools consistently demonstrate positive outcomes from communal culture, it is not a guarantee. Fortna cautions, "Although the religious nature of Catholic schools provides the conditions for this social capital to exist and, seemingly, ensures a caring, nurturing environment, it is not a guarantee that such will exist in the schools" (2004, p. 92). The homogeneity of the school's Catholic culture is measured to determine its effect on the development of professional community.

This study creates a Catholic profile for each school through a composite scale that includes school demographic data on the percentage of Catholic students, percentage of Catholic teachers, percentage of teaching staff that are clergy or religious, and the vocation of the principal. This variable is analyzed to identify any correlations to the development of professional community.

Sponsorship

Catholic educational institutions have long been sponsored by parishes, dioceses, and religious orders. In the last twenty years, multi-parish and regional schools have grown. These different sponsorship and governance models each have a different locus of control and ownership (Hunt, Joseph, & Nuzzi, 2002). In single parish sponsorship models, governance and ownership is located closest to teachers and students. Religious order schools tend to also have close local control. In regional and diocesan sponsorship models, governance is more centralized and further removed from the daily experience of teachers.

To date, there is no body of research evaluating the impact of different models of sponsorship and governance on teachers in Catholic schools. This study evaluates the effects that are experienced by teachers and how these effects are translated into different levels of professional community. Although the functional community woven together by school, parish, and home provides opportunities for the caring relationships that many middle school reforms attempt to achieve, it still requires the ongoing commitment of teachers. Research in this area has focused on Catholic high schools and none to date has investigated the functional communities surrounding middle grades schools. This study investigates how these conditions influence teachers and the creation of professional learning communities that are focused on better serving young adolescents.

PROFESSIONAL COMMUNITY

Hoy and Sabo (1998) advocate a paradigm shift from school effectiveness (the focus on outcomes) to school quality (a focus on how school processes and relationships affect members and lead to continuous improvement). Many researchers agree that a sense of community in schools increases the quality of life for students and teachers (Bryk et al., 2010; Convey, 1992; Schuttloffel, 2008). When teachers feel connected and value their membership in the profession and school, they are more likely to provide the support students need to also feel connected (Arhar, 1992). The collaborative culture of the professional community leads to increased student learning because teachers also become a community of learners, seeking new ideas and gaining a greater sense of efficacy. Bryk and colleagues (2010) identify the development of collaborative professional communities as one of the five essential supports for school improvement and it is also established as

one of the five core propositions for the national certification of teachers (National Board

for Professional Teaching Standards, 1989).

Goodlad (1984) argues that improving teachers' workplace is itself a significant

goal, irregardless of the effects on student achievement. "Teachers, like other humans, are

entitled to a satisfying workplace… Even if student achievement improved only modestly

or not at all, teachers at least would benefit from improvements in the circumstances under

which they teach" (p. 177). While many of the factors in this study's conceptual

framework are connected through linear relationships, the school faculty and development

of professional community enjoy a reciprocal relationship. While the faculty creates the

professional community, its presence creates a self-sustaining feedback loop that further

reinforces teachers' levels of satisfaction and commitment to each other. This two-way

relationship reflects the phenomena of both "the creation and influence of social contexts

in organizations" (Denison, 1996, p. 646). In short, professional community is both an

outcome of, and a contributor to, the relationships among educators.

Professional community is not a program, prescription, or plan. It is a process and

an ongoing commitment whereby professional educators review data, research, and

practices to make informed decisions in support of students and in support of each other

(DuFour & Eaker, 1998). "At its core, the concept of PLC rests on the premise of

improving student learning by improving teaching practice" (Vescio, Ross, & Adams,

2008, p. 82). Research indicates that professional community benefits students in terms of

increased academic achievement and decreased absenteeism and dropout rates (Hord,

1997). "The development of professional communities supports the change process and

can generate additional human and social resources" (Gamoran, 2002, p. 7). Bryk,

Camburn, and Lewis (1999) delineate the six components of a professional community: focus on student learning, collective responsibility, new teacher socialization to norms, reflective dialogue, deprivatized practice, and collaboration.

However, there can be many factors that interfere with the development of strong relationships and professional community. School characteristics like size, governance, departmentalization, ability grouping, and large student loads can be non-motivating for both students and teachers (Goodlad, 1984; Lee & Loeb, 2000; Midgley, Feldlaufer, & Eccles, 1988). Most teachers enter the profession to teach and anticipate intrinsic rewards. When workplace constraints interfere, frustration and dissatisfaction set in and diminish teacher effectiveness (Goodlad, 1984). Continuing frustrations can be a major reason for teachers leaving a school or the profession all together. Seghers (1995) found that higher implementation levels of the Carnegie middle school recommendations were correlated with lower teacher turnover rates.

The backbone of middle school reform is formed by three national reports that identify the developmentally responsive elements schools should have to effectively educate early adolescents. The recommendations laid out by *Turning Points* (Carnegie Council on Adolescent Development, 1989), *Turning Points 2000* (Jackson & Davis, 2000), and *This We Believe* (National Middle School Association, 2010) [plus earlier editions in 2003, 1995, 1982] address many elements of school climate. The recommendations made in these three foundational reports are incorporated into the variables identified in this study's conceptual framework. Exemplary middle school practices are hard work and require a faculty to work together. These practices will serve as evidence of the level of professional community in a middle level school. A low level of

professional community can be expected to hinder the implementation of best practices in schools for young adolescents.

As with any education reform, just using the term "professional community" in a school does not mean that a learning organization truly exists (Vescio, Ross, & Adams, 2008). The professional community focuses on results, not intentions (DuFour & Eaker, 1998). When attitudes and beliefs are expressed in specific actions, they can promote greater school effectiveness and student achievement. But the question of which individual, environmental, and cultural inputs promote or inhibit the norms and practices of professional community is not yet fully resolved (Convey, 1992; Hoy & Sabo, 1998). This study advances the field of knowledge in this regard by examining the six components of shared norms and core practices that Bryk, Camburn, and Louis (1999) identify as the elements of professional community. The normative components include shared vision, collective responsibility, and new teacher socialization. The practical components are made up of reflective dialogue, deprivatized practice, and collaboration.

Norms and Values

Norms describe the unwritten behavioral expectations of a group (Owens, 2004). In a school setting, norms influence the behavior of teachers toward each other, students, and the wider community.

In the educational process, teachers provide students with more than information to be digested and procedures to be mastered. They also communicate their own attitudes toward particular students and toward the learning process. These attitudes constitute an important dimension of the culture of classrooms and ultimately of

schools. Teacher's attitudes are instrumental in how students construct knowledge, which ultimately results in learning. (Lee & Smith, 1996, p. 108)

In a professional community the focus of all efforts is the student. "Committed behavior here refers not to commitment of teachers to the school or to their colleagues but commitment of teachers to their students" (Hoy & Sabo, 1998, p. 31). Those researchers acknowledge that further study is needed to refine the conceptual foundation of this commitment to students. This dissertation research advances that cause by identifying correlations between school context and the level of professional community.

Shared Mission

The first of the normative elements is a shared mission focused on student learning. "Until a school has clarified what it is trying to become, attempts to improve it will represent only random lunges in the dark" (DuFour & Eaker, 1998, p. 84). This requires that vision and values have been clearly established and communicated among the staff and that the staff has high expectations for student learning and teaching (DuFour & Eaker, 1998; Hord, 1997; Morrissey, 2000).

This outcome cannot simply be measured by well-written mission and vision statements, but on how well the staff has internalized these values and attitudes into their daily work. "A vision will have little impact until it is widely shared and accepted and until it connects with the personal visions of those within the school" (DuFour & Eaker, 1998,

p. 65). This study's survey instruments collect responses to determine how well a faculty

has developed a shared mission focused on students.

<div align="center">Collective Responsibility</div>

The construct of collective responsibility is the second normative element of

professional community. Lee and Smith (1996) expanded the study of teacher attitudes

from expectations for student learning to a sense of responsibility for student learning. It is

their definition of collective responsibility that is used in this study; "teacher's willingness,

interest, and care for how and what all his or her students learned" (pp. 114-115). This

dissertation study also accepts Lee and Smith's definition that collective responsibility is

an organizational property of a school, not an individual attribute.

Professional community involves a movement away from bureaucratic models to

collective arrangements where faculty members work together to determine needs, plan

interventions, and monitor progress (DuFour & Eaker, 1998). Collective responsibility is

the norm that motivates staff to put their vision into action. It entails, "teachers

internalizing responsibility for the learning of their students, rather than attributing

learning difficulties to weak students or deficient homelives; a belief that teachers can

teach all students; willingness to alter teaching methods in response to students' difficulties

and successes; and feelings of efficacy in teaching" (Lee & Smith, 1996, p. 114).

Collective responsibility describes a shared commitment to student learning,

improvement, leadership, and school operations (Bryk, Camburn, & Louis, 1999; Lee &

Loeb, 2000). Teachers in schools with high levels of collective responsibility do not see

the principal as the sole leader, but work with the principal to improve teaching and learning. "When leadership is distributed across the organization and teachers and administrators collaborate on decision-making, teacher-leaders emerge and professional communities grow" (Gamoran, 2002, p. 5). While collective responsibility enhances the work environment of teachers, it is not self-serving. Creating a culture of collective responsibility is correlated with gains in student learning (Lee & Loeb, 2000; Lee & Smith, 1996).

In studying high school sophomores and their teachers, Lee and Smith (1996) found that "in schools with high levels of collective responsibility, where these attitudes are also consistent among the faculty, students learn more in all subjects. Equally important, collective responsibility is associated with less internal stratification in these outcomes by social class" (p. 130). While improved student achievement is a desirable outcome, it is not a finish line. "The objective is not necessarily high test scores but rather the *continuous improvement of student learning*." (Lambert, 2003, p. 55).

Chard (2003) identified the factors that influenced collective responsibility among National Board Certified Teachers in Michigan public schools. In creating a rating scale to assess the amount of collective responsibility among K-12 public school teachers, Chard found that collective responsibility, "is not an entity that may be investigated in isolation. Both its antecedents and consequences come into play" (Chard, 2003, p. 8). The eight influencing factors she identified match closely with the individual, environmental, and cultural factors previously addressed within this study's conceptual framework. Chard's influencing factors include: school demographic characteristics; student achievement; the effects of social networks; administrative leadership; allocation of resources; school/grade

size; the level of support from parents, community and administration; and collective professionalism and teacher leadership.

Chard's review of the literature also identified seven outcomes that show evidence of a collegial culture, many of which are also reflected in this dissertation's conceptual framework: shared responsibility by teachers for student learning; lesson adaptation to meet needs of students' successes and failures; confidence in ability to influence students' learning; commitment to common goals, mission, objectives, and student learning; frequent sharing and high levels of reciprocity between staff; sense of trust between staff members; and control over educational issues (Chard, 2003).

These outcomes are assessed in this dissertation within the categories of norms and practices of professional community. Most of the research on collective responsibility has occurred in public schools. This dissertation responds to the suggestion that, "future research should consider extending the collection of measures of collective responsibility to teachers in non-public schools, as they constitute a rapidly growing sector of the educational community" (Chard, 2003, p. 39).

This dissertation study surveys middle school teachers in Catholic schools to determine the degree to which the faculty focuses on student learning, takes responsibility for student learning, shares leadership, commits to shared goals, and has confidence in their ability to affect student learning.

New Teacher Socialization

Professional communities successfully manage teacher turnover through a socialization process through which new teachers are inducted into a faculty and made

consciously aware of the existing shared norms. Bryk, Camburn and Louis argue that

"schools that pay no attention to socializing newcomers are often 'normless'" (1999, p.

756). But the socialization process does not mean that norms are dictated to new members.

When norms are *shared* it means that they must also integrate the values of the new

member as part of the professional learning community. "As new members are socialized

into the community, they acculturate to the values and beliefs of the group. However they

bring with them prior learning and knowledge, which then becomes part of the wider

community" (Angelle & Anfara Jr., 2008, p. 54).

Practices

There are three components that describe the practices of educators engaged in

professional community. Gamoran (2002) describes these practices at work in the

following way, "In contrast to teachers' usual practice of working in isolation and meeting

primarily to discuss administrative details, these teachers *collaborated*, engaged in

reflective dialogue that focused on student thinking, and made their *teaching practices*

public [emphasis added]" (p. 4).

<u>Reflective Dialogue</u>

The first practice is that teachers have extensive and meaningful conversations

about issues central to student learning and effective teaching. This shift from discussion

about 'administrivia' to those topics essential to school improvement has been labeled

reflective dialogue (Bryk, Camburn, & Louis, 1999) or collective inquiry (DuFour &

Eaker, 1998). Both of these terms refer to a common element;

Professional learning communities honor both the knowledge and experience of

teachers and knowledge and theory generated by other researchers. Through

collaborative inquiry, teachers explore new ideas, current practice, and evidence of

student learning using processes that respect them as the experts on what is needed

to improve their own practice and increase student learning. (Vescio, Ross, &

Adams, 2008, p. 89)

Jackson and Davis have identified this dialogue as "potentially the most powerful

source of professional development for middle grade teachers" (2000, p. 128). In order to

deconstruct unconscious norms and practices that undermine middle school reform goals

and build on those that support these goals, teachers should have an avenue to share,

analyze, and modify classroom methods. This is one of the advantages of professional

community.

For this type of dialogue to occur, relationships must be close and trusting, but also

professional. It appears that friendships with colleagues may actually inhibit this

component (Marzano, 2003). If relationships are too close, the conversations may not

develop into the challenging ones called for in a professional community. Reflective

dialogue does not just involve friendly sharing, it also involves honestly and constructively

evaluating the current practices of the school and its faculty (Vescio, Ross, & Adams,

2008).

<u>Deprivatized Practice</u>

In professional communities and effective schools, "teaching is defined as a collective rather than an individual responsibility" (Arhar, 1992, p. 150). Therefore, the second action element of professional community involves opening classrooms and practices to colleagues. This is a significant shift from the traditional isolation of teachers within their classrooms. Deprivatized practice (Bryk, Camburn, & Louis, 1999; Lee & Smith, 1996), also called shared personal practice (Hord, 1997), involves teachers sharing their philosophies and methods through discussions and opening up their classrooms to observers other than the administrator. Other researchers argue that the process of observing and providing non-evaluative feedback benefits both the teacher being observed and the teacher doing the observation (Hord, 1997). Gamoran (2002) argues that making teaching practices public indicates a recognition that expertise resides within each school and not just with external researchers.

<u>Collaboration</u>

There are several types of relationships that can exist among a school faculty. Colleagues may engage in cooperation, coordination, or collaboration (Mattessich, Murray-Close, & Monsey, 2001). Cooperation describes individuals working together informally with no commonly shared mission, goals, or planning. Coordination describes a staff that works together with a shared mission, but who retain individual authority. Such coordination usually centers on issues and projects that generally stop at the classroom door, such as agreeing to teach a particular unit at the same time. Collaboration is the most developed faculty climate and requires shared leadership and comprehensive planning

regarding strategies and assessment. This study adopts DuFour's definition of

collaboration – "a *systematic process* in which teachers work together interdependently in

order to *impact their professional practice* in ways that will lead to better results for their

students, for their team, and for their school" (DuFour, DuFour, Eaker, & Many, 2006, p.

98).

   Collaboration is the third element of practice in a professional community. It is the

act of putting into action what is learned through reflective dialogue. Over twenty years

ago, the *Turning Points* report argued that improved teaching and learning would come

when teachers used shared knowledge to improve instructional programs (Carnegie

Council on Adolescent Development, 1989). Collaboration should be viewed only as a

means to the desired end result. "Working collaboratively is the process not the goal of a

PLC. The goal is enhanced student achievement" (Vescio, Ross, & Adams, 2008, p. 89).

DuFour et. al. also point out the difference between working together and true

collaboration,

> Over and over again, we have seen schools in which staff members are willing to
>
> collaborate about any number of things—dress codes, tardy policies, the
>
> appropriateness of Halloween parties—provided they can return to their classrooms
>
> and continue to do what they have always done. Yet in a PLC, the reason teachers
>
> are organized into teams, the reason they are provided with time to work together,
>
> the reason they are asked to focus on certain topics and complete specific tasks, is
>
> so that when they return to their classrooms they will possess and *utilize* an
>
> expanded repertoire of skills, strategies, materials, and ideas in order to impact

student achievement in a positive way. (DuFour, DuFour, Eaker, & Many, 2006, pp. 98-99)

The Carnegie Council on Adolescent Development called for giving teachers greater autonomy to act on their knowledge of students, designing "individualized, responsive, and creative approaches to teaching" (1989, p. 54). But far from being a blank check, the council also called for teachers to take responsibility for the consequences of those decisions. In order to maximize success, teachers must be provided the time to meet with each other regularly.

Research suggests that efficacy is not a character trait, but is situation specific (Midgley, Feldlaufer, & Eccles, 1988). Efficacy is grounded in teachers' perceptions of whether they can make a difference *in their school* (Marzano, 2003). Jackson and Davis found that collaborative work groups provided intellectual and emotional support for teachers, increasing efficacy.

Collegiality and professionalism are also highlighted as one of Marzano's (2003) five school-level factors for effectiveness, This study assesses the development of the practices of a professional community. Surveys of middle school teachers reveal the level of reflective dialogue, deprivatized practice, and collaborative community in Catholic schools. Correlations between these practices and teacher, environmental, and cultural factors are determined.

Implementation of National Middle School Recommendations

Vescio, Ross and Adams argue that "a key element of successful PLCs is their pervasive attention to meeting the learning needs of their students" (2008, p. 88). It is well documented that young adolescents have unique needs that make them distinct from elementary and secondary students (Carnegie Council on Adolescent Development, 1989; George & Alexander, 1993; Irvin, 1992; National Middle School Association, 1995). George and Alexander argue that this uniqueness is so overwhelming that "it is folly to proceed with any endeavor related to middle school education without first focusing firmly on the nature and needs of the developing adolescent" (1993, p. 2).

Middle school professional communities must be attuned to these unique needs and focused on meeting them through the 'best practices' advocated in national reports. Therefore, this study of professional community in the middle grades specifically measures the implementation of practices that have been nationally recommended to teachers in middle level schools.

The changes and needs of early adolescent students encompass the intellectual, moral, physical, emotional, psychological, and social dimensions (Irvin, 1992; Milgram, 1992; National Middle School Association, 1995) and the scope of these changes are tremendous. "Students change dramatically during a relatively short period of time, which means that the changes themselves and the speed in which they occur have an impact on students" (Milgram, 1992, p. 16). These changes help produce students who are more independent, but who still need guidance and direction from their schools and teachers. "Middle grades need security on one hand and freedom to experience and explore on the

other. They need an environment that protects them from themselves without smothering

the 'self'" (Wiles & Bondi, 1993, p. 28).

Sadly, many studies have found that early adolescent indicators are unfavorable,

indicating their needs are not being met (Carnegie Council on Adolescent Development,

1989; Clements & Seidman, 2002; Eccles & Midgley, 1991). The stage-environment fit (or

person-fit) theory proposes that "behavior, motivation, and mental health are influenced by

the fit between the characteristics individuals bring to their social environments and the

characteristics of these social environments" (Eccles, Lord, & Buchanan, 1996, p. 254).

Learning is maximized when there is a good fit between the needs and characteristics of

the learner (ability, cultural, developmental) and the characteristics of the learning

environment (Eccles & Roeser, 2003). However, if environments do not fit the

psychological needs of a person or group, motivation and performance are likely to suffer

(Eccles, Lord, & Buchanan, 1996).

Unfortunately, the transition from elementary school to middle school has been

called, "perhaps the most abrupt and traumatic move in a student's educational experience"

(Thomason & Thompson, 1992, p. 275). If schools and classrooms are structured counter

to students' internal needs, a 'developmental mismatch' exists and this may the greatest

cause of decreasing achievement and the rise of undesirable behavior in early adolescents

(Eccles, Lord, & Buchanan, 1996). "Students have difficulty academically in environments

in which they do not feel personally valued and welcomed" (Frederickson, 1996, p. 27).

The *Turning Points* report (Carnegie Council on Adolescent Development, 1989)

addressed the education of young adolescents as a unique developmental group. The

council warned that for many children, early adolescence was their, "last best chance to

avoid a diminished future… Middle grade schools are potentially society's most powerful force to recapture millions of youth adrift" (p. 8). However, the report warned that the current status of middle schools needed to be reformed because, "a volatile mismatch exists between the organization and curriculum of middle grade schools and the intellectual and emotional needs of young adolescents" (pp. 8-9).

The Carnegie report set a goal of creating schools that would provide intellectual challenge and growth, prepare students for work and citizenship, develop ethics, and promote physical and mental health. The Council identified eight components that should be central to middle level programs. Roughly a decade later Anthony W. Jackson, one of the original authors of the *Turning Points* report, wrote *Turning Points 2000* (Jackson & Davis, 2000). This report incorporated additional research and further refined the essential goals for effective middle schools.

The National Middle School Association (NMSA) first published *This We Believe*, a position paper for middle level schools and programs, in 1982. This document is currently in its fourth edition (1982, 1995, 2003, 2010) and identifies the characteristics and practices most appropriate for schools that educate early adolescents. Reviewing these sets of recommendations from 1982 through 2010, one can see a growing emphasis on the concept of professional learning communities. The latest NMSA recommendations clearly highlight the importance of the norms and practices of professional learning communities among the essential characteristics of successful middle schools.

The recommendations set forth in the latest edition of *This We Believe* (National Middle School Association, 2010) are encompassed in the conceptual framework of this dissertation study. Recommended characteristics are reflected in the human,

environmental, and cultural factors of school contexts. Practices have been organized into

four groups: organizational structures, curriculum, pedagogy, and student supports

(Dickinson & Butler, 2001). These will form a set of outcome measures to specifically

assess the practices of middle school teachers in professional learning communities. Table

1 illustrates how the NMSA recommendations are incorporated into this dissertation's

conceptual framework.

Table 1: National Middle School Recommendations

Conceptual Framework	This We Believe (NMSA, 2010)
TEACHER FACTORS	Educators value young adolescents and are prepared to teach them.
ENVIRONMENTAL FACTORS	Leaders are knowledgeable about this age, research, and best practice.
	Leaders demonstrate courage and collaboration.
CULTURAL FACTORS	The school actively involves families in the education of their children.
	The school includes community and business partners.
	School environment is inviting, safe, inclusive, and supportive of all.
PROFESSIONAL COMMUNITY NORMS AND PRACTICES	A shared vision developed by all stakeholders guides every decision.
	Every student's development is guided by an adult advocate.
	Ongoing professional development reflects best educational practices.
NATIONAL MIDDLE SCHOOL RECOMMENDATIONS	Organizational structures foster purposeful learning and relationships.
	Curriculum is challenging, exploratory, integrative, and relevant.
	Students and teachers are engaged in active, purposeful learning.
	Educators use multiple learning and teaching approaches.
	Varied and ongoing assessments advance and measure learning.
	Guidance and support services meet the needs of young adolescents.
	Health and wellness are supported in curricula, programs, and policies.

The goal of middle school reforms is to create motivating and supportive

environments for both students and teachers (Roeser & Lau, 2002). The implementation of

these developmentally appropriate practices correlates positively with higher student

satisfaction (Gulino & Valentine, 1999) and academic achievement (National Middle

School Association, 2010). They are also associated with lower proportions of student

suspensions, expulsions, and teacher turnover (Seghers, Kirby, & Meza Jr., 1997).

Even though the body of research indicates that these reforms help improve student academic and developmental growth, "few middle grades schools have implemented many of the practices recommended for the education of early adolescents, and even fewer have implemented them well" (MacIver & Epstein, 1993, p. 530). Seghers (1995) found that the reorganization of schools in Louisiana to the 6-8 middle school structure did not guarantee a high level of implementation of accepted middle level practices. In fact, his overall results showed elementary configurations implemented those recommendations at a higher level than middle schools.

Dickinson and Butler (2001) found that there are several causes for the 'arrested development' of middle level reforms: implementing changes incrementally instead of holistically, staff turnover, failure to specialize teacher education programs, too much focus on organizational structures instead of curriculum, a delay in the development of holistic research, and a misunderstanding of the original concept. They caution that "the original concept is a totally integrated ecology of schooling. It is an organizational, curricular, instructional, and relational environment that cannot be parsed or broken" (p. 8).

While this dissertation study acknowledges the holistic nature of the national recommendations, in order to facilitate analysis and deeper understanding, they are organized into the four subcategories identified by Dickinson and Butler (2001) – organizational structures, curriculum, pedagogy, and student supports. Principals surveyed in this study are asked to respond about the interactions teachers have with their colleagues and students to determine the degree to which faculty implement the recommendations for middle-level schools.

<u>Organizational Structures</u>

Many individuals and organizations associated with middle school reform have called for small learning environments for students (Carnegie Council on Adolescent Development, 1989; Jackson & Davis, 2000; National Middle School Association, 1995). Interdisciplinary teams, houses, and 'schools-within-schools' are all strategies used to create small environments so that students do not feel lost, ignored, or anonymous (Epstein, 1990; George & Alexander, 1993). "The key principle is to create groupings of students and educators small enough to stimulate the development of close, supportive relationships" (Jackson & Davis, 2000, p. 123).

Kramer (1992) found that students prefer teachers who demonstrate personal interest in and concern for students. However, as students advance in grades and reach the early adolescent years, this teacher support (academic and personal) typically decreases just when students need it most. Interdisciplinary teaming helps correct this by creating small 'family-like' support groups (Kramer, 1992). "Teams provide a psychological home within the school that helps reduce the stress of isolation and anonymity" (Jackson & Davis, 2000, p. 125).

The benefits of teaming include a stronger sense of belonging, consistency in teacher expectations and rules, stronger ties with classmates, coordinated academic work, more positive attitudes about teachers, more interest in subject matter, improved discipline, and more self-confidence (Arhar, 1992; George & Alexander, 1993). Interdisciplinary teaming results in better social bonding to peers and teachers and reduces dropouts (Crow & Pounder, 2000). The interdisciplinary team has become a cornerstone of the middle school model. "In the presence of a stable interdisciplinary organization, other components

of the middle school program function more smoothly. In the absence of the interdisciplinary team organization, they operate with considerably more difficulty, if they exist at all" (George & Alexander, 1993, p. 247).

Prior to the *Turning Points* Report, researchers warned of a lack of communication and collaboration between teachers to promote school improvement, "teachers, like their students, to a large extent carry on side by side similar but essentially separated activities" (Goodlad, 1984, p. 188). The implementation of interdisciplinary teaming creates a stronger sense of membership for teachers, helping them as well as their students.

When teachers feel connected and value their membership in the profession and school, they will provide the support students need to feel connected (Arhar, 1992). Teachers on effective teams find opportunities for collaboration, reflective practice, and decision-making (George & Alexander, 1993). Teaming increases teacher morale and efficacy by giving teachers 'creative control' for how to reach goals, decreasing the territoriality of departments, and encouraging more extensive and critical evaluation of curriculum and student progress (Arhar, 1992; Carnegie Council on Adolescent Development, 1989; George & Alexander, 1993).

The major advantage interdisciplinary teams have over academic departments is that, "As might be expected, teachers talk about what they have in common, and when they share the same students rather than the same academic discipline, the students are at the center of discussion and program planning" (George & Alexander, 1993, p. 283). Knowledge leads to attitudes, which in turn leads to advocacy and when teachers regularly talk about their students it helps them develop 'safety nets' (Irvin & Farr, 2004). Arhar argues that teaming is an outcome of professional community;

It appears as if teaming is a manifestation of a commitment on the part of teachers to engage in teacher-student relationships that facilitate growth and individual student development. That teaming causes the philosophical commitment is unlikely; that it gives teachers the ability to translate this commitment into action is almost certain. (Arhar, 1992, p. 157)

The effective use of teaming can't happen without significant collaborative planning by teachers and common planning time is critical to making these organizational structures work. However, the tasks of teaching keep teachers separated from each other for most of the day. This not only prevents instructional planning; it also impedes the personal relationships necessary for effective teams. Because of supervision responsibilities and tight schedules, even lunchtime does not provide teachers the same opportunity to establish personal relationships as it does for office workers (Goodlad, 1984). For these reasons, national reform reports (Carnegie Council on Adolescent Development, 1989; National Middle School Association, 1995) call for middle level teachers to have frequent common planning time in addition to individual time. Teachers cite having time for collaborative team meetings as one of the most supportive features of their school (Irvin & Farr, 2004, p. 356).

Despite these long-standing national recommendations, the full implementation of the team concept and common planning time has come along slowly. While about a third of schools containing seventh grade did implement some form of teaming by 1993, many did not provide any common planning time and only 10% of schools had what researchers defined as a strong teaming program (MacIver & Epstein, 1993). An analysis of the

national study of middle level schools conducted by the National Association of Secondary

Principals (NASSP) found interdisciplinary structure and instruction present in only 55%

of schools nationally, but in 81% of successful schools (Petzko, 2004). Jackson and Davis

(2000) found that students on teams where teachers met together at least four times per

week for 30 minutes had higher test scores than those on teams that had less common

planning time. They propose that, "common planning time becomes a daily professional

development 'huddle' as teachers reflect critically on their purpose and approach to

teaching, addressing issues that extend well beyond the simple sharing of resources, ideas,

and other immediate practicalities" (p. 141).

This dissertation study focuses not just on the presence of teaming, but also on the

implementation of common planning time to facilitate the work of teams. Middle school

organizational structures are created and strengthened in a professional community, but

they are not ends in themselves. "Admirable as intention may be, such structural

modifications as dividing teachers and students into teams, modifying schedules, or

creating decision-making teams have limited impact without a purposeful, laser like focus

on how these structural changes will enable improved student learning" (Jackson & Davis,

2000, p. 29). Principals in this study are asked to provide information regarding teaming

and common planning time.

<div align="center">Curriculum</div>

The curriculum of the middle grades should be integrative, challenging, relevant,

and exploratory (National Middle School Association, 2010). Toepfer (1992) defines

curriculum as the product and program of schools, the intended learning and experience of

the learner. He argues that departmentalization is the least desirable organizational pattern and that curriculum should be organized in an integrative fashion, much in the same way the National Geographic Society integrates geography, biology, history, anthropology, etc. into a cohesive whole. Students have favorable perceptions of interdisciplinary units and these ratings were higher when they perceive more organization to the unit (Kramer, 1992).

One of the biggest criticisms of the middle school movement was its early lack of attention to creating a rigorous curriculum and effective teaching strategies in favor of focusing on teaming, exploration courses, and advisories. However, the middle school movement is not an 'either-or' proposition. Students need both challenging curriculum and supportive environments. Middle school reformers call for a renewed focus on promoting high achievement, without sacrificing the features that make schools developmentally responsive (George & Alexander, 1993). "Exemplary programs do all of these things *and* strive to provide curriculum and instruction that is process oriented, integrated, and relevant to students" (Irvin, 1992, p. 311). Curriculum practices are measured by the responses of principals regarding the integration of subject matter across disciplines and the presence of exploratory courses and school activities.

Pedagogy

Middle level schools need teachers who are committed to teaching students as much as they are committed to teaching content. "Instruction should be designed based on what we know about young adolescents and based on what we know about effective learning strategies" (Irvin, 1992, p. 296). The NMSA recommendations call on teachers to

employ a variety of approaches to match the needs, skills, abilities, and prior knowledge of students. Instruction should also encourage teamwork and provide choices among learning activities. Assessment needs to be a close partner and should focus on "both the processes and products of learning, taking into account student differences" (National Middle School Association, 2010).

Information on instructional practices is provided by school principals. They respond as to the variety of teaching strategies and assessment methods. This information helps in assessing the level of variation between schools and correlations between the predictor variables.

<div align="center">Student Supports</div>

The previous groups of nationally recommended practices address the cognitive and social needs of students. The final group includes practices that provide comprehensive support that are designed to help students in their emotional and physical development. Jackson and Davis (2000) argue that adolescents need close, trusting relationships with adults to provide the security needed to extend themselves and explore the world. *Turning Points* called for every student to be, "well known by at least one adult. Students should be able to rely on that adult to… act on their behalf to marshal every school and community resource needed for the student to succeed" (Carnegie Council on Adolescent Development, 1989, p. 40).

In any school setting, positive teacher relationships help support students by adding to parental support or helping compensate for a lack of it (Harter, 1996). Eccles, Lord and Buchanan argue that, "teachers are the one stable source of nonparental adults left for

many U.S. youth" (1996, p. 256). Research on the perceptions of young adolescents reveals that positive student-teacher relationships provide the support needed to increase student engagement (Marks, 2000), motivation, achievement (Kramer, 1992; Milgram, 1992), and student retention (Kramer, 1992).

In a national study of leadership in middle level schools, Petzko (2004) found that advisory groups were one of the least implemented elements of the middle school model. Only 32% of the national sample had fully implemented an advisory program. Among those schools that were identified as highly successful, the implementation rate was still only 47%.

To provide continuity of support, public schools have been encouraged to investigate the use of looping in the middle school grades (Carnegie Council on Adolescent Development, 1989; Jackson & Davis, 2000). This stability allows teachers and students to get to know each other better academically and personally. A greater sense of trust can develop under such conditions (Fortna, 2004). Students in many K-8 Catholic schools often have the same group of teachers for several years during the middle level grades. However being a small school or a Catholic school are not enough to guarantee the development of positive relationships; "this will not happen if teachers and staff do not consciously use the opportunities provided to develop these relationships" (Fortna, 2004, pp. 93-94).

Previous research suggests that formal arrangements such as interdisciplinary teams, exploratory classes, and teacher-student advisory time may be less common in the K-8 school (Epstein, 1990; McEwin, Dickinson, & Jacobson, 2004). However, Fortna (2004) found that other elements of the Catholic school accomplish the same purpose of

advisory programs even when those programs do not formally exist. She notes the social capital created by the partnership between home, school, and parish. This functional community (Bryk, Lee, & Holland, 1993; Coleman & Hoffer, 1987) shares a common vision, religious values and practice, values partnerships, and maintains high expectations. Because of these shared values and their generally smaller size, modern-day Catholic schools place great value on developing relationships and there is increased interaction between students and the entire school staff (cooks, custodians, secretaries), not just teachers. Moreover, the faith component, "provides opportunities to work with different staff members and smaller groups of students in an atmosphere different from the regular classroom setting" (Fortna, 2004, p. 89). Therefore other interactions between students and trusted adults in Catholic schools also help accomplish the goals for which the advisory concept was created.

This study asks principals to respond whether teachers facilitate small advisory groups of students. Teachers will provide data about the level of engagement between students, parents, and colleagues.

SUMMARY

This dissertation adds to the general understanding of how human, environmental, and cultural factors in schools affect teachers. In particular, this study fills in gaps in the research regarding school context and professional community in Catholic schools educating early adolescents. First, there is a research gap concerning the influence of school context on the development of professional community in middle grades schools. Second, a gap exists on the specific effects of grade configuration and school size in Catholic learning institutions. Third, research on the concept of professional community is

increasing, but has yet to consider the model within Catholic school settings. Fourth, research into the NMSA middle school recommendations has not conducted an assessment of the state of those recommendations in Catholic schools. This dissertation study addresses these gaps and provides the first comprehensive view of the factors influencing development of professional community within Catholic schools and how those schools serve middle grades students.

CHAPTER 3

METHODOLOGY

This chapter explains the methodology of the present study. It provides the rationale for the selection of the research location, describes the participants, and explains the instruments used and how they were developed. It also identifies the method of analyses and defines the variables and procedures used in this investigation.

RESEARCH LOCATION

Environmental and cultural factors are important predictor variables under investigation in this study. Based on a diverse mix of demographic characteristics, the five dioceses in Wisconsin were selected as the research location. While there are a total of 302 Catholic schools in the state, this study only includes the 202 Catholic schools that serve seventh grade students in the Archdiocese of Milwaukee and the Dioceses of Green Bay, La Crosse, Madison, and Superior. This criterion follows the work of Epstein and MacIver (1990) who studied middle grade schools that contained seventh grade as a way to include a wide variety of grade configurations in the sample.

One of the predictor variables in this research project is the grade configuration of the school. Therefore, it is important that this research be conducted in a location that not only contains traditional K-8 schools, but also has a sufficient number of schools that are organized in different configurations. In 2006 there were 119 Catholic schools in the United States that contained middle school grades, but were organized differently than the

traditional K-8 model. These included 7-12 buildings, elementary schools with split

primary and middle school campuses, and stand-alone Catholic middle schools (National

Catholic Educational Association, December 2006; P.J. Kenedy & Sons, 2006). These

schools were found to be most prevalent in the Upper Midwest and the Northeast. Table 2

shows the frequency of Catholic schools that educated early adolescents in configurations

other than K-8 by regions established by the National Catholic Educational Association

(NCEA). The Great Lakes region clearly contained the greatest number of these non-

traditional Catholic school configurations. The state of Wisconsin alone contained 19 of

the 22 schools in that region and nearly 16% of those schools for the entire country.

Table 2: Catholic Middle Schools by NCEA Region (2006)

NCEA Region	States	Catholic Middle Grade Schools other than K-8 Configuration
Region 1: New England	CT, MA, ME, NH, RI, VT	13
Region 2: New York	NY	15
Region 3: New Jersey, Pennsylvania	NJ, PA	9
Region 4: South Atlantic States	DC, DE, FL, GA, MD, NC, PR, SC, VA, VI, WV	10
Region 5: Southern States	AL, KY, LA, MS, TN	6
Region 6: Michigan, Ohio	MI, OH	11
Region 7: Great Lakes States	IL, IN, WI	22
Region 8: North Central States	CO, MN, ND, SD, WY	7
Region 9: Plains States	IA, KS, MO, NE	11
Region 10: Southwestern States	AR, AZ, NM, OK, TX	6
Region 11: Western States	CA, HI, NV, UT, Pacific Territories	4
Region 12: Northwestern States	AK, ID, MT, OR, WA	5
TOTAL		**119**

Source: (National Catholic Educational Association, December 2006; P.J. Kenedy & Sons, 2006)

In addition to grade configuration, Wisconsin Catholic schools are also diverse in

location, size, and sponsorship. Wisconsin contains a significant variety of inner-city,

urban, suburban, and rural Catholic schools. Enrollment in schools that serve seventh

graders within the state varies from 30 to 511. One of the cultural predictors is school sponsorship and again, Wisconsin Catholic schools that serve seventh graders are diverse; approximately 76% are sponsored by a single parish, 13% are sponsored as interparish schools, 1% are diocesan, and nearly 3% are sponsored by a religious congregation or other independent board. The state also contains Nativity/Miguel middle schools, a newer Catholic school model with a unique combination of variables. Because of the wide variety of grade configurations, locations, enrollment, and sponsorship, the Catholic schools of Wisconsin provide an excellent research sample.

PARTICIPANTS

The participants sampled for this study included the principals and middle school teachers in each of the 202 Catholic schools that serve early adolescents in Wisconsin. Information about the proposed study was first distributed to the diocesan superintendents of Catholic schools for their review. All five superintendents granted approval and building principals were mailed the introductory information and survey and asked to participate in the study.

Surveys were provided to principals in two formats. A paper survey form was mailed and contained a stamped return envelope addressed to the researcher. Each paper survey was marked in advance with a building-specific code number that allowed the researcher to match responses from teachers and principals within the same school. Principals were also provided a link to complete an electronic version of the survey through www.surveymonkey.com. Principals completing the online version were required to enter the building code printed on their survey before completing the electronic survey.

To encourage increased participation, follow-up reminders were mailed after four weeks and an email reminder was sent after another three weeks.

In addition to completing their survey, principals were also asked to help distribute information to teachers who were assigned to teach core academic subjects (Language Arts, Mathematics, Religion, Science, Social Studies) to middle school students. The principal survey included a question about the number of teachers that taught core academic subjects to seventh grade students. This response provided the researcher an accurate count of how many teacher surveys to send to each school administrator and allowed the researcher to determine the completion rates by individual school. Teacher surveys were mailed to principals upon receipt of their completed principal survey. This ensured that all teacher data would be useable and could be matched with the school level data that were only provided by the principal.

Surveys were also provided to teachers in two forms. A paper survey form was mailed along with a stamped envelope addressed to the researcher. The information also contained a link to complete an electronic version of the survey through www.surveymonkey.com. These procedures provided participants the assurance of anonymity in providing answers related to principal's leadership style and the behaviors of their colleagues. Each paper survey was marked in advance with a building-specific code number that allowed the researcher to match responses from teachers and principals within the same school. Teachers completing the online version were required to enter this code before completing the electronic survey. Packets of reminder postcards were mailed to principals three weeks later to be distributed in faculty mailboxes. As a safeguard against

extreme responses, schools were only included in the research sample if at least two teacher surveys had been completed, so that responses could be averaged.

INSTRUMENTATION

The data gathered in this study came from two sources. Building principals were asked to provide personal demographic data, demographic data about their schools, and information about the middle school practices utilized by middle school teachers. Middle school core teachers (Language Arts, Mathematics, Religion, Science, Social Studies) provided information on personal demographics, the school environment, school culture, and professional community practices. The school is the unit of study. Survey results were aggregated and analyzed on a school-level basis.

Principal Demographics

Principal surveys consisted of three parts. Part one collected data on personal demographics such as gender, vocation, age, experience, and educational licensure. The principal's vocation was used as one component of Catholic profile, one of the cultural variables. Principals were not asked to provide their religion since diocesan policies require that all principals be practicing Catholics.

School Demographics

Part two of the principal survey asked administrators to provide descriptive data about their school. In order to simplify the data reporting process, the survey was formatted to replicate the data grids used on the annual NCEA Databank report. In this

format, administrators only needed to copy the information already submitted to their diocesan Catholic Schools Office. Specific responses from the NCEA Databank served as predictor variables within the environmental and cultural groups of factors.

The environmental factor of grade configuration was determined by the youngest and oldest class enrollment specified on the NCEA Databank report. Schools were divided into four categories modified from a national study of middle grades practices and trends (Epstein & MacIver, 1990). These categories are: elementary school (e.g. k-8), unit school (e.g. K-12), secondary school (e.g. 6-12), or middle school (e.g. 6-8). In addition, further definition was needed for the middle school category due to changes in Catholic school governance and grade configurations brought on by mergers and consolidations. Principals were asked to clarify if the middle grades program existed on a different campus than either elementary or secondary grades and if the middle grades program had its own principal. A positive response to at least one of these questions was necessary for a school to be categorized as a middle school. If it did not meet either of those criteria, the school was placed in one of the other three configurations (i.e. a program may call itself a 'middle school', but if grades 7-8 shared a common building and principal with the 9-12 program, it was considered a secondary school in this study).

School size was operationalized as a continuous variable, as was grade/cohort size. This latter information was obtained based on the number of students enrolled in the grades the school identified as middle school grades, divided by the number of grade levels specified as part of the middle school program. Staff stability was reported by the building principal as the percentage of middle school teachers that had been at the school at least three years.

Student diversity was based on the information provided on the NCEA Databank report. It was used as a school-level variable derived from the mean of the percentage of minority students and the highest percentage of students using federal programs (Title I and free/reduced lunch or breakfast). Student diversity was used as a control variable to factor out differences in student populations between schools.

The administrator's survey also provided data on the cultural variables of Catholic profile and sponsorship. Sponsorship was coded as parish, interparish, diocesan, or religious congregation/private based on the information provided on the NCEA Databank report. Each school's Catholic profile was coded as a composite score. The composite score was based on a ten point scale, created by this researcher, derived from the percentage of Catholic students in the school, the principal's self-reported vocation, and information reported by teachers. The nominal coding of each of these responses yielded a composite measure scale of 0-10. The full coding protocol for the Catholic profile variable is described in table 3.

<div align="center">Middle Level Practices</div>

Middle level practices were represented by a composite measure of the organizational structures, curriculum, pedagogy, and student supports advocated for middle school programs in *This We Believe* (National Middle School Association, 2010). Because there is not yet an instrument to compare implementation of the latest edition of these recommendations between schools, fourteen questions were derived from three major studies investigating the implementation of previous versions of middle level recommendations (Epstein & MacIver, 1990; McEwin, Dickinson, & Jenkins, 2003;

Seghers, 1995). These items had not yet been combined into a single measure so a pilot

study was conducted. The researcher conducted the pilot study with a sample of Catholic

schools from a diocese outside Wisconsin. Analysis of results from the pilot study helped

the researcher clarify and modify the instrument design to strengthen its reliability. The

pilot of the fourteen original questions yielded a Chronbach's alpha of .685, below the

acceptable limit. Seven questions that yielded low or negative corrected item-total

correlations were removed from the scale and the remaining items had a reliability of .802.

This revised seven-item scale was used on the final survey instrument for the research

sample. The final questions used in the middle school practices scale are:

11. Middle school teachers in our school are organized into inter-disciplinary teams (i.e. the organization of two or more teachers from different disciplines who share responsibility for the curriculum, instruction, and evaluation of the same group of students).

12. Middle school teachers in our school integrate the subject matter across the various disciplines such as organizing thematic instructional units for their middle level students.

13. Middle school teachers in our school use alternative assessment methods such as portfolio assessment in the evaluation of students.

14. Middle school teachers in our school are assigned as advisors and facilitate small groups of middle school students on a regular basis.

15. Middle school students in our school participate in exploratory or "mini" courses where they can experience success in a variety of interest areas.

16. How much COMMON planning time is OFFICIALLY SCHEDULED each week for the MIDDLE SCHOOL teacher teams?

17. Please indicate the extent to which the following teaching methods are used by MIDDLE SCHOOL teachers in your school: Direct Instruction, Cooperative Learning, Inquiry Teaching, Independent Study, On-line Instruction

<u>Teacher Demographics</u>

The survey of teachers collected information in three parts. Part one collected data on personal demographics such as gender, age, teaching experience, teacher licensure, and teaching assignment. Teacher's individual demographic information was averaged to create school-level measures for these factors.

The gender variable was represented by whether a school's teachers were all female (homogeneous) or mixed gender (heterogeneous). Age and experience were continuous variables determined by the mean age and mean years of teaching experience reported on teacher surveys for each school. Certification level was a nominal variable representing the most prevalent level of middle school teacher licensure/certification for the school. The coding was based on which level the majority of teachers was certified. If a majority of teachers were not certified in the same level, the variable was coded as 'mixed' certification levels. Teacher responded whether they were Catholic and about their vocation as clergy, vowed religious, or lay person. These responses were used in the coding of the Catholic profile for each school.

<u>School Leadership and Culture</u>

Part two of the teacher survey collected information on principal leadership, academic press, and environmental press. The scale for principal leadership included subscales from two inventories developed specifically to measure middle school climate. Each subscale used the same Likert-type response set. The Organizational Climate Description Questionnaire for Middle Schools (OCDQ-RM) was developed by Hoy and

Sabo (1998) based on the work of Halpin and Croft (1962). The Organizational Health

Inventory for Middle Schools (OHI-M) was also created by Hoy and Sabo (1998).

The survey instrument for this present study placed the questions from the

following relevant subscales in random order by using a random number table from a

statistical reasoning text. Each of the following subscales was translated into standard

scores with a mean of 500 and standard deviation of 100, as specified in the directions for

each of the original instruments (Hoy & Sabo, 1998). The mean of the subscale standard

scores is used in the OCDQ-RM and OHI-M to create a composite score for principal

behavior. The same procedure was used in the present study to derive a school-level

composite predictor for principal leadership.

The collegial leadership subscale from the OHI-M consists of nine items that

measure principal behaviors that are supportive, open, equitable, and set a tone of high

performance. The subscale has a reliability of .94 (Hoy & Sabo, 1998, p. 66) and includes

the following response items, numbered as follows in the present study's teacher survey

instrument:

13. The principal is understanding when personal concerns cause teachers to arrive late or leave early.

17. The principal treats all faculty members as his or her equal.

23. The principal looks out for the personal welfare of faculty members.

25. The principal accepts questions without appearing to snub or quash the teacher.

29. The principal discusses classroom issues with teachers.

36. The principal lets faculty know what is expected of them.

38. The principal is friendly and approachable.

54. The principal is willing to make changes.

55. The principal explores all sides of topics and admits that other options exist.

The principals' supportive behavior subscale, taken from the OCDQ-RM, is an eleven item scale that measures the tendency of the principal to be helpful, show genuine concern, motivate, share leadership, and set an example for teachers. The scale has a reliability of .96 (Hoy & Sabo, 1998, p. 38) and its response items have been incorporated into this study's teacher survey:

12. The principal is available after school to help teachers when assistance is needed.

17. The principal treats teachers as equals.

20. The principal listens to and accepts teachers' suggestions.

23. The principal looks out for the personal welfare of the faculty.

27. The principal compliments teachers.

30. The principal encourages teacher autonomy.

35. The principal accepts and implements ideas suggested by faculty members.

37. The principal uses constructive criticism.

39. The principal goes out of his or her way to help teachers.

42. The principal sets an example by working hard himself or herself.

48. The principal goes out of his or her way to show appreciation to teachers.

The subscale for principals' directive behavior (OCDQ-RM) has a reliability of .88 (Hoy & Sabo, 1998, p. 38). The six response items address the degree to which the

principal maintains a domineering posture, closely monitoring all aspects of teacher

behavior. The items have been randomly dispersed throughout section two of this study's

teacher survey instrument:

15. The principal keeps a close check on sign-in times.

24. The principal closely checks teacher activities.

41. The principal monitors everything teachers do.

45. The principal rules with an iron fist.

47. The principal supervises teachers closely.

50. The principal corrects teachers' mistakes.

The final subscale used in the principal leadership composite measure is the

principals' restrictive behavior from the OCDQ-RM. It contains four items to measure

behaviors that interfere with, rather than facilitate, the work of teachers and the subscale

has a reliability of .89 (Hoy & Sabo, 1998, p. 38). The response items have been included

in the present study and are numbered as follows:

18. Administrative paperwork is burdensome at this school.

26. Teachers are burdened with busywork.

43. Routine duties interfere with the job of teaching.

53. Assigned non-teaching duties are excessive.

Environmental press is a separate factor from principal leadership and is measured

using the institutional integrity subscale of the OHI-M. This scale measures the degree to

which the school copes with its environment while protecting its programs from

unreasonable outside demands. The subscale contains seven response items with a

reliability of .93 (Hoy & Sabo, 1998, p. 66). The response items are randomized within the

current survey and appear as numbered below:

    14. Select citizen groups are influential with the board.*

    19. Teachers are protected from unreasonable community and parental
        demands.

    21. The school is vulnerable to outside pressures.*

    28. Teachers feel pressure from the community.*

    32. Community demands are accepted even when they are not consistent
        with the educational program.*

    33. The school is open to the whims of the public.*

    52. A few vocal parents can change school policy.*

    * = Item scored in reverse.

    Finally, teachers were asked about a third factor related to the school environment;

the degree of academic press in their school. Academic press is a construct describing the

degree to which a school is focused on academic excellence. The academic emphasis

subscale of the OHI-M measures the degree to which high goals are set for students, the

learning environment is orderly and focused, and students value and respect hard work.

The subscale has a reliability of .94 (Hoy & Sabo, 1998, p. 66) and the response items are

arranged in the present study as follows:

    16. Students try hard to improve on previous work.

    22. Students respect others who get good grades.

    31. Academically oriented students in this school are ridiculed by their
        peers.*

    34. The learning environment is orderly and serious.

40. Students seek extra help so they can get good grades.

44. Teachers in this school believe that their students have the ability to achieve academically.

46. Students neglect to complete homework.*

49. Good grades are important to the students of this school.

51. Students make provisions to acquire extra help from teachers.

*= *Item scored in reverse.*

Professional Community

Part three of the teacher survey focused on obtaining responses regarding the prevalence of norms, values, and practices associated with professional communities. A study of professional communities in Chicago's public elementary (K-8) schools (Bryk, Camburn, & Louis, 1999), focused on both the normative and behavioral elements of a professional community. The researchers identified shared norms focused on student learning, collective responsibility, and new teacher socialization as the normative elements of a professional community. The Chicago study also investigated three behavioral elements; reflective dialogue, deprivatization of practice, and peer collaboration. These normative and behavioral components were analyzed through data collected in a 1994 periodic survey of Chicago public school teachers conducted by the Consortium on Chicago School Research (CCSR). Using a principal components factor analysis and Rasch rating-scale analysis, Bryk, Camburn and Louis (1999) combined these components into a single composite measure of professional community. They found that "statistical

evidence suggests that the six component indicators of professional community measure a single organizational construct" (p. 762).

The measure of normative factors begins with a shared focus on student learning. This shared norm creates an "informal social control mechanism that strongly guides adult behavior" (Bryk, Camburn, & Louis, 1999, p. 755). The subscale for this component has a person reliability of .84 (Bryk, Camburn, & Louis, 1999, p. 774) and contains five response items. The items were randomly assigned within the group of items with the same response set:

> 57. This school has well-defined learning expectations for all students.
>
> 58. This school sets high standards for academic performance.
>
> 59. The school day is organized to maximize instructional time.
>
> 60. When making important decisions, the school always focuses on what's best for student learning.
>
> 81. How many teachers in this school feel responsible that all students learn?

Collective responsibility refers to the willingness of a school faculty to assume responsibility for school operations and improvement. This norm focuses on the work of everyone as a team, rather than attributing school-wide responsibilities to the principal alone. This subscale contains five response items with a .90 individual level reliability (Bryk, Camburn, & Louis, 1999, p. 774). These items use a unique response set and therefore could not be randomly interspersed with other questions:

> 69. At this school, teachers work together to do what is "best for the kids."
>
> 70. Teachers support the principal in enforcing school rules.

77. How many teachers in this school help maintain discipline in the entire school, not just their classroom?

78. How many teachers in this school take responsibility for improving the school?

79. How many teachers in this school set high standards for themselves?

80. How many teachers in this school feel responsible to help each other do their best?

The new teacher socialization subscale measures the degree to which existing faculty members deliberately induct new members and perpetuate the norms of the community. It is measured with two response items that have a .60 person reliability (Bryk, Camburn, & Louis, 1999, p. 774).

56. A conscious effort is made by faculty to make new teachers feel welcome here.

67. Experienced teachers invite new teachers into their rooms to observe, give feedback, etc.

The behavioral components of professional community include subscales that measure collaboration, reflective dialogue, and deprivatized practice. Collaboration includes more than cordial relationships. Collaboration involves shared work on projects and school improvement efforts. The collaboration subscale has a person reliability of .75 (Bryk, Camburn, & Louis, 1999, p. 773) and contains four items:

63. Most teachers at this school are cordial.

64. The principal, teachers, and staff collaborate to make this school run effectively.

66. Teachers design instructional programs together.

68. Teachers at this school make a conscious effort to coordinate their teaching with instruction at other grade levels.

Reflective dialogue occurs when teachers are willing to engage in extended conversations with colleagues on their beliefs regarding teaching and learning. These discussions place assumptions and practices under scrutiny in order to foster continued improvement. The reflective dialogue subscale has a reliability of .85 (Bryk, Camburn, & Louis, 1999, p. 773) and contains nine items. The first five were randomly interspersed with other response items. The final four items use a unique response set and therefore remain grouped together on the survey:

61. Teachers in this school regularly discuss assumptions about teaching and learning.

62. Teachers talk about instruction in the teachers' lounge, faculty meetings, etc.

65. We do a good job of talking through views, opinions, and values.

71. Faculty meetings are often used for problem solving.

72. Many teachers express their personal views at faculty meetings.

73. How often do you have conversations with colleagues about what helps students learn best?

74. How often do you have conversations with colleagues about development of new curriculum?

75. How often do you have conversations with colleagues about the goals of this school?

76. How often do you have conversations with colleagues about managing classroom behavior?

The final measure of professional community is deprivatized practice. This involves faculty members breaking out of the traditional separation that occurs between teachers in different classrooms. In a professional community, teachers share and observe each other's practice to provide constructive feedback and analysis. In short, the work of the faculty to improve the school does not stop at the door to each classroom. Teachers in such a community take turns being mentors, specialists, and learners. The subscale to measure this component contains five response items and has an individual reliability of .70 (Bryk, Camburn, & Louis, 1999, p. 773). This subscale used a unique response set and remained non-randomized as a result:

82. In a typical year at this school, how often do you receive meaningful feedback on your performance from colleagues?

83. In a typical year at this school, how often do you observe other teachers' classrooms?

84. In a typical year at this school, how often do you have colleagues observe your classroom?

85. In a typical year at this school, how often do you receive useful suggestions for curriculum materials from colleagues?

86. In a typical year at this school, how often do you invite someone in to help teach your class(es)?

MAJOR VARIABLES

The major variable groups in this study are: teachers, school environment, culture, and professional learning communities. The factors that make up teachers include ethnicity, gender, age, certification level, middle school training, and teaching experience. The factors that form environment are: student diversity, grade configuration, school size, cohort size, principal leadership, and staff stability. The factors included in culture are:

academic press, environmental press, Catholic profile, and school sponsorship. The factors

that form middle level professional learning communities are: shared focus on student

learning, collective responsibility, new teacher socialization, reflective dialogue,

deprivatization of practice, and collaboration. The response items that measure the

implementation of national middle school recommendations address curriculum,

pedagogy, organizational structures, and student supports. In this study, the predictor

variables are teachers, school environment, and culture. The dependent variable is middle

level professional learning communities. Each of the variables is analyzed and correlated at

the school level. Table 3 shows how variables were coded for data entry and analysis.

Table 3: Operational Definition of Variables

Major Factors	Variables	Operational Definition and Coding
Teacher Factors *(Predictor Variable Set)*	Gender	Gender of middle school respondents: 0 = Homogeneous (female only) 1 = Heterogeneous (mixed gender)
	Age	Mean age of middle school teacher respondents.
	Certification Level	Most prevalent certification reported for each school's middle school teacher respondents (coded dichotomously for regression): 0 = Certification other than K-8 1 = K-8 certification
	Total Experience	Mean years of total teaching of respondents
	Exper. at This School	Mean years of teaching at this school of teacher respondents
	Catholic School Exper.	Mean years of Catholic school teaching of teacher respondents
	MS Experience	Mean years of middle school teaching of teacher respondents
	MS Training	Specific training on national middle school recommendations as reported by teacher respondents: 0 = No teachers trained 1 = Some teachers trained

Major Factors	Variables	Operational Definition and Coding
Environmental Factors *(Predictor Variable Set)*	Student Diversity	Mean of the percentage of minority students on NCEA databank #B.1. and highest percentage of students receiving federal programs on NCEA databank #D.1-3. for each school.

	Grade Configuration	Use grades listed on NCEA databank #B.2. and answer to principal survey #9a-9b (coded dichotomously for regression):
		   1 0 = K-8 configuration
		   0 1 = Middle school configuration (5-8)
		   0 0 = Other configuration

	School Size	Total school enrollment as reported on NCEA databank #B.2.
	Grade/Cohort Size	Mean grade level size for middle school grades calculated by dividing total enrollment in middle school grades (as identified by principal response #10 and NCEA databank #B.2) by the number of grade levels specified as part of the middle school program (as specified by principal response #10c)

	Principal Leadership	Mean of the standardized scores of four scales from the OCDQ-RM and OHI-M (Hoy and Sabo, 1998):
		   Collegial Leadership scale
		     (9 items, α=.94)
		   Principal's Supportive Behavior scale
		     (11 items, α=.96)
		   Principal's Directive Behavior scale
		     (6 items, α=.88)
		   Principal's Restrictive Behavior scale
		     (4 items, α=.89)

	Staff Stability	Percent of consistent middle school staff during last three years as reported by principal response #10a-10b.

Cultural Factors *(Predictor Variable Set)*	Academic Press	Standardized score of one scale from the OHI-M (Hoy and Sabo, 1998):
		   Academic Emphasis scale
		     (9 items, α=.94)

	Environmental Press	Standardized score of one scale from the OHI-M (Hoy and Sabo, 1998):
		   Institutional Integrity scale
		     (7 items, α=.93)

Major Factors	Variables	Operational Definition and Coding
Cultural Factors - continued *(Predictor Variable Set)*	Catholic Profile	An original ten point scale as the sum of: Percent of Catholic students in entire school from NCEA databank #B.1. $\quad$ 0 = 0-25% $\quad$ 1 = 26-50% $\quad$ 2 = 51-75% $\quad$ 3 = 76-100% Percent of Catholic teachers among in middle school teacher respondents. $\quad$ 0 = 0-25% $\quad$ 1 = 26-50% $\quad$ 2 = 51-75% $\quad$ 3 = 76-100% Percent of religious/clergy teachers among middle school teacher respondents. $\quad$ 0 = none $\quad$ 1 = 1-15% $\quad$ 2 = 16-30% $\quad$ 3 = more than 30% Principal's vocation (principal survey #1) $\quad$ 0 = lay person $\quad$ 1 = vowed religious or clergy
	Sponsorship	NCEA databank #A.1.b. (coded dichotomously for regression): $\quad$ 0 0 0 = Single Parish $\quad$ 1 0 0 = Interparish $\quad$ 0 1 0 = Diocesan $\quad$ 0 0 1 = Religious Congregation/Private
Professional Learning Community *(Dependent Variable Set)*	Shared Focus on Learning Collective Responsibility Teacher Socialization Reflective Dialogue Deprivatized Practice Collaboration	Full scale and subscale measures derived by Bryk, Camburn, and Louis (1999): $\quad$ Focus on Student Learning scale $\quad\quad$ (5 items, α=.84) $\quad$ Collective Responsibility scale $\quad\quad$ (6 items, α=.90) $\quad$ New Teacher Socialization scale $\quad\quad$ (2 items, α=.60) $\quad$ Reflective Dialogue scale $\quad\quad$ (9 items, α=.85) $\quad$ Deprivatized Practice scale $\quad\quad$ (5 items, α=.70) $\quad$ Staff Collegiality/Collaboration scale $\quad\quad$ (4 items, α=.75)
Implementation of National Middle School Recommendations *(Dependent Variable Set)*		An original scale derived from Seghers (1995), McEwin (2003), Epstein and MacIver (1990), verified through pilot: $\quad$ (7 items, α=.802)

PROCEDURE OF ANALYSIS

The school is the unit of analysis for this study. Much of the information gathered from principals (i.e. from the NCEA Databank) was already measured as school-level data. Information that was gathered from individual teachers was analyzed on a school-by-school basis to produce a school-level mean score for those variables.

The research questions posed in this study were investigated through the use of descriptive statistics, multiple regression analysis, and stepwise regression. Question one investigated the current state of teacher, environmental and cultural factors in Wisconsin Catholic schools. Question two sought to reveal the development of professional learning communities and the implementation of national middle school recommendations.

The correlation between dependent and predictor variables was investigated using multiple regression analysis. The three nominal variables in this study (certification level, grade configuration, sponsorship) were recoded using dichotomous dummy variables for the regression analysis. The analysis investigated six primary regressions. The first three analyzed the relationship between the professional learning community composite score as the dependent variable and the predictor sets of teacher factors, environmental factors, and cultural factors.

The final three regressions looked at the dependent variable of implementation of national middle school recommendations and the predictor sets of teacher factors, environmental factors, and cultural factors. Stepwise regressions between each of the dependent variables and the individual variables within each predictor set were also conducted to investigate individual correlations of predictor variables. Student diversity was used as a control variable, isolating differences in student populations so that the true

effects of teacher and environmental factors could be identified. Table 4 contains the

variable sets used in the regressions.

Table 4: Predictor and Dependent Variables for Regression Analysis

Multiple Regression Predictor Blocks	Stepwise Regression Predictor Variables	Dependent Variables
Teacher Factors	Gender Age Certification Level (dummy variables) Middle School Training Experience	Professional Learning Community
Environmental Factors	Student Diversity Grade Configuration (dummy variables) School Size Cohort Size Principal Leadership Staff Stability	Professional Learning Community
Cultural Factors	Academic Press Environmental Press Catholic Profile Sponsorship (dummy variables)	Professional Learning Community
Teacher Factors	Gender Age Certification Level (dummy variables) Middle School Training Experience	Middle School Recommendations
Environmental Factors	Student Diversity Grade Configuration (dummy variables) School Size Cohort Size Principal Leadership Staff Stability	Middle School Recommendations
Cultural Factors	Academic Press Environmental Press Catholic Profile Sponsorship (dummy variables)	Middle School Recommendations

SUMMARY

Catholic schools that educate early adolescents are affected by a variety of factors.

This study investigated the influence of teacher factors, environmental factors, and cultural

factors on the development of professional learning communities. The concept of

professional learning communities at the middle school level incorporates the general defining characteristics of professional communities in any school, coupled with the implementation of the "best practices" identified by national middle school recommendations.

Data from the NCEA Databank report provided measures of teacher gender, student diversity, grade configuration, school size, cohort size, Catholic profile, and school sponsorship. Data obtained from principal surveys measured the implementation of national middle school recommendations and contributed information to the measurement of grade configuration, staff stability, and Catholic profile. Information provided through teacher surveys measured age, certification level, experience, principal leadership, academic press, environmental press, Catholic profile, and professional learning community norms and practices.

This study investigated the variability among predictor sets of variables in Wisconsin's Catholic schools through the use of descriptive statistics. The same statistical tests were also used to assess the variability among the dependent variables of professional learning communities and national middle school recommendations among Wisconsin Catholic schools serving seventh graders. Multiple regression analysis investigated the correlations between dependent variables and predictor variable sets and stepwise regressions uncovered the relationship between dependent variables and the individual predictor variables.

CHAPTER 4

RESULTS

Summary

The purpose of this study is to investigate the influence of human, environmental, and cultural factors on the development of professional learning community and the implementation of national middle school recommendations in Catholic schools that educate early adolescents. The research design incorporates the characteristics of students, teachers, school leaders, school organization, and the culture of Catholic schools and their surrounding faith communities.

The findings described in this chapter reflect data provided by the principals and teachers from 73 Catholic schools educating middle-level students in the five (arch)dioceses of Wisconsin. This sample reflects 36.1% of the state's 202 Catholic schools educating early adolescents. The findings reported in this chapter address the following questions at the center of the study's research design:

1. How do Catholic middle schools in Wisconsin vary in regards to teachers, school environment, and school culture?

2. What is the level of professional community and the implementation of national middle school recommendations in Wisconsin's Catholic middle schools?

3. Which teacher, environmental, and cultural characteristics best predict the development of professional community and middle school practices in Catholic middle schools?

The school was used as the unit of analysis for this study. Although some data were obtained from individual teachers, they were converted to school-level variables by using the mean score of all teacher respondents from that school. In order to reduce bias and extreme individual scores, a minimum of two teacher respondents were needed from each school so that a mean score could be calculated. Schools that did not have at least two teacher respondents were excluded from the final sample. The mean value of all teacher responses from each school was calculated for teacher age, total teaching experience, years of experience at this school, years of teaching in Catholic schools, and years teaching at the middle school level. Scores for the principal leadership scale, academic press scale, environmental press scale, and professional community scale were calculated by obtaining individual teacher scores for these scales and then calculating the mean of the standard scores between teachers to produce a school-level scale score. Additional values were calculated based on a percentage of teacher responses. These values included gender, certification level, middle school training, and the teacher contribution to the Catholic profile scale (Catholicity and religious vocations).

Several analysis procedures were used to answer the three research questions. The first question was investigated through the use of descriptive statistics to uncover areas of similarity and difference between the sample schools. For this analysis, scale variables were transformed by binning responses into several levels. The second question sought to determine the level of professional community and implementation of middle school practices in Wisconsin Catholic schools. Descriptive data were analyzed by subscales and

individual questions to identify areas where professional community and middle school practices were well-developed and where they have yet to take hold.

The third question regarding correlations between the predictor variables and the development of professional community and middle school practices was explored through the use of several regression techniques. For these regressions, the original scale variables were used. Multiple regressions were used to determine the predictive influence of the three categories of predictors: teacher factors, environmental factors, and cultural factors. Stepwise regression tests were used to find correlations between each predictor variable and the dependent variables of middle school practices, professional community, and the six subscales of professional community. Data were analyzed using the IBM SPSS Statistics software, version 19.0.

<center>Demographic Data</center>

During the 2011-2012 school year, the five Arch(dioceses) of Wisconsin operated 202 Catholic schools that educated students in the middle school grades. Of those 202 schools, 115 principals responded to this study's request for information. Thirteen principal surveys contained incomplete information and, despite several requests for the missing information, the data were not provided and those schools were excluded from the final sample. In five schools, the principal omitted only one piece of data. These schools were included in the final sample, but analyses excluded missing values on a pairwise basis.

To guard against bias and outliers, the research design required at least two teacher respondents from each school so that respondent scores could be averaged to create a mean school-level score. A total of 223 teachers responded to the survey in either the paper or electronic format. However, an additional twenty-nine schools were excluded from the final sample because, although the principal had provided school-level data, either no teachers responded (16 schools) or only one teacher survey was returned to the researcher (13 schools). As shown in table 5, more than half of the schools in the final sample had more than two respondents and some schools had as many as seven respondents from whom school-level mean scores were derived for several variables.

Table 5: Number of Teacher Respondents per School

Teacher Respondents per School	School Frequency	Percent
Two	34	46.6%
Three	24	32.9%
Four	10	13.7%
Five	3	4.1%
Six	0	0%
Seven	2	2.7%

The final sample included 73 schools with a full dataset from the principal and at least two teacher respondents. This sample set represents more than a third of Wisconsin's Catholic schools educating students in the middle school grades. The schools of the Diocese of Green Bay had the highest participation rate (43.8%) and the schools of the Diocese of Superior had the lowest (30.8%). Table 6 shows that the participation rates of all dioceses were clustered close to the overall mean, demonstrating that the sample was equally representative of all five dioceses throughout the state.

Table 6: Schools by Diocese

(Arch)diocese	Number in Sample Set	Number of Catholic Schools Serving Early Adolescents	Percent
Green Bay	14	32	43.8%
La Crosse	11	28	39.3%
Madison	10	32	31.3%
Milwaukee	37	102	36.3%
Superior	4	13	30.8%
TOTAL	**73**	**202**	**36.1%**

In addition to significant representation from all five (arch)dioceses of the state, the schools in the final sample were located in different types of locations, each with its own unique challenges and opportunities. As shown in table 7, more than half (52.1%) of the sample schools identified their location as "rural" on the 2011-2012 NCEA Databank Report. Urban schools made up 20.5% and suburban schools comprised 17.8% of the sample. Only a few inner city schools made up the sample (4.1%).

Table 7: Location of Schools

Response	School Frequency	Percent
Urban	15	20.5%
Inner City	3	4.1%
Suburban	13	17.8%
Rural	38	52.1%
Incomplete Data	4	5.5%

Research Question One

The first question this research addresses is to describe how Catholic middle schools in Wisconsin vary in regards to the teacher factors, school environment factors, and cultural factors identified in this study's conceptual framework. To answer this question, analyses of descriptive statistics were conducted. Scale variables were

transformed by binning responses into groups for clearer comparisons. Data are reported in this section according to the levels of the transformed variables. The original scale predictors and dichotomous predictors created from the nominal variables were retained for the regression analysis which was used to answer the third research question.

There were eight variables that made up the teacher factors. They included various demographic items such as gender, age, certification, training, and experience (total years, years at present school, years at middle school, and years in Catholic schools). The gender variable specified whether the faculty respondents were universally female or whether respondents were of mixed genders. While a majority (69.9%) of schools had teacher respondents that were homogeneous by gender, table 8 reveals that a large number of schools (30.1%) did have mixed gender respondents.

Table 8: Gender of Teacher Respondents

Teacher Respondents	School Frequency	Percent
Female Only	51	69.9%
Mixed Gender	22	30.1%

The mean age of teachers fell within a normal distribution as expressed in table 9. However, the range of individual ages is much more pronounced. Because this study evaluates teacher age as a mean school-level variable, this individual variability has been muted by the law of averages. Schools in the sample had an average number of 4.47 core academic teachers for the middle school grades whose ages were averaged together. The actual ages reported by individual teachers ranged from 22-81 years of age.

Table 9: Mean Age of Teacher Respondents

Response	School Frequency	Percent
30 or younger	2	2.7%
31-40 years old	12	16.4%
41-50 years old	36	49.3%
51-60 years old	19	26.0%
61 or older	4	5.5%

Teacher certification and training were also transformed into school-level variables. Certification was calculated based on the most prevalent certification among respondents for each school. The predominant type of teacher certification was at the K-8 level (54.8%). Only six schools (8.2%) had a faculty with a predominant type of certification other than K-8. More than a third (37.0%) of schools had a faculty with mixed certification types, such that there was no one single certification level that at least half of the school's respondents shared. The categories of certification other than K-8 were collapsed to yield a dichotomous variable that could also be used in the regression analysis for research question three (see table 10).

Table 10: Most Prevalent Certification Level

Response	School Frequency	Percent
K-8 Certification	40	54.8%
Other Certification	33	45.2%

Middle level teachers were also asked if they had received any specific training during their teacher education or career about developmentally responsive practices for middle school education, as set forth in national middle school recommendations. Table 11 shows that a majority of schools (52.1%) did not have any teachers indicate that they had

received such training. Slightly less than half of the schools (47.9%) had at least some

respondents report they had received specific middle school training.

Table 11: Middle School Training

Response	School Frequency	Percent
No Teachers Trained	38	52.1%
Some Teachers Trained	35	47.9%

Several questions were asked of teacher respondents regarding their years of

teaching experience overall, at this school, in Catholic schools, and at the middle school

level. Table 12 provides the mean teacher responses by school building. The data show a

great deal of longevity among teachers, with more than half of the schools reporting mean

experience greater than 11 years in all measures. More than half of the schools in the

sample (53.4%) had teacher service to Catholic schools averaging more than 16 years.

Table 12: Mean Teacher Experience

Response	School Frequency	Percent
5 Years or Less Total	4	5.5%
6-10 Years Total	9	12.3%
11-20 Years Total	31	42.5%
21-30 Years Total	23	31.5%
31 Years or More Total	6	8.2%
5 Years or Less This School	13	17.8%
6-10 Years This School	23	31.5%
11-15 Years This School	19	26.0%
16-20 Years This School	10	13.7%
21 Years or More This School	8	11.0%
5 Years or Less Catholic Schools	7	9.6%
6-10 Years Catholic Schools	12	16.4%
11-15 Years Catholic Schools	15	20.5%
16-20 Years Catholic Schools	23	31.5%
21 Years of More Catholic Schools	16	21.9%

Response	School Frequency	Percent
5 Years or Less Middle School	5	6.8%
6-10 Years Middle School	25	34.2%
11-15 Years Middle School	15	20.5%
16-20 Years Middle School	18	24.7%
21 Years or More Middle School	10	13.7%

There are six variables that comprise the environmental factors in this study's conceptual framework. They include data about students, grade configuration, school size, principal leadership, and staff stability. Student diversity was calculated as the mean of the percentage of minority students in the school and the percentage of students receiving free/reduced meals or Title I services. Table 13 details the breakdown of student diversity among the schools in this study's sample set. A vast majority of schools (78%) reported minority student rates and rates of student receiving federal programs between 0.1-25% of students. Schools with more than half of students in minority categories or receiving federal programs comprised 13.6% of the sample. Of the ten schools with the highest percentage of non-white and lower income students, six were in urban and inner city locations, and four were rural schools. Two of the rural schools served significant Native American populations.

Table 13: Diversity in Student Population

Response	School Frequency	Percent
0%	2	2.7%
0.1-10.0%	35	47.9%
10.1-25.0%	22	30.1%
25.1-50.0%	3	4.1%
50.1-75.0%	5	6.8%
75.1-100.0%	5	6.8%
Incomplete Data	1	1.4%

The grade configuration for each school in the sample set was determined from data provided by the principal that identified grade levels and indicated whether middle school grades existed on a separate campus or under the direction of a separate principal. These additional responses were important to determine if a middle school operated as a separate educational entity or as one part of a larger K-8, 6-12, or K-12 school. This study only classified a school as a middle school if it existed on a separate campus or under the direction of a separate principal. The schools in the sample included predominantly K-8 schools and stand-alone middle schools. There were only a few respondent schools that were configured as K-12 or 6-12 schools so those categories were compressed. The breakdown of school configurations is provided in table 14.

Table 14: Grade Configuration

Response	School Frequency	Percent
Elementary School (e.g. K-8)	60	82.2%
Middle School (e.g. 5-8)	10	13.7%
Other (K-12 or 6-12)	3	4.1%

The size of the school was factored in the analysis in two ways. First, the overall enrollment of all grades in the entire school was considered. Second, the average cohort size was calculated by dividing the total number of students enrolled in the middle school grades by the number of grades that the principal identified as part of the middle school program. The schools in the final sample were relatively small with 68.5% having a total enrollment of less than 200 students and 61.6% having middle school grade-level cohorts smaller than 20. These variables provided data about the school-level and program-level context in which teachers worked and are detailed in table 15.

Table 15: School Size and Middle School Cohort Size

Response	School Frequency	Percent
School Size less then 100	12	16.4%
School Size 100-199	38	52.1%
School Size 200-299	11	15.1%
School Size 300-399	5	6.8%
School Size 400 or larger	7	9.6%
Cohort Size 1-9	13	17.8%
Cohort Size 10-19	32	43.8%
Cohort Size 20-29	12	16.4%
Cohort Size 30-39	6	8.2%
Cohort Size 40-49	5	6.8%
Cohort Size 50-59	2	2.7%
Cohort Size 60 or larger	3	4.1%

The principal leadership score was created by first calculating each teacher's individual score on the subscales for collegial leadership, principal's supportive behavior, principal's directive behavior, and principal's restrictive behavior. These scores were transformed into individual standardized scores as specified in the instructions for scoring the Organizational Climate Description Questionnaire for Middle Schools (OCDQ-RM) and the Organizational Health Inventory for Middle Schools (OHI-M) (Hoy & Sabo, 1998). Standardized scores were calculated with the formula: $SdS = 100 * (\text{raw score} - M) / SD + 500$, where M is the mean and SD the standard deviation identified for each scale through Hoy and Sabo's pilot study of over 2,700 teachers in 86 middle schools. This calculation yielded teacher-level standardized scores with a mean of 500 and standard deviation of 100.

School-level mean scores were calculated from teachers' individual standardized scores on the subscales for collegial leadership, principal's supportive behavior, principal's

directive behavior, and principal's restrictive behavior. Hoy and Sabo specified the

calculation for the three behavior scales to create a principal openness score (1998, p. 137).

This researcher also incorporated the collegial leadership scale into the equation since each

standardized score had the same mean and standard deviation. The calculation used was:

principal leadership total score = (PSB + (1000 - PDB) + (1000 - PRB) + CL) / 4. The

school level mean scores for each subscale were combined to create a single measure of

principal leadership.

Table 16 provides the breakdown of school-level scores. Overall, teachers in

Wisconsin Catholic schools rated principal leadership very favorably, giving 60.3% of the

schools in the sample a leadership score at or above .5 standard deviations on the

instrument's standardized scale.

Table 16: Principal Leadership Standard Scores

Response	School Frequency	Percent
<=400 (-1.0 std. dev.)	4	5.5%
401-450 (-0.5 std. dev.)	3	4.1%
451-500 (low mean)	8	11.0%
501-550 (high mean)	13	17.8%
551-600 (+0.5 std. dev.)	21	28.8%
601 => (+1.0 std. dev.)	23	31.5%
Incomplete data	1	1.4%

Staff stability is represented by the percentage of core middle school teachers that

the principal indicated have been at the school for at least the last three years. Table 17

reveals that a majority of middle schools have retained the same faculty over the last three

years and that teacher turnover was low in most schools in the sample.

Table 17: Staff Stability Over Last Three Years

Response	School Frequency	Percent
Less than 33% of MS Teachers	4	5.5%
34-66% of MS Teachers	12	16.4%
67-99% of MS Teachers	20	27.4%
100% of MS Teachers	37	50.7%

The final set of predictor variables measured cultural factors such as academic press, environmental press, a school's Catholic profile, and the sponsorship and governance model of the school. Academic press measures the focus on academic success among teachers and students. Environmental Press measures the degree to which parents and the community outside the school exerts pressure on the school. Individual teacher scores were transformed into individual standardized scores as specified in the instructions for scoring of the OCDQ-RM and the OHI-M instruments (Hoy & Sabo, 1998). Standardized scores were calculated with the formula: $SdS = 100 * (raw\ score - M) / SD + 500$, where M is the mean and SD is the standard deviation identified for the scale through Hoy and Sabo's extensive pilot study. This calculation yielded teacher-level standardized scores with a mean of 500 and standard deviation of 100. The school-level scores were calculated as the mean of individual teacher standardized scores.

The distribution of the academic press and environmental press scores is provided in table 18. Both measures scored significantly higher among teachers in this study's sample than the sample used to originally standardize the scales. This illustrates that there are significant differences between the experience of teachers in Wisconsin Catholic schools and those in New Jersey public schools. Teachers in Wisconsin Catholic schools

described their schools as having a stronger academic focus and a more involved

community.

Table 18: Academic Press and Environmental Press Standard Scores

Response	School Frequency	Percent
Acad. Press <=400 (-1.0 std. dev.)	1	1.4%
Acad. Press 401-500 (low mean)	0	0%
Acad. Press 501-600 (high mean)	2	2.7%
Acad. Press 601-700 (+1.0 std. dev.)	2	2.7%
Acad. Press 701-800 (+2.0 std. dev.)	10	13.7%
Acad. Press =>801 (+3.0 std. dev.)	58	79.5%
Environ. Press <=400 (-1.0 std. dev.)	3	4.1%
Environ. Press 401-500 (low mean)	7	9.6%
Environ. Press 501-600 (high mean)	26	35.6%
Environ. Press 601-700 (+1.0 std. dev.)	21	28.8%
Environ. Press 701-800 (+2.0 std. dev.)	11	15.1%
Environ. Press => 801 (+3.0 std. dev.)	4	5.5%
Incomplete data	1	1.4%

Each school's Catholic profile score was calculated based on the percentage of

Catholic students, percentage of Catholic teacher respondents, the percent of

religious/clergy teacher respondents, and the principal's vocation. Together, the

components produced an overall school score of 0-10 with 10 indicating the highest

possible level for each of the components. Table 19 specifies the Catholic profile scores of

the schools in the sample set. A majority of schools (60.3%) had a Catholic profile score of

6. While many schools were also clustered at scores of 4 and 5, there were very few (4.1%)

with a score higher than 6. This can be accounted for by the lack of vowed religious and

clergy in Wisconsin Catholic schools in 2012. Four of the possible points in the Catholic

profile score were awarded based on the presence of religious/clergy teachers and

administrators.

Table 19: Catholic Profile Score

Score	School Frequency	Percent
3 or lower	2	2.8%
4	12	16.4%
5	11	15.1%
6	44	60.3%
7	0	0%
8 or greater	3	4.1%
Incomplete Data	1	1.4%

The sponsorship and governance model of the school is addressed as the last cultural factor. Data were provided by the principal as it was reported on the annual NCEA databank survey. A majority of schools in the sample were single parish schools, but it also included a large number of interparish schools as specified in table 20.

Table 20: School Sponsorship and Governance

Response	School Frequency	Percent
Single Parish	47	64.4%
Interparish	16	21.9%
Diocesan	6	8.2%
Religious Congregation/Private	3	4.1%
Incomplete Data	1	1.4%

Two other measures of a distribution of scores are kurtosis, or "peakedness" of the frequency distribution of each factor, and skewness, or asymmetrical distribution. The analysis of the data produced kurtosis and skewness statistics of between -2.0 and +2.0 for most variables, demonstrating distributions approximating the normal curve. However, six predictor variables demonstrated leptokurtic distributions with higher peaks and less variability. These variables are identified in table 21 and indicate that the data from Wisconsin Catholic schools were clustered closer together, resulting in unbalanced

frequency distributions. The skewness of these variables was also analyzed and three had

skew statistics outside the normal range. Mean cohort size, grade configuration, and

student diversity were all positively skewed, indicating that the high peak of scores

occurred in the lower region of values for the variable.

Table 21: Kurtosis and Skewness of Variables Outside Normal Range

Predictor Variable	Kurtosis	Skewness
Mean Cohort Size	10.499 *	2.707 *
Academic Press SdS	5.401 *	-1.804
Grade Configuration	4.657 *	2.312 *
Student Diversity	3.680 *	2.176 *
Catholic Profile Scale	3.638 *	-.678
Total School Size	2.250 *	1.481

* statistic outside of the normal range of -2.000 to +2.000

Research Question Two

The second research question in this study is to determine the level of professional

community and the implementation of national middle school recommendations in

Wisconsin's Catholic middle schools. These dependent variables were measured through

responses provided by principals (middle school practices) and teachers (professional

community). Descriptive statistics provide a deeper understanding of how extensively each

of these concepts is implemented in Catholic middle schools.

Professional community involves a complex set of elements that includes shared

focus on student learning, collective responsibility, new teacher socialization, reflective

dialogue, deprivatized practice, and collaboration. The subscale scores for each of these

components and a total rating for professional community was calculated for each

individual teacher. The level of professional community in the school was calculated by

taking the mean of the individual teacher scores. The professional community total scale

had 139 possible points and teachers in 58.9% of the Wisconsin's middle schools gave

their school at least 100 points, indicating strong agreement with many of the indicators.

Table 22 provides the distribution of the school-level scores for professional community.

Table 22: Professional Community Scale

Score	School Frequency	Percent
<=69	3	4.1%
70-79	5	6.8%
80-89	8	11.0%
90-99	14	19.2%
100-109	28	38.4%
110-119	12	16.4%
120-129	3	4.1%
130-139	0	0%

While the total score for professional community is very high for most of the

schools in the sample, the individual questions and subscales reveal some important

insights. Because each subscale contained a different number of questions and used

response sets of differing sizes (sometimes within the same subscale), it was necessary to

standardize the scores to enable valid comparisons between the subscales. The

standardized mean and standard deviation was obtained for each individual question by

dividing the raw scores by the number of steps in the response scale for that question. After

these standardized scores were calculated, mean standardized scores could also be created

for each subscale and the two groups of subscales, norms and practices. This allowed an

accurate comparison of the means and variability of the components of professional

community. Table 23 provides these standardized values.

The standardized data show that Catholic schools in Wisconsin have a higher mean (.812) and less variability (.169) in implementing the norms of professional community than they do in regards to its practices (mean=.658, std. deviation=.202). In regards to individual subscales, the strongest was shared focus on student learning with a higher mean value (.871) and lower variability (.151). The weakest subscale was deprivatized practice with a lower mean (.486) and higher variability (.240).

Individual questions also showed significant differences in response patterns. Two of the strongest response patterns were on question 58 "The school sets high standards for academic performance" with a high standardized mean of .905 and low variability (standard deviation of .137). Question 63 "Most teachers at this school are cordial" had a mean of .875 and standard deviation of .150. There are a number of other questions that show a similar pattern of high mean and low variability, especially within the norms subscales.

The weakest response patterns were found among practices subscales, especially reflective dialogue and deprivatized practice. Low means were found for question 74 and 75 about the frequency of conversations about new curriculum and school goals. Deprivatized practice showed much weaker implementation with the lowest means and greatest variability among the sample schools.

Table 23: Professional Community Standardized Subscale Scores

	RAW		STANDARDIZED			
Scale/Question	**Mean**	**Std Dev.**	**Mean**	**Std Dev.**	**Skew**	**Kurtosis**
NORMS SUBSCALES			.812	.169		
Focus on Learning			.871	.151		
Q57. Expectations	3.49	.608	.873	.152	- .887	.430
Q58. Academic standards	3.62	.549	.905	.137	- 1.060	.116
Q59. Instructional time	3.39	.606	.848	.152	- .429	- .654
Q60. Decisions	3.41	.587	.853	.147	- .406	-.700
Q81. Student learning	4.37	.839	.874	.168	- 1.458	1.696
Collective Responsibility			.820	.182		
Q69. Work together	3.44	.641	.860	.160	- .912	.736
Q70. Help enforce rules	3.40	.646	.850	.162	- .821	.580
Q77. Maintain discipline	3.99	.979	.798	.196	- .777	- .223
Q78. Respon. to improve	4.09	.939	.818	.188	- .821	- .214
Q79. Standards for self	4.14	.885	.828	.177	- .963	.345
Q80. Teachers help others	3.84	1.051	.768	.210	- .643	- .571
New Tchr Socialization			.744	.173		
Q56. Feel welcome	3.41	.624	.853	.156	- .790	.755
Q67. Veteran's outreach	2.54	.754	.635	.189	.004	- .324
PRACTICES SCALES			.658	.202		
Collaboration			.795	.170		
Q63. Cordial	3.50	.601	.875	.150	- .911	.512
Q64. Collaborate	3.45	.622	.863	.156	- .793	.221
Q66. Design together	2.78	.734	.695	.184	- .333	.022
Q68. Conscious coordinate	2.98	.753	.745	.188	- .486	.127
Reflective Dialogue			.693	.195		
Q61. Discuss assumptions	3.00	.680	.750	.170	- .354	.249
Q62. Talk about instruction	3.13	.735	.783	.184	- .566	.115
Q65. Talk about opinions	3.19	.716	.798	.179	- .522	- .122
Q71. Problem solving	2.86	.734	.715	.184	- .204	- .258
Q72. Express own views	2.99	.679	.748	.170	- .346	.241
Q73. What helps students	3.17	.839	.793	.210	- .897	.341
Q74. Develop curriculum	1.82	.805	.455	.201	.492	- .828
Q75. Discuss school goals	1.96	.869	.490	.217	.412	- .818
Q76. Classroom mgmt	2.83	.965	.708	.241	- .409	- .798
Deprivatized Practice			.486	.240		
Q82. Meaningful feedback	3.82	1.457	.637	.243	- .388	- .597
Q83. Observe others	2.26	1.420	.377	.237	.771	- .486
Q84. Colleagues observe	2.08	1.295	.347	.216	1.037	.333
Q85. Receive suggestions	3.93	1.507	.655	.251	- .354	- .794
Q86. Invite teaching help	2.49	1.503	.415	.251	.643	- .637

The measurement of the implementation of national middle school recommendations was obtained through a seven-item scale provided to principals. Administrators were asked to provide data on the organizational structures, curriculum, pedagogy, and student supports used in their middle school programs. The school mean scores for middle school practices are provided in Table 24. The full scale had a possible 41 points, but most principals in the sample (53.4%) gave their school less than half of the possible points, indicating an overall weak level of implementation.

Table 24: Implementation of National Middle School Practices Scale

Score	School Frequency	Percent
10-14	7	9.6%
15-19	32	43.8%
20-24	19	26.0%
25-29	11	15.1%
30-34	3	4.1%
Incomplete data	1	1.4%

Just as with professional community, a closer look at the individual questions can provide deeper insight. Because the questions used response sets with differing lengths, it was again necessary to standardize the scores by dividing the raw scores by the number of steps in the response scale for that question. This allowed an accurate comparison of the means and variability of the components of middle school practices. Table 25 provides these standardized values.

The areas with the highest standardized means and lowest standard deviations were the specific instructional techniques. The organization into interdisciplinary teams had the highest standardized mean (.750), but also had one of the highest variabilities (.309), indicating that the sample schools are not homogeneous in this regard. The participation in

exploratory or mini courses and common planning time had the lowest means showing

weaker implementation. Direct instruction had a high mean and a very high kurtosis factor,

indicating that it had a very pronounced "peakedness."

Table 25: Middle School Practices Standardized Scores

Scale/Question	RAW		STANDARDIZED		Skew	Kurtosis
	Mean	Std Dev.	Mean	Std Dev.		
Q11. Interdisciplin. teams	3.75	1.546	.750	.309	- .824	- .888
Q12. Integrated instruction	3.25	1.044	.650	.209	- .038	- .444
Q13. Altern. assessment	3.27	1.040	.654	.208	- .122	- .058
Q14. Advisory	2.74	1.618	.548	.324	.280	- 1.530
Q15. Exploratory	2.45	1.463	.490	.293	.566	- 1.050
Q16. Common plan time	2.27	1.471	.378	.245	1.101	.480
Q17a. Direct instruction	2.71	.580	.903	.193	- 1.879	2.466
Q17b. Cooperative learning	2.70	.460	.900	.153	- .885	- 1.240
Q17c. Inquiry teaching	2.49	.538	.830	.179	- .308	-1.154
Q17d. Independent study	2.30	.599	.767	.200	- .224	- .584
Q17e. On-line instruction	1.95	.633	.650	.211	.043	- .459

Research Question Three

The third research question seeks to determine which teacher, environmental, and

cultural characteristics best predict the development of professional community and

implementation of national middle school recommendations in Catholic middle schools. In

order to answer this question, a series of regression analyses were performed. For the

regressions, only scale variables and dichotomous variables were used. The nominal

variables of certification, grade configuration, and sponsorship were recoded into

dichotomous variables. The correlation matrix for predictor variables is provided in

Appendix D and Appendix E provides a correlation matrix of dependent variables.

There were four groups of regressions conducted. First, linear regressions of professional community and middle school practices were conducted on the three groups of factors (teachers, environmental, cultural). Following that, a stepwise regression was conducted for the dependent variables of professional community and middle school practices on the individual predictor variables. An additional stepwise regression was performed for each of the subscales of professional community on the individual predictor variables. A final stepwise regression was performed for each of the professional community subscales on the principal leadership subscales.

The first set of regressions was performed by entering the predictor variables in the model as three separate blocks of variables. The blocks used were those specified in the study's conceptual framework: factors related to middle school teachers, factors related to school environment, and factors related to school culture. Each regression block was run once for the dependent variable of professional community and again for the dependent variable of middle school practices. Table 26 summarizes the findings that the school environment block was a significant predictor of professional community and that none of the blocks was a significant predictor of middle school practices.

Table 26: Regression Results for Groups of Predictor Variables in one block

Model	R	R^2	Adjusted R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
Prof. Community on Teacher Factors	.392	.154	.048	12.785	.154	1.455	.191
Prof. Community on Environ. Factors	.494	.244	.161	12.002	.244	2.949	.010 **
Prof. Community on Culture Factors	.398	.159	.080	12.571	.159	2.012	.077
MS Practices on Teacher Factors	.248	.061	- .058	4.813	.061	.516	.840
MS Practices on Environ. Factors	.288	.083	- .019	4.724	.083	.812	.581
MS Practices on Culture Factors	.228	.052	- .037	4.765	.052	.585	.741

** significant at the .01 level

The second set of regressions performed included stepwise regressions of professional community and middle school practices on all individual predictor variables. The stepwise procedure allows the SPSS software to enter the most significant predictor into the model first and then select the next most significant factor to enter until there are no more significant factors. The advantage of this procedure is that it allows the researcher to investigate the combined influence of the most significant variables. The stepwise regression of middle school practices entered no variables into the equation, revealing no significant predictors. Table 27 summarizes the stepwise regression of professional community on the individual predictor variables. Model 2 identifies two significant predictors of overall professional community: principal leadership (p=.001) and total school size (p=.027). School size is negatively correlated with the development of professional community, indicating that as size decreases, professional community

increases. Two other variables came very close to inclusion in the model: mean age of

middle school teachers (p=.066) and K-8 certification (p=.065).

Table 27: Stepwise Regression of Professional Community on All Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.410[b]	.168	.156	12.040	.168[b]	13.929	.000
2	.476[c]	.226	.203	11.696	.058[c]	5.113	.027

Model	B	Std Error	Beta	T	Sig
1 (Constant)	60.151	10.554		5.699	.000
Principal Leadership	.071	.019	.410	3.732	.000
2 (Constant)	68.336	10.873		6.285	.000
Principal Leadership	.065	.019	.379	3.522	.001
Total School Size	-.027	.012	-.243	-2.261	.027

a. Dependent Variable: Professional Community Total Score
b. Predictors: (Constant), Principal Leadership
c. Predictors: (Constant), Principal Leadership, Total School Size

The previous analyses indicate that school environmental factors are a significant

group of predictors of professional community. Specifically, the predictors of principal

leadership, and total school size are the most significant variables. Since the measure of

professional community is a composite of several subscales (Bryk, Camburn, & Louis,

1999), a third set of regressions was used to identify how the different subscales of

professional community are correlated to the predictor variables. The subscales of shared

focus on student learning, collective responsibility, new teacher socialization, reflective

dialogue, deprivatized practice, and collaboration were entered into separate stepwise

regressions on all predictors.

Table 28 summarizes the results of the stepwise regression of the Focus on Student

Learning subscale on each predictor variable. Model 3 identified three significant

predictors which included principal leadership (p=.003), K-8 certification (p=.004), and

total years of experience (p=.027). This subscale is the only one in which years of teaching

experience was a predictive factor. Together, these three predictors account for 28.8% of

the variance in the subscale score. Student diversity just missed entering the model for this

subscale with a p value of .067.

Table 28: Stepwise Regression of Focus on Student Learning on All Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.357[b]	.127	.114	1.644	.127[b]	10.048	.002
2	.483[c]	.234	.211	1.552	.107[c]	9.456	.003
3	.537[d]	.288	.256	1.507	.054[d]	5.115	.027

Model	B	Std Error	Beta	T	Sig
1 (Constant)	13.789	1.441		9.568	.000
Principal Leadership	.008	.003	.357	3.170	.002
2 (Constant)	13.513	1.363		9.914	.000
Principal Leadership	.008	.002	.329	3.088	.003
K-8 Certification	1.142	.371	.328	3.075	.003
3 (Constant)	12.780	1.363		9.378	.000
Principal Leadership	.007	.002	.321	3.103	.003
K-8 Certification	1.075	.362	.308	2.969	.004
Total Years Teaching Exper	.045	.020	.234	2.262	.027

a. Dependent Variable: Focus on Student Learning subscale
b. Predictors: (Constant), Principal Leadership
c. Predictors: (Constant), Principal Leadership, K-8 Certification
d. Predictors: (Constant), Principal Leadership, K-8 Certification, Total Teaching Experience

The regression of the collective responsibility subscale identified two predictor variables of significance: principal leadership (p=.001) and Catholic profile score (p=.048). This was the only subscale in which the Catholic profile scale made a significant contribution. As specified in table 29, these factors accounted for 18.9% of the subscale variance.

Table 29: Stepwise Regression of Collective Responsibility Subscale on All Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.375[b]	.141	.128	3.364	.141[b]	11.302	.001
2	.435[c]	.189	.165	3.292	.048[c]	4.067	.048

Model	B	Std Error	Beta	T	Sig
1 (Constant)	13.000	2.949		4.408	.000
Principal Leadership	.018	.005	.375	3.362	.001
2 (Constant)	9.279	3.425		2.710	.009
Principal Leadership	.018	.005	.371	3.395	.001
Catholic Profile Score	.697	.346	.220	2.017	.048

a. Dependent Variable: Collective Responsibility subscale
b. Predictors: (Constant), Principal Leadership
c. Predictors: (Constant), Principal Leadership, Catholic Profile Score

The new teacher socialization scale stepwise regression found the two factors of principal leadership (p=.014) and K-8 certification (p=.026) to be significant predictors, accounting for 15.6% of the variance. Table 30 summarizes the regression analysis.

Table 30: Stepwise Regression of New Teacher Socialization Subscale on All Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.304[b]	.092	.079	.878	.092[b]	7.011	.010
2	.395[c]	.156	.131	.853	.064[c]	5.150	.026

Model	B	Std Error	Beta	T	Sig		
1 (Constant)	4.076	.770		5.293	.000		
Principal Leadership	.004	.001	.304	2.648	.010		
2 (Constant)	3.964	.749		5.289	.000		
Principal Leadership	.003	.001	.282	2.526	.014		
K-8 Certification	.463	.204	.254	2.269	.026		

a. Dependent Variable: New Teacher Socialization subscale
b. Predictors: (Constant), Principal Leadership
c. Predictors: (Constant), Principal Leadership, K-8 Certification

The stepwise regression of the reflective dialogue subscale found only one significant predictor variable. Principal leadership entered the model with a p value of .003. The next closest variable was K-8 certification which missed the model with a significance level of .085. Table 31 provides the regression data for the reflective dialogue subscale.

Table 31: Stepwise Regression of Reflective Dialogue Subscale on All Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.345[b]	.119	.106	2.807	.119[b]	9.329	.003

Model	B	Std Error	Beta	T	Sig
1 (Constant)	17.733	2.460		7.207	.000
Principal Leadership	.013	.004	.345	3.054	.003

a. Dependent Variable: Reflective Dialogue subscale
b. Predictors: (Constant), Principal Leadership

The stepwise regression for deprivatized practice revealed the only subscale where principal leadership (p=.010) entered the model behind another predictor. The most significant predictor of this subscale was total school size (p=.002). Together, they represented 22.7% of the variation in the deprivatized practice subscale score. Table 32 details that school size maintained a negative correlation with the subscale, indicating that as school size decreased, the deprivatized practice subscale score increased.

Table 32: Stepwise Regression of Deprivatized Practice Subscale on All Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.383[b]	.147	.134	3.649	.147[b]	11.846	.001
2	.476[c]	.227	.204	3.498	.080[c]	7.070	.010

Model	B	Std Error	Beta	T	Sig
1 (Constant)	17.174	.836		20.539	.000
Total School Size	-0.12	.004	-.383	-3.442	.001
2 (Constant)	8.795	3.252		2.705	.009
Total School Size	-.011	.004	-.346	-3.221	.002
Principal Leadership	.015	.006	.286	2.659	.010

a. Dependent Variable: Deprivatized Practice subscale
b. Predictors: (Constant), Total School Size
c. Predictors: (Constant), Total School Size, Principal Leadership

The final subscale regression was for collaboration. The two significant predictors were ones that predicted several other subscales as well. However, principal leadership entered the model with its highest significance level of p=.000 and highest coefficient, as detailed in table 33. Together with K-8 certification (p=.037), the two predictors accounted for 28.7% of the variance in the subscale scores.

Table 33: Stepwise Regression of Collaboration Subscale on All Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.489[b]	.240	.229	1.486	.240[b]	21.737	.000
2	.536[c]	.287	.266	1.449	.047[c]	4.520	.037

Model	B	Std Error	Beta	T	Sig
1 (Constant)	6.815	1.302		5.232	.000
Principal Leadership	.011	.002	.489	4.662	.000
2 (Constant)	6.637	1.273		5.213	.000
Principal Leadership	.010	.002	.471	4.584	.000
K-8 Certification	.737	.347	.218	2.126	.037

a. Dependent Variable: Collaboration subscale
b. Predictors: (Constant), Principal Leadership
c. Predictors: (Constant), Principal Leadership, K-8 Certification

In each of the previous stepwise regressions, principal leadership was a highly significant predictor. This predictor itself was a composite of four subscales (supportive behavior, directive behavior, restrictive behavior, collegial leadership) devised by Hoy and Sabo (1998). Since this predictor was so highly correlated with professional community, it was important to delve deeper into the components of principal leadership. This deeper analysis provides further insight as to the specific behaviors of principals that are most significant in predicting the development of professional community. Stepwise regressions were performed with the professional community total score and each of the professional community subscale scores as the dependent variables and the principal leadership total score and leadership subscales as the predictor variables. The data from each of these regressions reveal that the same predictor entered each of the seven regression models - supportive leadership. This consistent finding emphasizes the great importance of the

construct this subscale measures. The other subscales were excluded from all of the models

due to much higher p-values. The fact that no other predictors came close to entering the

regressions, indicated that even the inhibitors of directive and restrictive behavior had

much less impact than the principal's supportive behavior.

Cohen (1992) identified standard ranges for the effect sizes for the square of the

multiple correlation coefficient. A value of R^2=.0196 or greater indicates a small effect,

R^2=.1304 or greater demonstrates a medium effect, and an R^2 value of .2592 or larger

reveals a large effect. This statistic revealed medium effect sizes in the previous

regressions. However, in the regressions of the professional community total score and its

subscale components on the principal leadership subscales the effect sizes range from

R^2=.212-.385, revealing several subscales where supportive behavior had a large effect

size, notably collective responsibility, reflective dialogue, and collaboration. Tables 34-40

shows the analysis from these regressions.

Table 34: Stepwise Regressions of Professional Community Total on Leadership Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.621[b]	.385	.376	10.349	.385[b]	43.843	.000

Model	B	Std Error	Beta	T	Sig		
1 (Constant)	33.154	10.046		3.300	.002		
Supportive Behavior	.094	.014	.621	6.621	.000		

a. Dependent Variable: Professional Community total scale
b. Predictors: (Constant), Principal Supportive Behavior subscale

Table 35: Stepwise Regressions of Shared Focus Subscale on Leadership Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.460[b]	.212	.200	1.562	.212[b]	18.798	.000

Model	B	Std Error	Beta	T	Sig		
1 (Constant)	11.789	1.516		7.775	.000		
Supportive Behavior	.009	.002	.460	4.336	.000		

   a.   Dependent Variable: Shared Focused on Student Learning subscale
   b.   Predictors: (Constant), Principal Supportive Behavior subscale

Table 36: Stepwise Regressions of Collective Responsibility Subscale on Leadership Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.522[b]	.273	.262	3.094	.273[b]	26.267	.000

Model	B	Std Error	Beta	T	Sig		
1 (Constant)	7.542	3.004		2.511	.014		
Supportive Behavior	.022	.004	.522	5.125	.000		

   a.   Dependent Variable: Collective Responsibility subscale
   b.   Predictors: (Constant), Principal Supportive Behavior subscale

Table 37: Stepwise Regressions of New Teacher Socialization Subscale on Leadership Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.464[b]	.215	.204	.817	.215[b]	19.182	.000

Model	B	Std Error	Beta	T	Sig		
1 (Constant)	2.649	.793		3.342	.001		
Supportive Behavior	.005	.001	.464	4.380	.000		

   a.   Dependent Variable: New Teacher Socialization subscale
   b.   Predictors: (Constant), Principal Supportive Behavior subscale

Table 38: Stepwise Regressions of Reflective Dialogue Subscale on Leadership Predictors[a]

Model	R	R^2	Adjusted R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.527[b]	.278	.268	2.541	.278[b]	26.960	.000

Model	B	Std Error	Beta	T	Sig
1 (Constant)	12.468	2.466		5.056	.000
Supportive Behavior	.018	.003	.527	5.192	.000

   a.   Dependent Variable: Reflective Dialogue subscale
   b.   Predictors: (Constant), Principal Supportive Behavior subscale

Table 39: Stepwise Regressions of Deprivatized Practice Subscale on Leadership Predictors[a]

Model	R	R^2	Adj. R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.464[b]	.215	.204	3.498	.215[b]	19.228	.000

Model	B	Std Error	Beta	T	Sig
1 (Constant)	-.065	3.395		-.019	.985
Supportive Behavior	.021	.005	.464	4.385	.000

   a.   Dependent Variable: Deprivatized Practice subscale
   b.   Predictors: (Constant), Principal Supportive Behavior subscale

Table 40: Stepwise Regressions of Collaboration Subscale on Leadership Predictors[a]

Model	R	R^2	Adjusted R^2	Std Error of the Estimate	R^2 Change	F Change	Sig. F Change
1	.591[b]	.350	.340	1.374	.350[b]	37.637	.000

Model	B	Std Error	Beta	T	Sig
1 (Constant)	4.710	1.334		3.532	.001
Supportive Behavior	.012	.002	.591	6.135	.000

   a.   Dependent Variable: Collaboration subscale
   b.   Predictors: (Constant), Principal Supportive Behavior subscale

SUMMARY OF FINDINGS

This study of professional community in Catholic middle schools was based on a sample of 73 Catholic schools in the five (arch)dioceses of Wisconsin. This sample represented 36.1% of the Catholic schools in the state that educate students in the middle grades. Between 30-44% of schools in each diocese were included in the final sample based on a completed principal survey and at least two teacher surveys.

The first research question sought to determine the state of factors affecting Catholic middle schools in Wisconsin. The schools in the final sample were overwhelmingly K-8 schools (82.2%), with 4.1% configured as unit (K-12) or secondary (7-12) schools, and 13.7% of the schools configured as separate middle schools. Total school size was predominantly small with 68.5% of schools having fewer than 199 students and middle school cohort size was 29 students or less for 78% of the schools. Overall, the schools had low student diversity rates. There were 233 middle school teachers that responded to the surveys. The schools they taught in had predominantly all female respondents (69.9%) with a mean teacher age of more than 41 (81%). There were very few vowed religious or clergy in teaching or administrative roles. A majority of teachers had K-8 certification (54.8%) and had not received any special training on national middle school recommendations (52.1%). Principals reported that teachers had a high stability rate and teachers gave favorable ratings of principal leadership at their school. The schools in the sample had high degrees of academic press and environmental press and were predominantly single parish schools (64.4%).

The second research question was to determine the level of implementation of the components of professional community and middle school practices. Professional community received high scores overall, but norms were better implemented than practices. Among particular subscales, shared focus on student learning was a strength while deprivatized practice was an area of low implementation. Middle school practices received low marks, with more than half of the sample schools scoring less than half of the points possible on the scale. This suggests low implementation of many of the components of middle schools.

To answer question three about correlations between the predictor variables and professional community and middle school recommendations, several sets of multiple regression analyses were performed, using simultaneous and stepwise strategies. A linear regression of the three general categories of variables specified in the conceptual framework (middle school teachers, school environment, and school culture) revealed that only the group of school environment factors predicted the level of professional community. No category was a significant predictor of middle school practices. A stepwise regression of the dependent variables on all predictor variables indicated that the individual variables of Principal Leadership (p=.000) and Total School Size (p=.027) were the two significant predictors of professional community, but that none of the variables in this study significantly predicted the development of middle school practices.

Another stepwise regression was performed for each of the six subscales that made up the professional community scale score. That analysis revealed that principal leadership was a highly significant predictor of every subscale with p-values ranging from .000-.014.

Teacher certification as a K-8 teacher was a significant predictor of the focus on student learning subscale (p=.003), new teacher socialization subscale (p=.014), and collaboration subscale (p=.037). Several predictor variables were only significant in one subscale area. Total years of teaching experience was only significant in predicting focus on learning (p=.027), Catholic profile score was only significant in collective responsibility subscale (p=.048), and total school size was only significant for the deprivatized practice subscale (p=.002).

A final set of stepwise regressions was conducted of the professional community subscale scores on the principal leadership subscales. This analysis demonstrated that principals' supportive leadership was consistently a strong and exclusive predictor of each of the professional community subscales. The results of this study give greater insight into the factors that positively impact the development of professional community in Catholic schools serving young adolescents.

CHAPTER 5

SUMMARY AND CONCLUSIONS

This research study investigates the implementation of professional community and national middle school recommendations in Catholic schools serving middle grades students. Schools that have developed high levels of professional community are, "schools in which the interaction among teachers is frequent and teachers' actions are governed by shared norms focused on the practice and improvement of teaching and learning" (Bryk, Camburn, & Louis, 1999, p. 753). National reports on middle level education also acknowledge the key role of teacher collaboration in accomplishing the recommendations regarding exemplary middle school practices (Carnegie Council on Adolescent Development, 1989; Jackson & Davis, 2000; National Middle School Association, 2010). These middle school practices are defined in four clusters: organizational structures, curriculum, pedagogy, and student supports (Dickinson & Butler, 2001).

This study is designed to measure the factors that impact schools, the level of professional community norms and practices, and the implementation of middle school practices. Predictive variables are conceptually organized into three groups – teacher, environmental, and cultural factors. Teacher factors include variables such as gender, certification, middle school training, and teaching experience. School environment factors include student diversity, grade configuration, school and cohort size, leadership, and staff stability. Finally, cultural factors consist of academic press, environmental press, Catholic

147

profile, and school sponsorship. Outcome variables in the study are professional community norms and practices, as well as middle school practices.   The research design investigates the current level of the predictor and outcome variables in Wisconsin's Catholic middle schools and identifies correlations between these predictive factors and dependent variables.

This study builds on a theoretical framework involving several large bodies of research regarding the importance of teachers' experiences, school climate, Catholic school culture, learning organizations, and middle school education. School climate affects students directly and indirectly through their teachers who are also influenced by a school's organizational and social systems. School climate research recognizes that these systems are multi-faceted and affected by individual characteristics, setting, and culture. Documents promulgated by the bishops of the United States and the Vatican affirm that the development of community is a central element of the mission of Catholic schools. Educational researchers and organizations call for teachers to break down traditional isolationist cultures and foster greater collaboration. National recommendations for middle school education also advocate for empowering teachers through collaborative communities.

Data were collected in this study from principals and teachers in Catholic schools that serve middle school grades in the five (arch)dioceses of Wisconsin. Principals were asked to provide general information about themselves, demographic data for their school, and to rate the current level of middle school practices. Teachers were asked to answer questions about themselves, their school environment, principal leadership, and the level of

professional community that existed in their school. A total of 115 principals and 223

teachers responded to the survey request. The final research sample consisted of 73 schools

for which a complete principal survey and at least two teacher surveys were returned. This

number of schools represents 36.1% of the 202 schools in the state that served early

adolescent students.

Many of the measures for the conceptual constructs in this study were validated in

other research studies. The instruments used to measure principal leadership, academic

press, and environmental press were obtained from the Organizational Climate Description

Questionnaire for Middle Schools (OCDQ-RM) and the Organizational Health Inventory

for Middle Schools (OHI-M) (Hoy & Sabo, 1998). The scales used to rate the components

of professional community were originally created by the Consortium on Chicago School

Research and validated by Bryk, Camburn, and Louis (1999).

Because no scale yet existed to measure the most recent recommendations

regarding middle school practices (National Middle School Association, 2010), this

researcher combined items from several previous measures of middle schools. A pilot

study helped reduce the number of response items for this measure and confirmed the

validity of this revised scale. The researcher also developed an original scale for measuring

the Catholic profile score of each school, based on the percentage of Catholic students and

teachers and the presence of vowed religious/clergy as teachers or administrators.

Data obtained through principal and teacher surveys were analyzed through the use

of descriptive statistics to address the first research question as to the status of predictor

variables. Descriptive statistics were also used to answer the second research question

regarding the degree of implementation of professional community norms and practices as well as middle school practices. To better address this specific research question, the descriptive statistics were standardized to permit direct comparison between these subscales which had varying numbers of response items and lengths of response sets. The third research question was addressed through the use of multiple regression and stepwise regressions.

This research study provides the first comprehensive look at the teachers, environments, and culture of Catholic schools serving early adolescents in Wisconsin. It also provides a clearer picture of the development of professional community and the implementation of middle school recommendations in these schools. Finally, the study identifies which predictor variables are correlated with these desired outcomes, providing educators with a better understanding of how to better foster professional community.

DISCUSSION OF FINDINGS

The major finding of this study is that school environmental factors, and especially principal leadership, emerge as the most significant predictors of professional community in Catholic middle schools. Analysis shows that the Catholic middle schools in this research sample implement the norms of professional community to a greater degree than professional community practices. While there was variability in the extent to which schools implemented the nationally recommended practices for middle schools, there were no statistical correlations between any predictor variables and these practices. This purpose

of this study was centered on three research questions. Findings to these questions are presented in this section.

Research Question One

This study investigated the first research question to determine how Catholic middle schools in Wisconsin varied in regards to teachers, school environment, and school culture. The first hypothesis was that Catholic middle schools would vary to the greatest degree in school environment factors. An analysis of school demographics and responses from teachers and administrators revealed that environmental factors did show more variability in this school-level analysis.

There are eight variables that make up the teacher factors. They include demographic items, such as gender and age. Data regarding professional preparation included certification level, specific training on middle school practices, and years of experience.

The majority of teacher respondents for most schools were females over age 41, demonstrating demographic homogeneity. Teacher certification at the elementary-middle (K-8) level was more prevalent than all other levels combined. This confirms earlier research that most middle school teachers tend to be certified as elementary teachers or secondary subject-area specialists and have not received specialized training in regards to developmentally responsive education for students in the middle grades, (Necochea, Stowell, McDaniel, Lorimer, & Kritzer, 2001).

A majority of the schools in the research sample had no teachers with specific middle school training, despite the fact that more than half of the teachers in the sample reported having taught at the middle school level for more than 10 years. This finding is consistent with research that finds nearly half of public K-8 and 6-8 schools have less than a fourth of their middle school teachers who have specialized middle level teacher preparation (McEwin, Dickinson, & Jacobson, 2004) and demonstrates that a majority of teachers in Wisconsin Catholic schools also lack specific training. In this area of preparation, Catholic school teachers and public school teachers appear to show great similarity. The mean years of service to Catholic schools in a majority of schools exceeded 15 years and teachers reported they had served their current school for more than 10 years.

This study has six variables that define school environmental factors. They include student diversity, grade configuration, school size, and cohort size. In addition, two variables deal with the social system of the school, principal leadership and staff stability.

Three-fourths of the schools in the sample report that less than 25% of students have a minority ethnicity or receiving federal program assistance, however ten schools had much higher student diversity rates of 50-100%. Despite this disparity, the regression analysis used to answer question three indicated no significant influence of student diversity on the development of professional community or middle school practices. This may be in part because previous research indicates that a communal culture permeates Catholic schools, generating social capital to benefit students and teachers (T. J. Cook, 2007). This study also finds extremely high levels of academic press and environmental

press in the sample schools. These constructs have been found to increase communal culture and help offset effects of student diversity (Bryk, Lee, & Holland, 1993).

The vast majority of schools in the research sample had a K-8 grade configuration, with only ten stand-alone middle schools and three schools of other configurations. While previous research indicates that post-transition teachers are more controlling and have lower ratings of efficacy (Eccles & Midgley, 1991; Midgley, Feldlaufer, & Eccles, 1988), this study found no correlation between grade configuration and changes in the faculty norms associated with professional community. This indicates that while teacher attitudes concerning students may undergo a change in a school transition, the work with their colleagues does not appear to suffer.

While Bryk and Schneider (2003) and other researchers typically define the boundary between large and small schools at 350 students, this schools in this sample consisted of much smaller sizes. More than two-thirds of schools in the sample enrolled less than 200 students, with the sample school sizes range from 50 to 642 students. Cohort size has been identified as a variable affecting the school experience of young adolescents (Offenberg, 2001), but this study did not find that cohort size had any affect on the development of professional community among teachers. In the Wisconsin Catholic school sample grade level cohorts were primarily less than 30 students, but the cohort size in the sample ranged from 4 to 120 students per grade level.

Teacher respondents rated principal leadership highly and 60% of the schools had mean ratings at or above +0.5 standard deviations on the standardized scale. This demonstrated strong leadership among a majority of schools. Staff stability was very high,

and more than half of the schools reported keeping the same faculty over the last three years. However, stability was not correlated with differing levels of implementation of national middle school recommendations, contradicting previous findings that higher stability correlated with higher implementation levels of the Carnegie recommendations (Seghers, 1995). This difference in these findings can be attributed to several possible factors: the prior research was conducted only among public middle schools, sampled schools of different grade configurations (the Seghers study did not include any K-8 schools, which were the predominant school type in the present study), was only conducted in the state of Louisiana, and measured implementation of the Carnegie recommendations.

The final set of predictor variables measured the cultural factors of the school by accounting for the Catholic school's dual mission as both an academic community and a faith community. These included measures of internal cultural factors such as academic press, the percentage of Catholic students and teachers, and the presence of vowed religious or clergy in teaching or principal roles. The culture surrounding the school community was also measured through the environmental press scale and the sponsorship/ governance model of the school.

This study finds high levels of academic press and environmental press among Wisconsin's Catholic middle schools. Nearly 80% of Wisconsin Catholic middle schools scored at or above +3.0 standard deviations on the standardized scale for academic press. Half of the schools had an environmental press score of +1.0 standard deviation or higher. The extreme values of this variable likely prevented any correlation with professional community. This study confirms that Catholic schools have very high ratings in regards to

these cultural variables that have a major affect on the larger culture of the school. Academic press reflects the importance students and teachers place on academics. Environmental press is the insistence of parents and community members on high achievement levels. The findings regarding high levels of environmental press make the study of professional community especially important to Catholic schools, as collegiality and cooperation have been identified as key tools to help faculties transform external pressures into positive actions (Hoy & Sabo, 1998).

The analysis of Catholic profile scores revealed the lack of vowed religious and clergy in administrative or teaching roles in Wisconsin's Catholic middle schools today. More than 60% of schools had a profile score of six, the highest level achievable without any religious or clergy educators. While a majority of schools were governed by a single parish, this study finds that governance and sponsorship models other than the traditional parish school have grown to significant levels, comprising nearly a quarter of the sample schools from Wisconsin. This is a major shift within Catholic education and further research is required to better understand its impact on teachers or students. This study does not reveal any significant correlations between sponsorship/governance and the development of professional community in Catholic middle schools

Research Question Two

The second research question this study investigated was to determine the level of professional community in Wisconsin's Catholic middle schools and measure the implementation of national middle school recommendations in these schools. It was

hypothesized that Catholic middle schools would have lower variability in the norms associated with professional community and greater variability in the implementation of professional community practices and the implementation of national middle school recommendations. The data analysis confirms this hypothesis.

Professional community as a total construct was rated highly by the faculty of Wisconsin's Catholic middle schools. The professional community total scale was composed of six subscale measures: shared mission focused on student learning, collective responsibility, new teacher socialization, reflective dialogue, deprivatized practice and collaboration. A deeper look into these subscales of professional community confirmed that the three subscales measuring professional community norms were rated higher than the three subscales representing professional community practices. This suggests that the Catholic schools in this study have developed collaborative norms to a greater degree than they have implemented professional community practices, verifying a portion of this study's second hypothesis.

This study's analysis of the six individual subscales also confirms a hierarchy among the subscales. Among the sample schools, shared focus on student learning is the highest rated of the six individual subscales. This finding confirms earlier research that shared focus on student learning is the cornerstone of professional community. Wherever professional community is developing, a shared focus on student learning will be found and without it, professional community will develop no further (DuFour & Eaker, 1998). The finding is also not surprising in Catholic schools considering that research has shown

that such a norm is not just present within the Catholic school, it also surrounds it (Bryk, Lee, & Holland, 1993).

By contrast, deprivatized practice was the lowest rated subscale in the sample group and reflective dialogue was also ranked low. Both of these subscales represent more advanced forms of professional community. This study's findings support previous research that while many efforts toward professional community can occur in a school and stop at individual classroom doors, the task of shifting from traditional isolation to substantially opening up classroom practice to each other through dialogue and classroom observation is a higher level task (Gamoran, 2002; Hord, 1997; Jackson & Davis, 2000; Vescio, Ross, & Adams, 2008). The findings regarding these subscales suggest that professional community in Wisconsin's Catholic middle schools is not yet fully developed.

In regards to middle school practices, one of the findings of this study is that a majority of principals score the middle school practices at their schools with less than half of the possible points in the scale, indicating weak implementation. This finding among Catholic schools supports research studies in public schools that indicate that few middle schools have implemented national middle school recommendations consistently or well (MacIver & Epstein, 1993). One cause may be that the schools in this study had a conspicuous absence of teachers certified or otherwise trained specifically for teaching the middle school grades. This finding augments recent research that finds that a majority of public K-8 schools and middle schools report that less than half of their teachers have received the specialized preparation that has been advocated since 1989 (McEwin, Dickinson, & Jacobson, 2004).

A review of specific response items related to middle school practices finds that curriculum and pedagogical practices such as integrated instruction, alternative assessments and instructional practices are rated highest. Student supports, such as student-teacher advisory groups, and the curriculum component of exploratory studies were rated lowest. The findings regarding advisory groups is not surprising since previous research has confirmed the same pattern in public schools (Petzko, 2004). However, research also provides another explanation for Catholic schools, identifying other elements in Catholic schools (social capital, shared values, focus on relationships and community, faith) that help accomplish the same goals, reducing the need for formal advisory programs (Fortna, 2004).

One of the interesting findings of this study was the contradictory results regarding the implementation of organizational structures recommended for middle schools. Principals in this study report that interdisciplinary teaming is one of the most implemented of all the recommendations, but they also reveal that teachers have relatively little common planning time. This finding mirrors public school research that found discrepancies between team formation and the common planning time needed to accomplish the work of the team (MacIver & Epstein, 1993).

Research Question Three

The final research question was to determine how teacher, environmental, and cultural factors are correlated with the creation of professional community and the implementation of nationally-recommended middle school practices. This study examined

several levels of predictor variables to gain better insight into which of these variables best predict the development of professional community and middle school practices. The hypothesis for this research was that the best predictors of professional community and middle school practices would be teacher preparation, small school and cohort sizes, principal leadership, and staff stability. The findings of this study partially confirm this hypothesis.

Multiple regression analysis reveals that school environment factors are the only block of variables that together predict the development of professional community. This indicates that variables related to the student body, size, and/or social systems correlate, either individually or through interactions, with the level of professional community in a school. Neither the teacher variable group nor the cultural variable group had a correlation to professional community. In addition, none of the three groups of variables had any connection to the implementation of middle school practices, indicating that perhaps middle school recommendations are best treated as a separate construct, not as an indicator of professional community practices at the middle school level.

Stepwise regressions were conducted on professional community and middle school practices for each of the predictors as individual variables, not grouped in blocks. This regression again reveals no significant predictors for middle school practices. The stepwise regression of the professional community total score finds that principal leadership and total school size are two significant predictors. School size as a predictor of professional community confirms research that also finds a negative correlation between the two in public schools (Bryk, Camburn, & Louis, 1999; Lee & Smith, 1996; National

Middle School Association, 2010). The finding related to school size is particularly significant because this study includes schools with sizes much smaller than the 350-student boundary line typically established between large schools and small schools (Bryk & Schneider, 2003). While the total school size for sample schools ranged from 50-642, a majority enrolled less than 200 students. The regression analysis reveals that smaller school size does impact professional community, even below the 350 student mark.

A further stepwise regression of the six subscales within professional community on the individual predictor variables reveals that principal leadership is a significant and consistent predictor of all six subscales. The level of influence provided by effective principal leadership is well-documented in the general research (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Marzano, 2003), in research specifically focusing on professional community (Bryk, Camburn, & Louis, 1999; DuFour & Eaker, 1998), and middle level education (National Middle School Association, 2010).

In addition, K-8 teacher certification was a significant predictor of focus on student learning, new teacher socialization, and collaboration. This finding affirms other research that identifies elementary certified teachers as more student-centered and more collaborative (Epstein & MacIver, 1990; George & Alexander, 1993). Total years of teaching experience is a significant predictor of focus on student learning. This finding further coincides with research that finds teacher experience and qualifications account for the largest part of school-level influence on student achievement (Marzano, 2003). Total school size had a significant inverse correlation to deprivatized practice. This finding confirms research that identifies smaller schools as places with, "more intimate and

personal social relations" (Lee & Loeb, 2000, p. 23) and this trust promotes a willingness for teachers to open themselves up to scrutiny from colleagues (Lee & Smith, 1996).

The Catholic profile score was a significant predictor of collective responsibility and this correlation is supported by Church documents and other writings on Catholic education. The sense of shared duty and communal dimension is central to the Catholic worldview (The Sacred Congregation for Catholic Education, 1977), helps define what it means to be a Catholic school (T. J. Cook, 2007), and is a key to its effectiveness (Convey, 1992) . "In this community one person's problem is everyone's problem and one person's victory is everyone's victory" (United States Conference of Catholic Bishops, 1972). Furthermore, collective responsibility not only exists within the Catholic school, but surrounds it as the entire faith community focuses all of its human, fiscal, and education resources toward the academic and moral education of its children (Jacobs, 1997). Even researchers outside of Catholic schools agree that a school culture centered around common expectations, creates a stronger sense of collective responsibility (Lee & Smith, 1996).

Because principal leadership maintained such a strong correlation to each professional community subscale, a final set of stepwise regressions was conducted to investigate the relationship between these outcome variables and the four specific subscales that define principal leadership more thoroughly. A significant finding of this research is that supportive leadership was the consistent and sole predictor of each of the professional community subscales. This finding revealed correlations with very strong effect sizes and further supports research that, "[Catholic school] principals have the

authority and mandate to create the supportive conditions for teachers, staff, and parents to carry out their roles as co-educators" (Schuttloffel, 2008, p. 43).

It is important to note that supportive behavior was a significant predictor for professional community subscales, whereas the more general collegial leadership was not and even the inhibiting effects of directive and restrictive behavior did not have a significant influence. The construct of collegial leadership involves the principal's behavior to establish an open and friendly climate and letting people know what is expected of them. But this study reveals that professional communities need more than that. "Supportive behavior is directed toward both the social needs and task achievement of faculty" (Hoy & Sabo, 1998, p. 175). A principal who demonstrates supportive behavior is one who gives feedback, sets an example of hard work, encourages autonomy, and accepts and implements suggestions. Supportive behavior also involves providing help, showing appreciation, offering compliments, and providing encouragement. In short, in a professional community, the principal's role cannot just be to promote open and friendly norms and establish expectations, he/she must lead from the center (DuFour & Eaker, 1998) and be a coach to continually help faculty achieve their goals.

CONCLUSIONS

This study contributes to the literature on Catholic schools with descriptive data that illustrates the ways in which Catholic middle schools in one state vary in regards to the human, environmental, and cultural domains. The participants in the sample schools scored principal leadership, academic press, and environmental press substantially higher

than the standardized scale for these variables. This confirms substantive differences between Catholic schools in Wisconsin and New Jersey public schools, where the scales were created and standardized.

The study also provides one of the first looks at the development of professional community specifically in Catholic schools. Of the two groups of subscales, professional community norms have a higher level of prevalence than professional community practices. This finding is consistent with a hierarchy of the subscales. The findings related to middle school practices are disappointing, with a low level of overall implementation and no correlations to any of the school climate factor groups or individual variables.

This findings of this study shed greater light on the role of principal leadership in the creation of professional community in Catholic middle schools. Principal leadership is the most significant predictor of professional community overall and its six component subscales: focus on student learning, collective responsibility, new teacher socialization, reflective dialogue, deprivatized practice, and collaboration. Additional findings are that the principal's supportive behavior is the most significant component of his/her role in promoting the development of professional community in all of its dimensions.

IMPLICATIONS FOR PRACTICE

The benefits of promoting community and collaboration in schools are reflected in overall school quality (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010), student support (Arhar, 1992), academic achievement (Hord, 1997), teacher satisfaction (Goodlad, 1984), and positive change (Gamoran, 2002). In addition, community is a central part of

the mission of the Catholic school (T. J. Cook, 2007; The Sacred Congregation for

Catholic Education, 1977; United States Conference of Catholic Bishops, 1972).

The findings of this research study have implications for principals, teachers,

diocesan leaders, pastoral leaders, and colleges that prepare educational administrators.

Each of these groups is encouraged to do its part to support Catholic education in general,

but more specifically to promote the factors that predict greater levels of professional

community.

Principals of Catholic middle schools should work consistently and creatively to

ensure that middle school teachers have common planning time during the school day.

This component has been cited as one of the most supportive features by middle school

teachers (Irvin & Farr, 2004). The effects translate into greater teacher satisfaction and also

benefit student achievement through higher test scores (Jackson & Davis, 2000). Principals

should also actively practice the skills of supportive leadership, demonstrating genuine

care for staff members, providing help and encouragement to teachers, recognizing teacher

accomplishments, and setting an example through hard work.

Catholic school teachers are encouraged to make the most effective use of common

planning times, going beyond administrative details and working toward the higher level

components of professional community like reflective dialogue and deprivatized practice.

Making the most effective use of such time justifies the creativity and sacrifices that

administrators, faculties, and parents often have to employ to make this common time

possible for teachers.

School boards, pastors, and bishops should support and recognize the great value of common time for collaboration built into the school day. While a traditional view of school values student contact hours as the measure of productivity and efficiency (DuFour & Eaker, 1998), our Catholic mission requires that practitioners have time to work together to ensure the academic excellence of our schools and it calls us to promote more intimate and dynamic faith communities.

Diocesan superintendents should re-evaluate administrator induction programs and mentor/intern programs within their dioceses to ensure that such programs focus not just on the technical and legal aspects of administration but the skills needed to effectively lead collaborative groups toward common goals. Together, superintendents and colleges that prepare educational administrators should review programs to ensure that collaboration plays a central role and should collaborate themselves in providing better guidance to administrators, especially those in their first years of principalship.

Principals are encouraged to work with middle school teachers to help them focus their professional community efforts toward creating specific education programs to best serve middle school students. This study found low levels of implementation of such practices among Catholic schools in Wisconsin. Because this study also found a low number of teachers with specialized middle school preparation, principals are advised that such a process will best begin with education and training for middle school teachers. Administrators should lead faculty not in blindly replicating programs, but in critically evaluating the different elements for how they are best accomplished in a Catholic school, and in the type of grade configuration present at the school. Visits to other schools with

exemplary programs will provide teachers an overall picture of the type of program that is most effective, even if specific elements will be implemented differently in a specific Catholic school.

LIMITATIONS OF THE STUDY

Although surveys are a well-established research technique, the surveys used in this study require self-reported data. Teachers and principals may have a bias about their own school or what they believed the researcher wanted them to write. These problems were minimized through the use of previously researched measures, communicating the confidentiality of survey results, and offering paper copy and online version of the surveys.

In addition, principals and teachers also reported some data about each other (principals about middle school practices, teachers about principal leadership), to provide more objective measures. Data were compiled at the school level, reducing the influence of outliers. Although previously researched measures were used, the difference in scale measurements made statistical transformations necessary before comparisons. A directly comparable set of subscales would have been more desirable. Another major limitation of this study is that it does not address principals or teachers who may have had a bias for responding or not responding to the survey.

This study only asked questions about middle school teachers and middle school grades. These programs often existed within a K-8 school setting or in another grade configuration with elementary or high school grades. The results of this study are based on middle school information only and cannot necessarily be generalized to elementary or

high school programs in Catholic schools. In addition, no significant predictors were found for middle school practices, leaving this question unresolved.

This study was only conducted with Catholic schools located in the five (arch)dioceses of the state of Wisconsin. It may not be generalizable to schools in other areas of the country or different types of schools (public, Lutheran, etc.)

RECOMMENDATIONS FOR FUTURE RESEARCH

While this study provides important insight into the development of professional community, additional questions remain which should be pursued in future research. In order to obtain a more complete demographic palette for analysis, future studies of school climate should consider use of stratified sampling techniques. Replicating this study of professional community in Catholic elementary schools and high schools would provide a much more complete picture of this construct in Catholic schools.

Several unanswered questions exist which are worth exploring further. First, since no factors in this study were predictive of middle school practices, further studies should pursue what factors are significant predictors and develop a research measure to more closely match the latest edition of *This We Believe* (National Middle School Association, 2010). Second, the Catholic schools in the sample demonstrated academic press and environmental press scores well above the standardized mean and variability for those scales. The mean for most schools in the sample was one to three standard deviations above the standardized mean. Clearly, Wisconsin Catholic schools were substantially different from the New Jersey public middle schools on which the scales were

standardized. Further research should investigate new instruments for use in Catholic and other religious/private schools or re-norm these scales for the study of Catholic schools. Such work would allow future researchers the ability to detect more subtle differences between schools which all have a tradition of academic excellence.

The regression models for three of the six professional community subscales (focus on student learning, new teacher socialization, and collaboration) revealed significant correlations for teachers who had K-8 certification. Additional research should be conducted to determine if this level of preparation is truly more disposed to professional community and if so, determine how that information can be used to help teachers certified at other levels to also develop stronger preparation for working in a professional community.

Finally, additional study as to what factors best lead to effective principal leadership, especially supportive behavior, would be useful to help train current and future principals. This element of principal leadership was a significant predictor of all six subscales of professional community. Therefore, the development of professional communities requires a clearer understanding of what leads principals to be more supportive in their behavior and what behaviors teachers find to be most supportive. A qualitative or mixed methods design may provide a more complete picture of this construct.

SUMMARY

The major finding of this study supports research that indicates the predictive power of effective leadership in a number of school areas. In particular, this study finds that supportive principal leadership is a significant predictor of professional community in Catholic middle schools. This study did not reveal any significant correlations between predictor variables and the implementation of middle school recommendations. Recommendations for practice and further research provide guidance for better understanding this concept and putting that knowledge into practice to help make Catholic schools more collaborative and effective.

APPENDICES A, B, C

COMMUNICATIONS WITH SUPERINTENDENTS

PRINCIPAL SURVEY INSTRUMENT

TEACHER SURVEY INSTRUMENT

Appendix A: Communication with Superintendents

Kurt Nelson
1333 East Ave. N
Onalaska, WI 54650
(608) 498-2718 voice
64nelson@cardinalmail.cua.edu

July 25, 2011

Dear Superintendent of Catholic Schools,

I am writing to request your permission to invite the educators of your diocese to participate in a research study of Catholic middle schools in the State of Wisconsin. This study will solicit responses from middle school teachers and principals in our five (arch)dioceses.

I am a fellow Wisconsin Catholic school administrator completing a doctoral degree from The Catholic University of America in Washington, D.C. The purpose of my dissertation study is to determine the amount of influence a school's teachers, environment, and culture have on the development of Professional Community and the implementation of national middle school recommendations. This research has been approved by the university and is being conducted exclusively in Catholic schools.

My research will attempt to answer the following questions:
1. How do Catholic middle schools in Wisconsin vary in regards to teachers, school environment, and school culture?
2. What is the level of professional community and the implementation of national middle school recommendations in Wisconsin's Catholic middle schools?
3. Which teacher, environmental, and cultural characteristics best predict the development of professional community and middle school practices in Catholic middle schools?

With your permission, I hope to contact principals of schools in your diocese that educate middle school students with a survey about demographic information and middle school practices. Once the principal grants permission and returns his/her survey, a set of teacher surveys will be sent to each school. Teachers will be asked about leadership, school culture, and professional community. Surveys will be mailed directly back to the researcher or completed on-line.

The participation of educators in your diocese will be entirely voluntary. They will be free to refuse to participate in this research without penalty or prejudice. Responses that are obtained in connection with this study will remain confidential. Privacy will be protected because no school or individual will be identified by name as a participant in this project. Data will be reported in my dissertation on a statewide basis and will not be segregated by diocese.

In order to continue my research, I request that you complete the enclosed permission form and return it to me in the self-addressed stamped envelope or by fax by **Friday, August 5, 2011**. I have also enclosed a roster of the Catholic schools in your diocese that include middle school grades and will be contacted during this research. The information was gathered this spring from diocesan and school websites and I would appreciate any updates for the 2011-2012 school year.

Thank you for your time and consideration of my request. Your support for Catholic school research and my dissertation study is greatly appreciated. Should you have any questions or would like to further discuss my research, please feel free to contact me.

Sincerely,

Kurt Nelson
Doctoral Candidate

PERMISSION TO CONTACT PRINCIPALS
WISCONSIN CATHOLIC MIDDLE SCHOOLS

This document conveys my permission for Kurt Nelson, Doctoral Candidate at The Catholic University of America, to contact the principals of schools in my (arch)diocese that educate middle school students during the 2011-2012 school year regarding his research study *Factors That Influence the Development of Professional Community in Catholic Middle Schools.*

The permission/participation of each principal will be obtained by the researcher prior to surveys being provided to middle school teachers.

Individual teachers and administrators at each school may participate in this research on a voluntary basis. The right of confidentiality will be guaranteed to all individuals and schools participating in this study.

The results of this research study will be made available to my office and all schools upon request.

_____   _____
Superintendent's Signature   *Date*

_____
Superintendent's Name (please print)

_____
(Arch)Diocese

_____   _____
Email   *Phone*

Please return by **Friday, August 5, 2011** in the enclosed envelope, via fax, or via email to:

Kurt Nelson
1333 East Avenue N
Onalaska, WI 54650
(608) 498-2718 voice
(608) 784-9988 fax
64nelson@cardinalmail.cua.edu

Thank you in advance for your support of Catholic school research!

173

Appendix B: Principal Survey Instrument

Kurt Nelson
1333 East Avenue N
Onalaska, WI 54650
(608) 498-2718
64nelson@cardinalmail.cua.edu

August 2011

Dear Catholic School Principal,

You and your faculty are invited to participate in a study of Catholic middle schools. This study is soliciting responses from middle school teachers and principals in the five (arch)dioceses of Wisconsin.

I am a fellow Wisconsin Catholic school administrator completing a doctoral degree from The Catholic University of America in Washington, D.C. The purpose of this dissertation study is to determine the amount of influence a school's teachers, environment, and culture have on the development of Professional Community. This research is being conducted exclusively in Catholic schools and will contribute to the research literature on Catholic education. There have been no risks identified with participation in this study.

This study has already been approved by your Diocesan Director/Superintendent of Catholic Schools. I hope you will take some time to participate in this study before the new school year begins. Completion of the survey should only take about 15 minutes and requires some demographic information from your school's 2010-11 NCEA Databank Report. You may return this paper survey in the enclosed envelope or complete the survey electronically at www.surveymonkey.com/s/CUAprincipal. Both formats contain the same questions, so you should only respond in one of the formats.

Please return your survey within two weeks. After you return your survey, you will be asked to help distribute a survey to each of your teachers that teach core academic courses (Language Arts, Mathematics, Religion, Science, Social Studies) at the middle school level. In September, you will be mailed the appropriate number of copies to distribute based on the number of middle school teachers you specify on your survey.

Your participation is entirely voluntary and you are free to refuse to participate in this research without penalty or prejudice. Individual responses that are obtained from you in connection with this study will remain confidential. Your privacy will be protected because neither you nor your school will be identified by name as a participant in this

project. By returning your paper survey or completing the online survey, you are giving your consent to participate in this study.

If you have any questions or would like to receive the overall results of this study, you may contact me directly at the address, phone or email above. Thank you for your participation and help in better understanding Catholic schools and Professional Community.

Sincerely,

Kurt Nelson
Doctoral Candidate

SURVEY OF CATHOLIC SCHOOL ENVIRONMENT AND PRACTICES IN THE MIDDLE GRADES (SCSEP-MG)

PART I: PRINCIPAL DEMOGRAPHICS

1. What is your gender and vocation?

   ○ Male Lay Person (married or single)   ○ Male Religious   ○ Male Clergy
   ○ Female Lay Person (married or single)   ○ Female Religious

2. What is the year of your birth?   **19** ☐☐

3. Please indicate which ethnicity best describes you:

   3.a.   Are you Hispanic/Latino?   ○ Yes (proceed to question 4)   ○ No (proceed to question 3.b.)

   3.b.   Please indicate your race/ethnicity

   ○ American Indian/Alaska Native   ○ Asian
   ○ Black or African American   ○ White
   ○ Native Hawaiian or Other Pacific Islander   ○ Multi-racial

4. Counting this year, how many years experience do you have at each of the following levels?

   TEACHING   **ADMINISTRATOR**

   ☐☐ years   Elementary (4K-5th grades)   ☐☐ years
   ☐☐ years   Middle School (6th-8th grades)   ☐☐ years
   ☐☐ years   High School (9-12 grades)   ☐☐ years

5. Counting this year, how many years have you worked in Catholic schools?   ☐☐ years

6. Counting this year, how many years have you been principal in THIS school?   ☐☐ years

7. Have you received any specific training during teacher education, administrator preparation, or during your career about developmentally responsive practices for middle school education (as defined in any of the following reports: *Turning Points*, *Turning Points 2000*, or *This We Believe*)?

   ○ Yes   ○ No

176

8. Please mark the grade levels you are licensed to TEACH (by any state).

   ○ Elementary, Middle, and High School Licensure
      e.g. Grades PreK-12

   ○ Elementary-Middle School Licensure
      e.g. Grades PreK-8

   ○ Middle School Licensure Only
      e.g. Grades 5-9

   ○ Middle-Secondary School Licensure
      e.g. Grades 6-12

   ○ I am not a licensed teacher in any state

PART II: SCHOOL FACTORS

9.a. Does your middle school program exist in a separate building from programs educating other ages of students (i.e. high school or elementary school programs)?   ○ Yes   ○ No

9.b. Does your school have its own principal for the middle grades?   ○ Yes   ○ No

10. Please mark ALL the grades your school considers part of the "MIDDLE SCHOOL" with the same type of educational program.

   ○ 4th grade   ○ 5th grade   ○ 6th grade   ○ 7th grade   ○ 8th grade

10.a.. How many teachers are assigned to teach CORE subjects (Language Arts, Mathematics, Religion, Science, Social Studies) to these MIDDLE SCHOOL students in the 2011-2012 school year?

   ☐☐   MIDDLE SCHOOL CORE teachers

10.b. Of that number of core teachers, how many have taught middle school at your school at least three years?   ☐☐

10.c. Into how many sections/homerooms did your school place middle school students during the 2010-2011 school year?

   ☐ 4th grade   ☐ 5th grade   ☐ 6th grade   ☐ 7th grade   ☐ 8th grade

177

For the following questions/grids, please respond with the same demographic information you provided on the **2010-2011 NCEA Data Bank School Report Form:**

A.1a. LOCATION (check one)		A.1b. SPONSORSHIP (Check one)		A2. GENDER (Check one)	
Urban		Single Parish		Male	
Inner City		Interparish		Female	
Suburban		Diocesan		Coed	
Rural		Religious Cong/Private			

B1. STUDENT ETHNICITY AND RELIGION
(*Students should be counted in the category of which they are most characteristic*)

	Catholic	Non-Catholic	TOTAL
American Indian/ Native Alaskan			
Asian			
Black			
Hispanic			
Native Hawaiian/ Pacific Islander			
White			
Multi Racial			
TOTAL			

B.2. ENROLLMENT BY GRADE LEVEL
List number of students in each grade

Prekindergarten	
Kindergarten	
First	
Second	
Third	
Fourth	
Fifth	
Sixth	
Seventh	
Eighth	
Ninth	
Tenth	
Eleventh	
Twelfth	
Ungraded	
TOTAL	

D. Government Funded Programs

1. The number of students who receive Title I services.	
2. The number of students who receive free or reduced price breakfast	
3. The number of students who receive free or reduced price lunch	

PART III: MIDDLE SCHOOL PRACTICES

Please answer the following questions as they pertain to <u>MIDDLE SCHOOL</u> teachers and students in your school.

	None	Very Few	Some	Most	All
11. Middle school teachers in our school are organized into inter-disciplinary teams (The organization of two or more teachers from different disciplines who share responsibility for the curriculum, instruction, and evaluation of the same group of students)	O	O	O	O	O
12. Middle school teachers in our school integrate the subject matter across the various disciplines such as organizing thematic instructional units for their middle level students.	O	O	O	O	O
13. Middle school teachers in our school use alternative assessment methods such as portfolio assessment in the evaluation of their students.	O	O	O	O	O
14. Middle school teachers in our school are assigned as advisors and facilitate small groups of middle school students on a regular basis.	O	O	O	O	O
15. Middle school students in our school participate in exploratory or "mini" courses where they can experience success in a variety of interest areas.	O	O	O	O	O

16. How much COMMON planning time is OFFICIALLY SCHEDULED each week for the MIDDLE SCHOOL teacher teams?

O No official common planning time   O Less than 30 minutes per week   O 30-60 minutes per week

O 60-120 minutes per week   O 120-180 minutes per week   O more than 180 minutes per week

17. Please indicate the extent to which the following teaching methods are used by MIDDLE SCHOOL teachers in your school.

	Rarely or Never	Occasionally	Regularly
Direct Instruction (teacher presentation, drill, practice)	O	O	O
Cooperative Learning (structured group work)	O	O	O
Inquiry Teaching (gathering information, deriving conclusions)	O	O	O
Independent Study (working individually on selected or assigned tasks)	O	O	O
On-line Instruction (using Internet-based assignments such as webquests, homework, research projects, Blaskboard or Moodle, or virtual world environments such as Second Life)	O	O	O

Thank you for your participation in this study. Your responses will remain confidential.

179

Kurt Nelson
1333 East Avenue N
Onalaska, WI 54650
(608) 498-2718
64nelson@cardinalmail.cua.edu

October 1, 2011

Dear Catholic School Principal,

Thank you for your participation in my doctoral research into the development of professional community in Catholic middle schools. Your survey has been received and the final stage of my research is to gather information from middle school teachers in the state.

Enclosed are surveys to distribute to the core middle school teachers in your building (those that teach the core academic courses of Language Arts, Mathematics, Religion, Science, and Social Studies). The number enclosed corresponds to the number of these teachers you indicated on your survey.   If you require additional surveys, you may contact me for additional paper copies or simply provide teachers with the following electronic survey link and your school's code number:

www.surveymonkey.com/s/PLCteacher

Your School Code is # _____

You will not need to collect any surveys, as teachers will mail them directly to me or complete the online version.

Thank you again for your help with this final stage of my research project. May God bless you and your school community this year.

Sincerely,

Kurt Nelson
Doctoral Candidate

Appendix C: Teacher Survey Instrument

Kurt Nelson
1333 East Ave. N
Onalaska, WI 54650
(608) 498-2718
64nelson@cardinalmail.cua.edu

October 2011

Dear Catholic School Teacher,

You are invited to participate in a study of Catholic middle schools. This study is soliciting responses from middle school teachers and principals in the (arch)dioceses of Wisconsin.

I am a Wisconsin Catholic school administrator completing a doctoral degree from The Catholic University of America in Washington, D.C. The purpose of this dissertation study is to determine the amount of influence a school's teachers, environment, and culture have on the development of Professional Community. This research is being conducted exclusively in Catholic schools and will contribute to the research literature on Catholic education. There have been no risks identified with participation in this study.

This study has already been approved by your Diocesan Director/Superintendent of Catholic Schools and your building principal. I hope you will take some time to participate in this study. Completion of the survey should only take about 15 minutes. You may return this paper survey in the attached envelope or complete the survey electronically at www.surveymonkey.com/s/PLCteacher. Both formats contain the same questions, so you should only respond in one of the formats.

Your participation is entirely voluntary and you are free to refuse to participate in this research without penalty or prejudice. Individual responses that are obtained from you in connection with this study will remain confidential. Your privacy will be protected because neither you nor your school will be identified by name as a participant in this project. By returning your paper survey or completing the online survey, you are giving your consent to participate in this study.

If you have any questions or would like to receive the overall results of this study, you may contact me directly at the address, phone or email above. Thank you for your participation and help in better understanding Catholic schools and Professional Community.

Sincerely,

Kurt Nelson
Doctoral Candidate

SURVEY OF PROFESSIONAL COMMUNITY IN THE MIDDLE GRADES (SPC-MG)

PART I: TEACHER DEMOGRAPHICS

1. What is your gender and vocation?

○ Male Lay Person (married or single)   ○ Male Religious   ○ Male Clergy
○ Female Lay Person (married or single)   ○ Female Religious

2. What is the year of your birth?   19 ☐☐

3. Please indicate which ethnicity best describes you:

   3.a.   Are you Hispanic/Latino?

        ○ Yes (proceed to question 4)   ○ No (proceed to question 3.b.)

   3.b.   Please indicate your race/ethnicity

       ○ American Indian/Alaska Native   ○ Asian
       ○ Black or African American   ○ Native Hawaiian or Other Pacific Islander
       ○ White   ○ Multi-racial

4. Are you Catholic?   ○ Yes   ○ No

5. Counting this year, how many years have you taught at each of the following levels (including all school experience)?

   Elementary (4K-5th grades):   ☐☐ years

   Middle School (6th-8th grades):   ☐☐ years

   High School (9-12 grades):   ☐☐ years

6. Counting this year, how many total years have you taught in Catholic schools?   ☐☐ years

7. Counting this year, how many years have you taught in THIS school?   ☐☐ years

182

8. Please mark the <u>grade levels</u> you licensed to TEACH (by any state)?

○ Elementary, Middle, and High School Licensure
    e.g. Grades PreK-12

○ Elementary-Middle School Licensure
    e.g. Grades PreK-8

○ Middle School Licensure Only
    e.g. Grades 5-9

○ Middle-Secondary School Licensure
    e.g. Grades 6-12

○ I am not a licensed teacher in any state

9. Have you received any specific training during teacher education or during your career about developmentally responsive practices for middle school education (as defined in any of the following reports: *Turning Points, Turning Points 2000, This We Believe)?*

○ Yes   ○ No

10. Please mark which assignment best describes your position at this school <u>this year</u>.

○ Core Classroom Teacher (Language Arts, mathematics, Religion, Science, Social Studies)

○ Specialist Teacher (e.g. art, music, P.E., foreign language, technology)

11. Please mark which level best describes the grades you are assigned to teach <u>this year</u>.

○ Middle level grades only (eg. 6-8 grade)

○ Middle level grades plus elementary grades (eg. K-8)

○ Middle level grades plus secondary grades (eg. 6-12)

PART II: SCHOOL ENVIRONMENT

Please indicate the extent to which each of the following statements describes your school.

	Rarely Occurs	Seldom Occurs	Occasionally Occurs	Very Frequently Occurs
12. The principal is available after school to help teachers when assistance is needed	○	○	○	○
13. The principal is understanding when personal concerns cause teachers to arrive late or leave early.	○	○	○	○
14. Select citizen groups are influential with the board	○	○	○	○
15. The principal keeps a close check on sign-in times	○	○	○	○
16. Students try hard to improve on previous work	○	○	○	○
17. The principal treats all faculty members as his or her equal	○	○	○	○
18. Administrative paperwork is burdensome at this school	○	○	○	○
19. Teachers are protected from unreasonable community and parental demands	○	○	○	○
20. The principal listens to and accepts teachers' suggestions	○	○	○	○
21. The school is vulnerable to outside pressures	○	○	○	○
22. Students respect others who get good grades	○	○	○	○
23. The principal looks out for the personal welfare of faculty members	○	○	○	○
24. The principal closely checks teacher activities	○	○	○	○
25. The principal accepts questions without appearing to snub or quash the teacher	○	○	○	○
26. Teachers are burdened with busywork	○	○	○	○
27. The principal compliments teachers	○	○	○	○
28. Teachers feel pressure from the community	○	○	○	○
29. The principal discusses classroom issues with teachers	○	○	○	○
30. The principal encourages teacher autonomy	○	○	○	○
31. Academically oriented students in this school are ridiculed by their peers	○	○	○	○
32. Community demands are accepted even when they are not consistent with the educational program	○	○	○	○
33. The school is open to the whims of the public	○	○	○	○
34. The learning environment is orderly and serious	○	○	○	○
35. The principal accepts and implements ideas suggested by faculty members	○	○	○	○
36. The principal lets faculty know what is expected of them	○	○	○	○
37. The principal uses constructive criticism	○	○	○	○
38. The principal is friendly and approachable	○	○	○	○
39. The principal goes out of his or her way to help teachers.	○	○	○	○

184

	Rarely Occurs	Seldom Occurs	Occasionally Occurs	Very Frequently Occurs
40. Students seek extra help so they can get good grades	○	○	○	○
41. The principal monitors everything teachers do	○	○	○	○
42. The principal sets an example by working hard himself or herself	○	○	○	○
43. Routine duties interfere with the job of teaching	○	○	○	○
44. Teachers in this school believe that their students have the ability to achieve academically	○	○	○	○
45. The principal rules with an iron fist	○	○	○	○
46. Students neglect to complete homework	○	○	○	○
47. The principal supervises teachers closely	○	○	○	○
48. The principal goes out of his or her way to show appreciation to teachers	○	○	○	○
49. Good grades are important to the students of this school	○	○	○	○
50. The principal corrects teachers' mistakes	○	○	○	○
51. Students make provisions to acquire extra help from teachers	○	○	○	○
52. A few vocal parents can change school policy	○	○	○	○
53. Assigned non-teaching duties are excessive	○	○	○	○
54. The principal is willing to make changes	○	○	○	○
55. The principal explores all sides of topics and admits that other options exist	○	○	○	○

(This section left intentionally blank. Please continue on the following page.)

PART III: PROFESSIONAL COMMUNITY

The following are statements about your practices and those of your colleagues at this school. Please indicate the extent to which each statement characterizes your school by filling in the circle under the most appropriate description.

	Strongly Disagree	Disagree	Agree	Strongly Agree
56. A conscious effort is made by faculty to make new teachers feel welcome here.	○	○	○	○
57. This school has well-defined learning expectations for all students.	○	○	○	○
58. This school sets high standards for academic performance	○	○	○	○
59. The school day is organized to maximize instructional time	○	○	○	○
60. When making important decisions, the school always focuses on what's best for student learning.	○	○	○	○
61. Teachers in this school regularly discuss assumptions about teaching and learning	○	○	○	○
62. Teachers talk about instruction in the teachers' lounge, faculty meetings, etc.	○	○	○	○
63. Most teachers at this school are cordial	○	○	○	○
64. The principal, teachers, and staff collaborate to make this school run effectively	○	○	○	○
65. We do a good job of talking through views, opinions, and values	○	○	○	○
66. Teachers design instructional programs together	○	○	○	○
67. Experienced teachers invite new teachers into their rooms to observe, give feedback, etc.	○	○	○	○
68. Teachers at this school make a conscious effort to coordinate their teaching with instruction at other grade levels	○	○	○	○
69. At this school, teachers work together to do what is "best for the kids"	○	○	○	○
70. Teachers support the principal in enforcing school rules	○	○	○	○
71. Faculty meetings are often used for problem solving	○	○	○	○
72. Many teachers express their personal views at faculty meetings	○	○	○	○

	Less than once a month	2 or 3 times a month	Once or twice a week	Almost daily
73. How often do you have conversations with colleagues about what helps students learn best?	○	○	○	○
74. How often do you have conversations with colleagues about development of new curriculum?	○	○	○	○
75. How often do you have conversations with colleagues about the goals of this school?	○	○	○	○
76. How often do you have conversations with colleagues about managing classroom behavior?	○	○	○	○

186

	None	Some	About Half	Most	Nearly All
77. How many teachers in this school help maintain discipline in the entire school, not just their classroom?	○	○	○	○	○
78. How many teachers in this school take responsibility for improving the school?	○	○	○	○	○
79. How many teachers in this school set high standards for themselves?	○	○	○	○	○
80. How many teachers in this school feel responsible to help each other do their best?	○	○	○	○	○
81. How many teachers in this school feel responsible that all students learn?	○	○	○	○	○

	Never	Once	Twice	3-4 times	5-9 times	10 or more times
82. In a typical year at this school, how often do you receive meaningful feedback on your performance from colleagues?	○	○	○	○	○	○
83. In a typical year at this school, how often do you observe other teachers' classrooms?	○	○	○	○	○	○
84. In a typical year at this school, how often do you have colleagues observe your classroom?	○	○	○	○	○	○
85. In a typical year at this school, how often do you receive useful suggestions for curriculum materials from colleagues?	○	○	○	○	○	○
86. In a typical year at this school, how often do you invite someone in to help teach your class(es)?	○	○	○	○	○	○

Thank you for your participation in this study. Your responses will remain confidential.

187

APPENDICES D, E

CORRELATION MATRIX OF PREDICTOR VARIABLES

CORRELATION MATRIX OF DEPENDENT VARIABLES

Appendix D: Correlation Matrix of Predictor Variables Used in Regression Analysis

	Gender	Age	Total Exper	Exp this School	CS Exper	MS Exper	K-8 Certified	MS Training	Percent of Low SES	K-8 Configuration	MS Configuration	Total School Size	Cohort Size	Principal Leadership SdS	Staff Stability Rate	Academic Press SdS	Environmental Press SdS	Catholic Profile Score	Interparish School	Diocesan School	Religious-Private School
Gender	1.00	-.045	-.031	.046	.012	.079	-.002	-.034	.130	.128	-.071	-.119	-.066	.150	-.196	-.041	.189	-.054	-.074	-.097	.103
Age	-.045	1.00	.744	.647	.746	.651	.082	-.067	-.059	.137	-.071	.173	.068	.078	.494	.271	-.070	.152	-.112	-.044	-.127
Total Exper	-.031	.744	1.00	.729	.845	.774	.086	.107	-.089	.045	.019	-.112	-.096	.040	.472	.218	-.018	.328	-.012	.147	-.075
Exp this School	.046	.647	.729	1.00	.864	.794	.114	.055	-.078	.025	.066	-.053	-.066	.022	.453	.122	.029	.133	.025	-.140	-.112
CS Exper	.012	.746	.845	.864	1.00	.865	.150	.113	-.086	-.004	.066	-.016	-.036	.017	.460	.183	-.002	.248	.022	-.027	-.089
MS Exper	.079	.651	.774	.794	.865	1.00	-.030	.087	-.102	.069	.031	.055	.032	.069	.467	.227	-.014	.227	-.008	-.055	-.113
K-8 Certif	-.002	.082	.086	.114	.150	-.030	1.00	-.103	-.091	.042	.042	-.102	-.081	.084	.013	.090	.107	.025	.149	.071	-.089
MS Training	-.034	-.067	.107	.055	.113	.087	-.103	1.00	.021	.011	.007	-.004	.108	-.269	.104	-.130	-.101	.166	.049	-.119	.093
% Low SES	.130	-.059	-.089	-.078	-.086	-.102	-.091	.021	1.00	.139	-.098	.067	.021	-.220	-.250	-.190	.177	-.110	.047	-.077	.155
K-8 Config	.128	.137	.045	.025	-.004	.069	.042	.011	.139	1.00	-.856	-.178	-.393	.067	.124	.187	.065	-.016	-.359	-.121	-.084
MS Config	-.071	-.071	.019	.066	.066	.031	.042	.007	-.098	-.856	1.00	-.002	.355	-.180	-.031	-.250	.065	.036	.463	-.119	-.082
School Size	-.119	.173	-.112	-.053	-.016	.055	-.102	-.004	.067	-.178	-.002	1.00	.711	-.128	.157	-.029	-.144	-.078	-.059	.197	-.130
Cohort Size	-.066	.068	-.096	-.066	-.036	.032	-.081	.108	.021	-.393	.355	.711	1.00	-.091	.145	-.038	-.120	.017	.201	.057	-.045
Leadership SdS	.150	.078	.040	.022	.017	.069	.084	-.269	-.220	.067	-.180	-.128	-.091	1.00	-.188	.388	.288	.020	-.147	.056	.114
Staff Stability	-.196	.494	.472	.453	.460	.467	.013	.104	-.250	.124	-.031	.157	.145	-.188	1.00	.127	-.049	.084	.049	-.250	-.095
Academic Press	-.041	.271	.218	.122	.183	.227	.090	-.130	-.190	.187	-.250	-.029	-.038	.388	.127	1.00	-.052	.122	-.183	.099	.099
Environ Press	.189	-.070	-.018	.029	-.002	-.014	.107	-.101	.177	.065	.065	-.144	-.120	.288	-.049	-.052	1.00	.125	.063	-.132	.013
Catholic Profile	-.054	.152	.328	.133	.248	.227	.025	.166	-.110	-.016	.036	-.078	.017	.020	.084	.122	.125	1.00	-.030	.133	.031
Interparish Sch	-.074	-.112	-.012	.025	.022	-.008	.149	.049	.047	-.359	.463	-.059	.201	-.147	.049	-.183	.063	-.030	1.00	-.159	-.110
Diocesan Sch	-.097	-.044	.147	-.140	-.027	-.055	.071	-.119	-.077	-.121	-.119	.197	.057	.056	-.250	.099	-.132	.133	-.159	1.00	-.062
Private School	.103	-.127	-.075	-.112	-.089	-.113	-.089	.093	.155	-.084	-.082	-.130	-.045	.114	-.095	.099	.013	.031	-.110	-.062	1.00

Appendix E: Correlation Matrix of Dependent Variables

	Professional Community Total Score	Middle School Practices Scale
Professional Community Total Score	1.00	- .014
Middle School Practices Scale	- .014	1.00

REFERENCES

Abella, R. (2003). *Follow-up evaluation of the K-8 centers program* (Report): Office of Evaluation and Research, Miami-Dade County Public Schools.

Akos, P. (2002). Student perceptions of the transition from elementary to middle school [Electronic Version]. *Professional School Counseling*, 5, 339-345. Retrieved July 16, 2006 from Academic Search Premier.

Anfara Jr., V. A., & Waks, L. (2000). Resolving the tension between academic rigor and developmental appropriateness. *Middle School Journal, 32*(2), 46-51.

Angelle, P. S. (2010). An organizational perspective of distributed leadership: A portrait of a middle school. *Research in Middle Level Education Online, 33*(5), 16.

Angelle, P. S., & Anfara Jr., V. A. (2008). Communities of practice promote shared learning for organizational success. *Middle School Journal*(May), 52-58.

Arhar, J. M. (1992). Interdisciplinary teaming and the social bonding of middle level students. In J. L. Irvin (Ed.), *Transforming middle level education: Perspectives and possibilities* (pp. 139-161). Boston: Allyn and Bacon.

Brandt, R. (1992). On building learning communities: A conversation with Hank Levin. *Educational Leadership, 50*(1), 19-23.

Bryk, A. S., Camburn, E., & Louis, K. S. (1999). Professional community in Chicago elementary schools: Facilitating factors and organizational consequences. *Educational Administration Quarterly, 35*(Supplement), 751-781.

Bryk, A. S., Lee, V. E., & Holland, P. B. (1993). *Catholic schools and the common good*. Cambridge, Massachusetts: Harvard University Press.

Bryk, A. S., & Schneider, B. (2003). Trust in schools: A core resource for school reform. *Educational Leadership, 60*(6), 40-44.

Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago: University of Chicago Press.

Carnegie Council on Adolescent Development. (1989). *Turning points: Preparing American youth for the 21st century*. Washington, D.C.: Carnegie Corporation of New York.

Chard, L. (2003). Collective responsibility for student learning: a rating scale analysis. Retrieved September 8, 2007, from http://ed-web3.educ.msu.edu/CEPSE/mqm/forms/Linda_Chard.doc

Clements, P., & Seidman, E. (2002). The ecology of middle grades schools and possible selves. In T. M. Brinthaupt & R. P. Lipka (Eds.), *Understanding early adolescent self and identity* (pp. 133-164). Albany, NY: State University of New York Press.

Cohen, J. (1992). A power primer. *Psychological Bulletin*(112), 155-159.

Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A., Weinfeld, F. D., et al. (1966). *Equality of educational opportunity*. Washington, DC: Office of Education, U.S. Department of Health, Education, and Welfare.

Coleman, J. S., & Hoffer, T. (1987). *Public and private high schools: The impact of communities*. New York: Basic Books.

191

Convey, J. J. (1992). *Catholic schools make a difference: Twenty-five years of research*. Washington, D.C.: National Catholic Educational Association.

Cook, P. J., MacCoun, R., Muschkin, C., & Vigdor, J. (2007). *Should sixth grade be in elementary or middle school? An analysis of grade configuration and student behavior*. Durham, NC: Duke University, Terry Sanford Institute of Public Policy.

Cook, T. J. (2007). *Architects of Catholic culture: Designing & building Catholic culture in Catholic schools*. Washington, D.C.: National Catholic Educational Association.

Crow, G. M., & Pounder, D. G. (2000). Interdisciplinary teacher teams: content, design, and process. *Educational Administration Quarterly, 36*(2), 216-254.

Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *The Academy of Management Review, 21*(3), 619-654.

Department of Public Instruction. Developmental levels for licensing [Electronic Version]. Retrieved July 3, 2010 from http://dpi.wi.gov/tepdl/devlevels.html.

Dickinson, T. S., & Butler, D. A. (2001). Reinventing the middle school. *Middle School Journal, 33*(1), 7-13.

DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IN: Solution Tree.

DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Bloomington, IN: National Educational Service.

Eccles, J. S., Lord, S., & Buchanan, C. M. (1996). School transitions in early adolescence: What are we doing to our young people? In J. A. Graber, J. Brooks-Gunn & A. C. Peterson (Eds.), *Transitions through adolescence: interpersonal domains and context* (pp. 251-284). Mahwah, NJ: Lawrence Erlbaum Associates.

Eccles, J. S., & Midgley, C. (1991). What are we doing to early adolescents? The impact of educational contexts on early adolescents. *American Journal of Education, 99*, 521-542.

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D. A., Flanagan, C., et al. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist, 48*, 90-101.

Eccles, J. S., & Roeser, R. W. (2003). Schools as developmental contexts. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp. 129-148). Malden, MA: Blackwell.

Epstein, J. L. (1990). What matters in the middle grades - grade span or practices? *Phi Delta Kappan, 71*(6), 438-444.

Epstein, J. L., & MacIver, D. J. (1990). *Education in the middle grades: National practices and trends*. Columbus, OH: National Middle School Association.

Fortna, G. D. (2004). *How Catholic schools use social capital to achieve the recommended goals of middle school reform advisory programs.* Unpublished doctoral dissertation, The University of Utah.

192

Frederickson, P. F. (1996). *A study of the transescent in Catholic elementary schools: Middle school programs versus traditional junior high school programs.* Unpublished doctoral dissertation, St. Louis University, St. Louis.

Gamoran, A. (2002). *Supporting professional development and teaching for understanding - actions for administrators*. Madison, WI: Wisconsin Center for Education Research.

George, P. S., & Alexander, W. M. (1993). *The exemplary middle school* (second ed.). Fort Worth, TX: Harcourt Brace College Publishers.

George, P. S., Stevenson, C., Thomason, J., & Beane, J. (1992). *The middle school - and beyond*. Alexandria, VA: Association for Supervision and Curriculum Development.

Gewertz, C. (2004). City districts embracing K-8 schools [Electronic Version]. *Education Week*, 23, 2. Retrieved October 1, 2004.

Goodlad, J. I. (1984). *A place called school: Prospects for the future*. New York: McGraw-Hill.

Gulino, J., & Valentine, J. W. (1999). Middle school programmatic practices and student satisfaction with school. *NASSP Bulletin, 83*(608), 90-99.

Halpin, A. W., & Croft, D. (1962). *The organizational climate of schools (Research Project, Contract No. SAE 543-8639)*. Washington, DC: U.S. Office of Education.

Harter, S. (1996). Teacher and classmate influences on scholastic motivation, self-esteem, and level of voice in adolescents. In J. Juvonen & K. R. Wentzel (Eds.), *Social motivation: Understanding children's school adjustment* (pp. 11-42). Cambridge, UK: Cambridge University Press.

Hohl, M. F. (2005). *The relationship between student perceptions of school climate and academic achievement in Catholic middle schools.* Unpublished Ph.D. Dissertation, Walden University.

Hord, S. M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.

Hough, D. L. (2003). The case for the elemiddle school [Electronic Version]. *Middle Matters*, 3. Retrieved December 9, 2004 from www.naesp.org.

Howley, C., & Bickel, R. (2002). The influence of scale. *American School Board Journal, 189*(3), 28-30.

Hoy, W. K., & Sabo, D. J. (1998). *Quality middle schools: Open and healthy*. Thousand Oaks, CA: Corwin Press.

Hunt, T. C., Joseph, E. A., & Nuzzi, R. J. (2002). *Catholic schools still make a difference: Ten years of research 1991-2000*. Washington, D.C.: National Catholic Educational Association.

Irvin, J. L. (1992). Developmentally appropriate instruction: The heart of the middle school. In J. L. Irvin (Ed.), *Transforming middle level education: Perspectives and possibilities* (pp. 295-313). Boston: Allyn and Bacon.

Irvin, J. L., & Farr, W. (2004). Collaborative school communities that support teaching and learning. *Reading & Writing Quarterly, 20*, 343-363.

Jackson, A. W., & Davis, G. A. (2000). *Turning points 2000: Educating adolescents in the 21st century*. New York: Teacher's College Press.

Jacobs, R. M. (1997). *The grammar of Catholic schooling*. Washington, D.C.: National Catholic Educational Association.

Johnston, J. H. (1992). Climate and culture as mediators of school values and collaborative behavior. In J. L. Irvin (Ed.), *Transforming middle level education: perspectives and possibilities* (pp. 77-92). Boston: Allyn and Bacon.

Kramer, L. R. (1992). Young adolescents' perceptions of school. In J. L. Irvin (Ed.), *Transforming middle level education: perspectives and possibilities* (pp. 28-45). Boston: Allyn and Bacon.

Lambert, L. (2003). *Leadership capacity for lasting school improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.

Lee, V. E., & Loeb, S. (2000). School size in Chicago elementary schools: Effects on teachers' attitudes and students' achievement. *American Educational Research Journal, 37*(1), 3-31.

Lee, V. E., & Smith, J. B. (1996). Collective responsibility for learning and its effects on gains in achievement for early secondary school students. *American Journal of Education, 104*, 103-147.

Lipka, R. P., Lounsbury, J. H., Toepfer Jr., C. F., Vars, G. F., Alessi Jr., S. P., & Kridel, C. (1998). *The eight-year study revisited: Lessons from the past for the present*. Columbus, OH: National Middle School Association.

Littky, D. (2004). *The big picture: Education is everyone's business*. Alexandria, VA: Association for Supervision and Curriculum Development.

Lounsbury, J. H. (1992). Perspectives on the middle school movement. In J. L. Irvin (Ed.), *Transforming middle level education: perspectives and possibilities* (pp. 3-15). Boston: Allyn and Bacon.

MacIver, D. J., & Epstein, J. L. (1993). Middle grades research: Not yet mature, but no longer a child. *The Elementary School Journal*, 519-533.

Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal, 37*(1), 153-184.

Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.

Mattessich, P. W., Murray-Close, M., & Monsey, B. R. (2001). *Collaboration: What makes it work* (2nd ed.): Amherst H. Wilder Foundation.

McEwin, C. K. (1992). Middle level teacher preparaton and certification. In J. L. Irvin (Ed.), *Transforming middle level education: Perspectives and possibilities* (pp. 369-380). Boston: Allyn and Bacon.

McEwin, C. K., Dickinson, T. S., & Jacobson, M. G. (2004). *Programs and practices in K-8 schools: Do they meet the educational needs of young adolescents?* Westerville, OH: National Middle School Association.

McEwin, C. K., Dickinson, T. S., & Jenkins, D. M. (2003). *America's middle schools in the new century: Status and progress*. Westerville, OH: National Middle School Association.

Meeks, G. B., & Stepka, T. H. (2004). *2004 Survey of middle grades public schools of Arkansas report*: Arkansas State University.

Midgley, C., Feldlaufer, H., & Eccles, J. S. (1988). The transition to junior high school: Beliefs of pre- and posttransition teachers. *Journal of Youth and Adolescence, 17*(6), 543-562.

Milgram, J. (1992). Perspectives on the middle school movement. In J. L. Irvin (Ed.), *Transforming middle level education: perspectives and possibilities* (pp. 16-27). Boston: Allyn and Bacon.

Morrissey, M. S. (2000). *Professional learning communities: An ongoing exploration*. Austin, TX: Southwest Educational Development Laboratory.

National Board for Professional Teaching Standards. (1989). What teachers should know and be able to do.   Retrieved March 15, 2009, from http://www.nbpts.org/UserFiles/File/what_teachers.pdf

National Catholic Educational Association. (December 2006). 2006-2007 Membership information database: NCEA.

National Middle School Association. (1995). *This we believe: Developmentally responsive middle level schools*. Columbus, OH: National Middle School Association.

National Middle School Association. (2010). *This we believe: Keys to educating young adolescents*. Westerville, OH: NMSA.

National Study of School Evaluation. (2005). *Breakthrough school improvement: An action guide for greater and faster results*. Schaumburg, IL.

Necochea, J., Stowell, L. P., McDaniel, J. E., Lorimer, M., & Kritzer, C. (2001). Rethinking middle level teacher education for the 21st century. In V. A. Anfara Jr. (Ed.), *The handbook of research in middle level education* (pp. 161-181). Charlotte, NC: Information Age Publishing.

Offenberg, R. M. (2001). The efficacy of Philadelphia's K-to-8 schools compared to middle grades schools. *Middle School Journal, 32*(4), 23-29.

Office of Postsecondary Education. (2002). *Meeting the highly qualified teachers challenge: The Secretary's annual report on teacher quality*. Washington, DC: U. S. Department of Education.

Owens, R. G. (2004). Organizational culture and organizational climate. In *Organizational behavior in education* (Eighth ed., pp. 175-216). Boston: Allyn and Bacon.

P.J. Kenedy & Sons. (2006). *The Official Catholic Directory*. New Providence, NJ.

Paglin, C., & Fager, J. (1997). *Grade configuration: Who goes where?* Portland, OR: Northwest Regional Educational Laboratory.

Petzko, V. N. (2004). Findings and implications of the NASSP national study of leadership in middle level schools, volumes I and II: Teachers in middle level schools [Electronic Version]. *NASSP Bulletin*, 88, 69-88. Retrieved October 1, 2004.

Purkey, S. C., & Smith, M. S. (1983). Effective schools: A review. *The Elementary School Journal, 83*(4), 426-452.

Roach, A. T., & Kratochwill, T. R. (2004). Evaluating school climate and culture. *Teaching Exceptional Children, 37*(1), 10-17.

Roeser, R. W., & Lau, S. (2002). On academic identity formation in middle school settings during early adolescence. In T. M. Brinthaupt & R. P. Lipka (Eds.), *Understanding early adolescent self and identity* (pp. 91-131). Albany, NY: State University of New York Press.

Schuttloffel, M. J. (2008). *Contemplative leadership that creates a culture of continuous improvement*. Washington, DC: National Catholic Educational Association.

Seghers, M. M. (1995). *The level of implementation and the effects of the Carnegie (1989) recommendations in Louisiana sixth and seventh grade public schools.* Unpublished doctoral dissertation, University of New Orleans, New Orleans.

Seghers, M. M., Kirby, P. C., & Meza Jr., J. (1997). More evidence for the implementation of middle level practices [Electronic Version]. *NASSP Bulletin*, 81, 99-107. Retrieved October 1, 2004 from Proquest Research Library.

Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2000). *Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. New York: Doubleday.

Smith, J. B. (1997). Effects of eighth-grade transition programs on high school retention and experiences. *The Journal of Educational Research, 90*(3), 144-152.

Stockard, J., & Mayberry, M. (1992). *Effective educational environments*. Newbury Park, CA: Corwin Press.

Tagiuri, R., & Litwin, G. H. (1968). *Organizational climate: Explorations of a concept*. Boston: Harvard University.

The Sacred Congregation for Catholic Education. (1977). *The Catholic school*. Vatican City.

Thomason, J., & Thompson, M. (1992). Motivation: Moving, learning, mastering, and sharing. In J. L. Irvin (Ed.), *Transforming middle level education: Perspectives and possibilities* (pp. 275-294). Boston: Allyn and Bacon.

Thompson, S. C., Gregg, L., & Niska, J. M. (2004). Professional learning communities, leadership, and student learning [Electronic Version]. *Research in Middle Level Education Online*, 28. Retrieved September 2009.

Toepfer Jr., C. F. (1992). Middle level school curriculum: Defining the elusive. In J. L. Irvin (Ed.), *Transforming middle level education: Perspectives and possibilities* (pp. 205-243). Boston: Allyn and Bacon.

Tschannen-Moran, M., & Hoy, W. (1998). Trust in schools: A conceptual and empirical analysis, *Journal of Educational Administration* (Vol. 36, pp. 334).

United States Conference of Catholic Bishops. (1972). *To teach as Jesus did*. Washington, D.C.: United States Conference of Catholic Bishops.

USCCB. (1972). *To teach as Jesus did*. Washington, D.C.: United States Conference of Catholic Bishops.

Vatican Council II. (1965). *Gravissimum educationis: Declaration on Christian education*. Vatican City.

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education, 24*, 80-91.

Wiles, J., & Bondi, J. (1993). *The essential middle school* (second ed.). New York: Macmillan.

Zmuda, A., Kuklis, R., & Kline, E. (2004). *Transforming schools: Creating a culture of continuous improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.