

Instructional Leadership and Student Achievement: The Role of Catholic Identity

in Supporting Instructional Leadership

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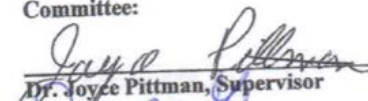
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INSTRUCTIONAL LEADERSHIP AND STUDENT ACHIEVEMENT: THE ROLE OF
CATHOLIC IDENTITY IN SUPPORTING INSTRUCTIONAL LEADERSHIP

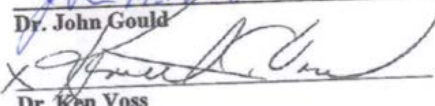
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Table of Contents

List of Tables	vii
List of Figures	viii
List of Equations	ix
Abstract	x
Chapter 1: Introduction	1
Introduction	1
Problem Statement	4
Purpose/Significance of the Problem	8
Research Questions Focused on Solution Finding	11
Conceptual Framework	12
Definition of Terms	13
Assumptions, Limitations and Delimitations	14
Summary	15
Chapter 2: Literature Review	15
Introduction of the Problem	15
Conceptual Framework	17
Instructional and Transformational Leadership	22
Catholic School Leadership	28
Comparison between Catholic, charter, and public schools	30
Final conclusion	32
Research Questions	33
Chapter 3: Action-Oriented Methodology	35
Introduction	35

Site and Population	35
Population description	35
Sampling Strategy.....	38
Site description	45
Site access.....	45
Research Design and Rationale	45
Research Methods.....	49
Stages of Data Collection	49
Instrument Description	49
Description of Each Method(s) Used.....	52
Instrument Description	53
Participant selection, Identification and Invitation.....	54
Data Collection	54
Data Analysis.....	55
Ethical Considerations	56
Respect of persons	56
Beneficence.....	57
Justice.....	57
Chapter 4: Findings from the Data.....	59
Introduction.....	59
Findings	60
Quantitative Participants.....	60
Instrument.....	65

Reliability Analysis of the Principal Instructional Measurement Rating Scale.....	68
Procedures for conducting the factor analysis.	69
Assumptions of Factor Analysis.	70
Overall Factor Analysis Findings	77
Research question 1.	78
Research question 2.	79
Qualitative Analysis.....	81
Qualitative Participants.	82
Research question 3.	84
Summary	87
Chapter 5: Interpretation, Conclusions, and Recommended Actionable Solution	89
Interpretation of Findings and Results.....	89
Conclusion	91
Recommendations.....	93
Summary	97
Further Research Questions	99
List of References	101
List of Appendices	110
Appendix A-Detailed Source List.....	111
Appendix B-Permission to Use the Principal Instructional Management Rating Scale	113
Appendix C-Principal Instructional Management Rating Scale.....	114
Appendix D-Framework for Catholic Identity Rubric	121

Appendix E-Approval to Conduct Research	122
Appendix F-In Person Qualitative Questions for Principal and Teachers.....	123
Appendix G-Reliability Output from SPSS	124
Appendix H-Factor Analysis Output from SPSS	128
Appendix I-Coded Interviews for Pilot and Study Schools.....	134

List of Tables

Table 1: List of Sources	21
Table 2: Number of Schools in the Mid-Atlantic Catholic Diocese.....	36
Table 3: Descriptive Statistics of Principal Population: Gender	36
Table 4: Descriptive Statistics of Principal Population: Ethnicity.....	37
Table 5: Descriptive Statistics of Student Population: Gender.....	37
Table 6: Descriptive Statistics of Student Population: Ethnicity	37
Table 7: Descriptive Statistics of Student Population: Religion.....	37
Table 8 List of Strata and Frequency Distribution by Each Demographic Type.....	40
Table 9 List of Strata and Calculated and Adjusted Weight for Final Study	41
Table 10: Sample Size Estimation	44
Table 11: Percent of Respondents by Region	61
Table 12: # of Respondents by Position Type	62
Table 13: Percent of Respondents by Gender.....	63
Table 14: Percent of Respondents by Ethnicity	63
Table 15: Percent of Respondents by Years at Sample School	64
Table 16: Cronbach's alpha for PIMRS	68
Table 17: Determinant for the Correlation Matrix.....	71
Table 18: KMO and Bartlett's Test of Sphericity	72
Table 19: Communalities	73
Table 20: Total Variance Explained	74
Table 21: Factor Matrix	77

List of Figures

Figure 1 Conceptual Framework Guiding the Dissertation	12
Figure 2 Conceptual Framework Guiding the Dissertation	17
Figure 3: Conceptual Framework for Factor Analysis	48
Figure 4: Scree Plot	76

List of Equations

Equation 1: School Weight Equation	40
Equation 2 Linear Regression Constant	46
Equation 3: Cronbach's alpha Equation	68

Abstract

Instructional Leadership and Student Achievement: The Role of Catholic Identity in Supporting Instructional Leadership

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Chairperson: Joyce Pittman

This study examined the relationship between strong instructional leadership, as measured by the Principal Instructional Measurement Rating Scale (PIMRS) and high student academic outcomes in 35 Mid-Atlantic Catholic elementary schools. In addition, the research explored the role of Catholic identity in supporting instructional leadership behaviors in Catholic elementary schools. The purpose of the study was to examine

- A) instructional leadership behaviors in principals with high versus low student academic outcomes, and
- B) to use a measure of Catholic identity to differentiate the extent to which principals can focus on instructional leadership

This research focused on ways Catholic schools can both improve themselves and inform charter and traditional public schools.

The study consisted of over 100 principals and teachers in Mid-Atlantic Catholic elementary schools. The participants completed the PIMRS and Framework for Catholic

Identity (FCI) to identify instructional leadership behaviors and level of Catholic identity. To document student academic achievement in aggregate, the research used a value added growth model. Using factor analysis, the researcher identified behaviors associated with schools in different levels of student growth and performance on standardized assessment in relation to outcomes on the PIMRS and FCI.

Research on principal leadership behavior is extensive and focuses on either traditional public schools, using an instructional leadership model supported by top-down leadership or public charter schools that focus on transformational leadership. The research provided evidence that Catholic schools reside in between instructional and transformational leadership, with Catholic culture supporting instructional leadership. Since Catholic schools lack an organized and systemic top-down leadership model, there is a gap in knowledge of the unique environment of site-based leadership management in Catholic schools. In addition, the research informs school improvement across all sectors of K-12 education. This research is designed to identify best practices in site-based leadership, as practiced in Catholic (P)K-8 elementary schools, to help improve education in public, charter, and non-public schools.

With many organizations, such as the Bill and Melinda Gates Foundation, supporting transformational leadership model to expand charter school across the country, there is a need to understand in what context it is possible to scale a site-based leadership model. Catholic schools benefit from having a Catholic culture drive their goals and purpose, which unlike charter schools, is not dependent on a single person or group. The implications of this study will inform Catholic school central offices on principal behaviors within its unique structure. In addition, the research will inform

school reformers on how to harness the most effective elements of both instructional and transformational leadership to improve student academic outcomes for all students.

Chapter 1: Introduction

Introduction

Researchers have focused on effective principal leadership behaviors, especially since the advent of *No Child Left Behind Act* of 2001 (Burch, 2007; Hallinger, 2008; Hallinger, 2010; Henderson, 2007; Reitzug, 2008; Shatzer, 2009). The research on principal leadership behaviors began in earnest in the 1980s (Hallinger, 2010). In particular, Bossert, Dwyer, Rowan, and Lee (1982) and Leithwood and Montgomery (1982) had the first systemic research noting the importance of principal leadership, “specifically, these bodies of research identified principal instructional leadership as a key factor in instructionally effective schools” (Hallinger, 2010, p. 274).

The research progressed over the last twenty years and among the common themes that emerge from the research is the dominance of instructional and transformational leadership (Shatzer, 2009). While the research presents instructional and transformational leadership as two distinct leadership styles (Shatzer, 2009), there is agreement that schools need both forms of leadership for a principal to improve student academic achievement (Henderson, 2007).

As documented by the research, the main element of instructional leadership is a focus on teaching in the classroom with an emphasis on “supervising curriculum, monitor and evaluate student progress, and provide incentives for teachers and students” (Shatzer, 2009, p. 1). One manifestation of a strong instructional leader is when a principal spends a majority of their time in the classroom, meeting with parents/students, and acting as instructional coaches for teachers (Burch, 2007; Henderson, 2007, Reitzug, 2008; Shatzer, 2009). By focusing on the classroom instruction, principals who utilize

instructional leadership need to be able to delegate administrative functions to others or have administrative tasks given to other employees (Henderson, 2007). It is for this reason that researchers commonly use traditional public schools as models of instructional leadership (Dorner, Spillane, & Pustejovsky, 2011).

Transformational leadership has a basis in business models (Shatzer, 2009). Originally, transformational leadership studies had a business focus where inputs affected an outcome. In the 1980s transformational leadership became standard practice and increased in popularity with the rise in accountability (Leithwood & Jantzi, 2005). The research characterizes transformational leadership in education as focused on “developing a vision for the organization, developing commitments and trust among workers, and facilitating organizational learning” (Leithwood & Jantzi, 2005, p. 177). In an effort to provide more clarity, Leithwood and Jantzi (2005) developed four key elements of transformational leadership:

1. Setting Directions
2. Helping People
3. Redesigning the Organization
4. Transactional and Managerial Aggregate (p. 181)

In the research, charter schools were more likely to implement transformational leadership models than public schools. The inability for charter schools to rely on a central office and the unique structure of the charter school itself make charter schools an ideal environment for transformational leadership.

As with charter and traditional public schools, there is extensive research on Catholic school principal behaviors. Within the research, studies found that Catholic

schools are highly collaborative (Ozar, 2010) and at the same time structured and uniform (Dorner et al., 2011; Hobbie, Convey, & Schuttloffel, 2010). As Leithwood and Jantzi noted, highly collaborative schools represent transformational leadership skills (2005). At the same time, structured and uniform schools reflect schools in which standard lesson plans and systemic teaching processes are in place, which denotes instructional leadership behaviors (Dorner et al., 2010; Hobbie et al., 2010; Henderson, 2007). Both Catholic and charter schools lack an organized structure like a traditional school district, which would lead one to believe that the Catholic and charter schools would be similar and face the same challenges. While Dorner et al.'s interview of teachers and principals in Catholic, charter, and public schools found that there were many similarities between Catholic and charter schools; there was a greater presence of instructional leadership behaviors in the Catholic schools (2011). The presence of instructional leadership in Catholic schools led to the conclusion that Catholic schools are able to position themselves between both instructional and transformational leadership models (Dorner et al., 2011).

What is it about Catholic schools that allow them to engage both instructional and transformational leadership? In addition, given the historical presence of site-based leadership in Catholic schools over the past 100 years (Howe, 1995), are there any lessons that charter and public schools can glean from the experience of Catholic schools?

While principal leadership behaviors have been the focus of many dissertations over the last several decades, few use Catholic schools. In Dr. Phillip Hallinger's meta-analysis of 130 dissertations on instructional leadership and principal behavior over the last 30 years, only 3% used non-public schools and only one dissertation used Catholic

schools (Hallinger, 2010). Having worked in both public and Catholic schools over the last 12 years, the researcher has developed a hypothesis that Catholic identity allows Catholic schools to use aspects of both instructional and transformational leadership.

Problem Statement

The research and researcher's experiential knowledge show an important, growing gap in understanding of Catholic school principal behaviors, as measured by the PIMRS, and the relationship to the degree of instructional leadership affects student academic achievement. In addition, the study identifies a need to understand to what extent the role of Catholic identity, as measured by the Framework for Catholic Identity (FCI), allows principals to focus on instructional leadership.

Among the extensive research in effective principal leadership behaviors, there is agreement that instructional and transformational leadership models are the dominant models present in schools (Leithwood & Jantzi, 2005; Shatzer, 2009). While instructional and transformational leadership models are not directly complimentary (Henderson, 2007), there is agreement in the literature that the most effective principal leadership behaviors are ones that use elements of both instructional and transformational leadership (Henderson, 2007; Shatzer, 2009).

Instructional leadership focuses on classroom teaching and learning (Burch, 2007; Henderson, 2007, Reitzug, 2008; Shatzer, 2009), while transformational leadership focuses on the culture of schools (Leithwood & Jantzi, 2005; Shatzer, 2009). While the research identifies charter and traditional public schools as having strengths in either instructional or transformational leadership, the research on Catholic schools demonstrates an ability to utilize elements of both.

In the Mid-Atlantic region charter schools have been expanding, replacing traditional public (Hall & Lake, 2011) and Catholic schools (Saroki & Levenick, 2009), creating increased pressure on principals in Catholic schools to respond to the expansion of new charter schools and increased accountability. In the researchers' interactions with Catholic school principals and leaders, many are not sure how to respond. Do principals and Catholic school systems adopt more instructional leadership behaviors, focusing even more on curriculum, or do they embrace transformational leadership behaviors? Of course, even celebrated charter school systems, such as Knowledge is Power Program charter schools (KIPP), face issues of scalability, attrition, and high teacher turnover (Payne & Knowles, 2009). Schools need to reflect both instructional and transformational leadership attributes. The research from Dorner et al. (2010), Hobbie et al. (2010), Howe (1995), and Ozar (2010) show that Catholic schools can effectively use attributes of both instructional and transformational leadership.

Alleviating confusion and helping to guide principals and dioceses, the researcher seeks to identify the relationship between Catholic school academic outcomes and instructional leadership. The researcher used the Principal Instructional Management Rating Scale (PIMRS) to differentiate principal behaviors between schools with varying rates of growth and performance on an archdiocesan growth model.

An integral part of the research is Catholic identity. The research derives the functional definition of Catholic identity from the National Standards and Benchmarks for Effective Catholic Elementary and Secondary Schools. Particularly, "The Church's teaching mission includes introducing young people to a relationship with Jesus Christ or deepening an existing relationship with Jesus, inserting young people into the life of the

Church, and assisting young people to see and understand the role of faith in one's daily life and in the larger society" (The Catholic School Standards Project, 2011, p. 10).

This research fills an important gap in the understanding of leadership, in particular, the significance of a strong Catholic identity in overcoming the weakness associated with transformational leadership in schools (Leithwood & Jantzi, 2008; Leithwood, Patten, & Jantzi, 2010). As the education reform movement continues to move forward and Catholic schools struggle to maintain their tradition (Hall & Lake, 2011; Payne & Knowles, 2009), dioceses need to understand the importance of supporting their schools and this research provides the evidence whether or not Catholic identity supports instructional leadership.

Research has documented that instructional leadership behaviors lead to improved student academic outcomes (Leithwood & Jantzi, 2008; Leithwood et al., 2010), and transformational leadership leads to improved teacher performance, which indirectly leads to improve academic outcomes (Shatzer, 2009). With Catholic schools exhibiting aspects of both instructional and transformational leadership, the researcher identifies if Catholic identity allows Catholic schools to reside between instructional and transformational leadership.

At the same time, politicians and education funders are giving an increasing amount of attention to site-based management leadership models. Under a site-based leadership model, the principals determine all decisions, from the mundane to mission critical. However, as a site-based leadership model becomes more popular, attracting growing support from for and non-profit organizations, there is increasing pressure for these schools to be a "scalable model," a model that can be replicated to other schools.

What many organizations are finding is that school reformers cannot take one particular model and replicate in another school, as a business reformer would a manufacturing process. Indeed, much of the literature on principal leadership has found that while school culture is central to student academic success, principals who spend time building culture negatively impact student academic outcomes (Horng, Klasik, & Loeb, 2010; Leithwood & Jantzi, 2008; Leithwood et al., 2010; Ma, 2000; Opdenakker & Damme, 2000; Seidel & Shavelson, 2007; Witzers, Bosker, & Kruger, 2003; Young, 2000). Of course, this brings up an important question, if school culture is important, and time spent building culture impedes student academic outcomes, how can a school using a site-based leadership model

A) Succeed at improving student academic outcomes

B) Be replicated in different buildings?

If the only model that is scalable would be one that has a culture which is not principal dependent, and rooted in the teachings and values beyond a singular person, then is this an advantage for a Catholic school, since the culture of the school is part of the systemic teachings of the Church itself?

As the last 2,000 years of Western culture has shown, the teachings of the Catholic faith, while not static, are not contingent upon a single person, ideal, or value, but rather on a belief that exists over time and millennia. However, in terms of education, there is little research on what differentiates the principal behaviors in one Catholic school over another.

To understand how principal behaviors lead to improved student academic outcomes, there is a need for more research demonstrating the relationship between

Catholic school principal behavior and student academic achievement. The researcher proposes to do an in-depth study of principal behaviors and improved student academic outcomes in Catholic schools that represent varying growth and performance on the archdiocesan growth model.

Purpose/Significance of the Problem

The purpose of this study is to examine and explore Catholic school principal behaviors, as measured by the PIMRS, to identify the degree of instruction in schools with varying growth and performance on the archdiocesan growth model. In addition, the study identifies the extent Catholic identity, as measured by the Framework for Catholic Identity (FCI), allows a principal to focus on instructional leadership.

Catholic Schools operate in a unique environment, where they are free from the regulations and mandates from the *No Child Left Behind Act* (NCLB) (107th Congress, 2002) but must follow policies and academic standards of their dioceses (Dorner et al., 2010; Hobbie et al., 2010). In many ways, Catholic schools reflect both public and charter schools, and as the research has shown, transformational leadership or instructional leadership dominates charter and public schools respectively (Dorner et al., 2011; Hobbie et al., 2010; Ozar, 2010).

Clearly Catholic schools are struggling to remain a viable option for families who want a Catholic education for their children. Nationally, over 170 Catholic schools closed last year alone and the number of students enrolled in Catholic schools continues to shrink (NCEA, 2011). Catholic schools participating in the study are also feeling the same pressure. From year to year, the number of schools and students has remained

constant, but, over the last ten years there has been an 18% drop in enrollment and 22 fewer schools to serve families.

In response to this pressure, the Center for Applied Research for the Apostolate conducted a survey of over 80,000 adults in the Mid-Atlantic region. Several themes emerged from the research, one of which was that 38% of principals and teachers were unsure of the role of the pastor in the life of the school (Gray & Perl, 2009). Furthermore, priests were just as confused, with 46% saying there was no clear role for the pastor in the life of the school (Sullins, 2009), demonstrating a need to further understand how Catholic schools can use their unique design to both improve instruction and create a sustainable environment.

There is pressure on today's Catholic school principal to adopt the systemic process of public schools, while maintaining the independence of a charter school. As cost continue to increase for human capital, and as competition for students increases with the further proliferation of charter schools, there needs to be a better understanding of what makes Catholic schools successful. In the researcher's experience working with Catholic school principals, there is a lack of actionable research for principals to inform their leadership practice.

In the same survey (Gray & Perl, 2009), parents of students enrolled in both Catholic and non-Catholic schools, believed that Catholic schools provide the best education for students in both academics and moral teaching. Across the board, the only negative result of peoples' perceptions of Catholic schools was cost. Families across the Mid-Atlantic region felt that the cost of Catholic education was too much, and there was not enough financial aid available (Gray & Perl, 2009).

Yet, enrollment continues to decline for some Catholic schools. An issue facing many of the schools is a lack of systemic understanding of what is and is not working. For example, in the diocese participating in the research, there is a growth model grouping schools into one of four categories:

1. High growth/high performance
2. High growth/low performance
3. Low growth/high performance
4. Low growth/low performance

However, on a diocesan level, little is known about what separates each of the four schools, and what, if anything, a diocesan office can do to support each school.

The research presented in the literature review provides evidence that instructional leadership improves student academic success. Additionally, the literature review provides evidence that principals who focus on transformation leadership behaviors, such as building school culture, do not improve student academic success to the same degree as principals who focus on instructional leadership.

Catholic school principals are excelling, but not all schools are succeeding. In addition, even schools with strong academic success, are seeing a decline in enrollment, which is reflected in national trends (NCEA, 2011).

Catholic schools have always practiced site-based leadership— The Code of Canon Law stipulates that on some level site-based leadership will always exist in Catholic schools (Vatican, 2003). In Catholic schools, each diocese has standards, but gives principals latitude in how to achieve those standards, with the exception of religion. With public schools looking more at adopting a site-based leadership model, there is a

need to study how site-based leadership works in practice. What are the strengths, weaknesses, and outcomes of such practices? Given the site-based leadership model that Catholic schools must follow, how can a Catholic school utilize its Catholic identity to support the instructional leadership in the school?

Research Questions Focused on Solution Finding

1. The researcher hypothesizes there is a direct positive relationship between instructional leadership behaviors of principals in Catholic elementary schools based on the school ratings on the archdiocesan growth model for Mid-Atlantic Catholic schools.

H_0 : There is no direct positive relationship between instructional leadership behaviors of principals in Catholic elementary schools based on the school ratings on the archdiocesan growth model for Mid-Atlantic Catholic schools.

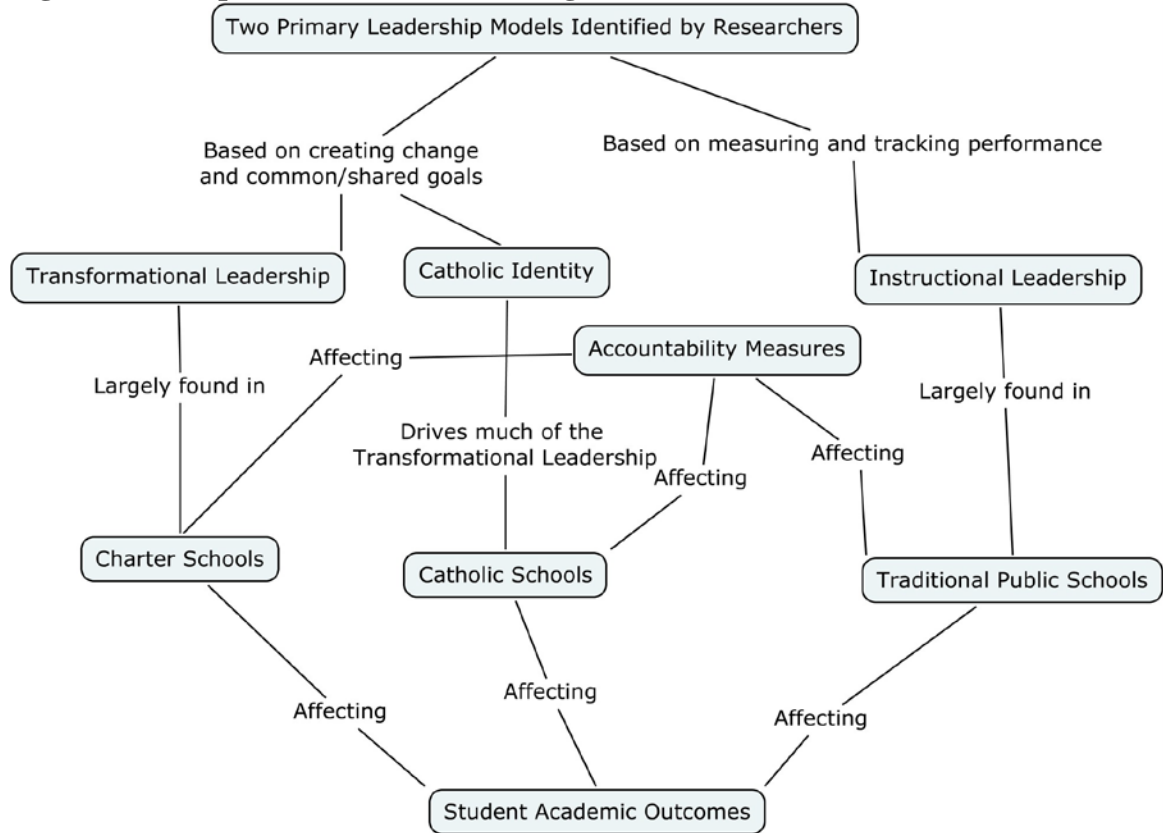
2. The researcher hypothesizes there is a direct positive relationship between the strength of Catholic identity in a Catholic elementary school and the level of instructional leadership behaviors practiced by the principal.

H_0 : There is a no direct positive relationship between the strength of Catholic identity in a Catholic elementary school and the level of instructional leadership behaviors practiced by the principal.

3. What perceptions do Mid-Atlantic Catholic school principals and teachers have in regards to their responsibility for developing Catholic identity?

Conceptual Framework

Figure 1 Conceptual Framework Guiding the Dissertation



The conceptual framework for this dissertation focuses on where Catholic schools exist between instructional and transformational leadership. To understand the topic more, the researcher conducted a literature review focused on three research themes:

1. Instructional and Transformational leadership
2. Catholic School Leadership
3. Comparison of Catholic, charter, and public school

Definition of Terms

Catholic Identity	Catholic Identity is the culture in place in a Catholic school that leads to “introducing young people to a relationship with Jesus Christ or deepening an existing relationship with Jesus,” (The Catholic School Standards Project, 2011, p. 10).
Catholic School	A Catholic school is defined as an elementary school (PK-8) that is recognized as a Catholic school under the jurisdiction of a Roman Catholic diocese and associated with a parish(es)
Framework for Catholic Identity	Assessment developed by a consortium of Catholic Universities and part of the AdvancedEd accreditation process, designed to measure key attributes of Catholic Identity in a Catholic school
Growth Model	Hierarchical linear model value added growth model designed to measure student growth and attainment on an end of year summative assessment.
High growth/High performance	The highest level of the growth model, as compared to other Catholic schools in the study
Low growth/Low performance	The lowest level of the growth model, as compared to other Catholic schools in the study
Principal	The position, appointed by the parochial administrator, to lead the school
Principal Instructional Management Rating Scale	The Principal Instructional Management Rating Scale (PIMRS) is a statistically valid principal leadership instrument designed by Dr. Phillip Hallinger to assess principals in “three dimensions of the instructional leadership construct: Defining the School’s Mission, Managing the Instructional Program, and Promoting a Positive School Learning Climate (Hallinger & Murphy, 1985).
Teacher	Any employee of a Catholic school assigned teaching duties and is not functioning as a principal

Assumptions, Limitations and Delimitations

As with all research, this research contains certain assumptions, limitations, and delimitations. The study accepts the inherent limitation when measuring the effects on student achievement. Namely, that it is impossible to control for all non-school factors. For example, Leithwood et al. (2005, 2008, 2010) continually asks the question, what happens if student social background drove the findings, rather than principal behavior? This study will face similar limitations and challenges.

The PIMRS, while having documented content validity and reliability and is one of the most used principal instruments in the United States (Hallinger, 2010), contains its own assumptions, limitations, and delimitations. Since teachers and principals completed the surveys, no one can be assured the responses are accurate, or rather, simply answers the user thinks the survey wants. As with any research in the social sciences, these limitations will shade and bias the results to some degree, but through proper statistical methodology and instruments, the researcher will minimize these assumptions, limitations, and delimitations.

In addition, each participating school had varying degrees of participation. While the researcher designed the research methodology to have each geographic region of the diocese represented, schools in one region responded at a much higher rate than schools in the other regions, providing one region with greater weight in responses. The researcher attempted to increase responses from other regions but failed to correct the over-representation.

Summary

The research hypothesis is that due to the systemic nature of Catholic culture, Catholic schools have a distinct advantage within the site-based management structure. In addition, the research identified key attributes of site-based leadership that led to increased student performance to produce guidelines for schools to improve their effectiveness. The guidelines allow the central office to provide more strategic support and data guided professional development to school leaders while maintaining respect for the spirit of site-based management. Through identified key attributes, the researcher identified if Catholic identity makes site-based leadership models successful, and how other schools can replicate these findings within the different and unique school environments without changing or controlling those environments.

Chapter 2: Literature Review

Introduction of the Problem

Since the 1980s, researchers have been increasingly interested in principal leadership behaviors (Burch, 2007; Hallinger, 2008; Hallinger, 2010; Henderson, 2007; Reitzug, 2008; Shatzer, 2009). Over the last decade, instructional and transformational leadership began to dominate the research on principal behavior (Shatzer, 2009), and both charter and public schools provide strong examples of each. Within instructional leadership, schools focus on classroom instruction, and within transformational leadership, schools focus on building a culture (Burch, 2007; Henderson, 2007; Leithwood & Jantzi, 2005; Reitzug, 2008; Shatzer, 2009).

While charter schools exemplify transformational leadership and traditional public schools reflect instructional leadership, the research is not as clear for Catholic

schools (Dorner et al., 2010; Hobbie et al., 2010, Ozar, 2010). The lack of research on Catholic school adoption of instructional and transformational leadership calls for more research in Catholic schools. The need for more research in Catholic schools is clear, for example, in Dr. Hallinger's analysis of 130 dissertations, only one researcher conducted their dissertation in Catholic schools.

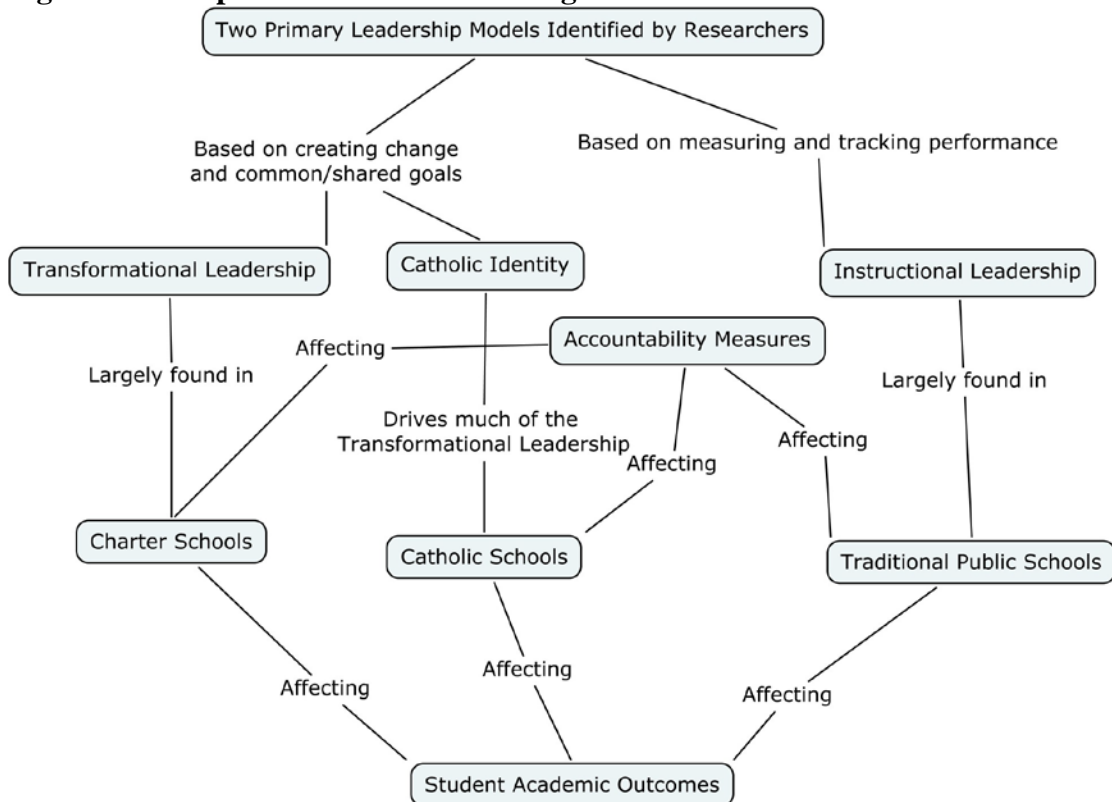
In addition, Catholic schools are facing increased pressure to remain viable. The growing charter school movement and increased accountability in public schools underscore the importance of understanding effective Catholic school principals. Finally, given the long history of Catholic schools' adoption of site-based leadership, what can charter and traditional public schools learn from Catholic schools?

Much of the literature on principal leadership has found that while school culture is central to student academic success, principals who spend time building culture negatively impact student academic outcomes (Horng et al., 2010; Leithwood & Jantzi, 2008; Leithwood et al., 2010; Ma, 2000; Opdenakker & Damme, 2000; Seidel & Shavelson, 2007; Witzers et al., 2003; Young, 2000). These findings highlight a serious question, if school culture is essential and time spent building culture impedes student academic outcomes, than how can a school using site-based leadership model:

- A) Succeed at improving student academic outcomes and,
- B) Replicate itself in different buildings?

Conceptual Framework

Figure 2 Conceptual Framework Guiding the Dissertation



The conceptual framework for this dissertation focuses where Catholic schools exist between instructional and transformational leadership. In particular, the conceptual framework places an emphasis on the hypothesis that, through strong Catholic Identity, Catholic schools can exist in between both instructional and transformational leadership. To provide clarity, the researcher created three themes for the literature review:

1. Instructional and Transformational leadership
2. Catholic School Leadership
3. Comparison of Catholic, charter, and public schools

A significant amount of research, in particular the early research, focused on measuring principal effectiveness using Albert Bandura's social learning theory and theory of self-efficacy (Leithwood & Jantzi, 2008). In the context of education, social

learning theory and self-efficacy relate to how principals and teachers persist in the face of adversity and struggle (Leithwood & Jantzi, 2008). Leithwood and Jantzi (2008) also use Bandura's social learning theory to demonstrate how principals and teachers who are successful when facing "threatening activities that are not actually threatening gain corrective experiences" (p. 501). Additionally, Leithwood et al. (2010) also document that most of the early research had its roots in business environment assuming that a principal's role as "manager" was not dissimilar to more traditional business setting that one might find on a factory floor. However, the dawn of NCLB was a particularly important moment in the study of school accountability. Entering the 21st century, the research begins to focus on school leadership, as it exists within the school context.

Despite the focus on school accountability research from "within," much of the research focuses on a business type model, where inputs (what and how it is taught) effect an outcome (student performance on standardized test scores, attendance, graduation rates, or a combination of all three). However, the "within research model" is still prevalent today and has many shortcomings because in education, many factors exist outside of the control of the school have significant impact on student academic performance. A business model assumes an ability to control virtually all factors, which in education is simply not the case. These shortcomings have caused researchers to create two fundamental changes in conducting school accountability research (Seidel & Shavelson, 2007).

First, as Seidel and Shavelson (2007) note, the research has focused on the "global aspects of teaching and analyzing teaching patterns or regimes instead of single teaching acts" (p. 456). By looking at the global aspects of teaching, researchers no

longer can view teaching as standardized across the board. A particular teaching methodology may work for a particular subject or grade level with certain students, but not others. Second, researchers began to focus on quasi-experimental designs leading to a focus on “specific learning domains” (p. 456). By focusing on specific learning domains, researchers are able to look at teaching more generally. These two changes have led researchers to view teaching, and management of teachers, from the prism of creating learning environments, where certain practices can increase learning, versus the prism of an input/output system where learning is more of a process (Seidel & Shavelson, 2007).

It is during the last 12 years that methodological concerns have become a significant theme in the research while still focusing on ensuring students are knowledgeable and productive (Opdenakker & Damme, 2000). However, research has indicated that measuring teacher performance (e.g., teacher effectiveness), while a significant aspect of school accountability, has been largely ineffective at improving education universally (Wise & Rothman, 2010). Despite the lack of universal findings, school accountability is here to stay.

NCLB and other accountability measures all seek to establish effective schools, but school effectiveness and teacher effectiveness are two different issues. Research has found many instances where schools have succeeded without effective teachers and vice versa (Seidel & Shavelson, 2007). The problem with focusing on teacher effectiveness as a proxy for school effectiveness is that school districts have a poor record of managing human capital leaving school districts incapable of making the necessary changes to improve instruction. As The New Teacher Project wrote in their report “The Widget Effect”: “In a knowledge-based economy that makes education more important than ever,

teachers matter more than ever” (Schoen & Fusarelli, 2008, p. 1). Under current public school structure, it seems odd to hold principals and teachers accountable for student performance on curriculum and assessments when the teacher has little to no authority to make necessary changes. In many public schools across the country, states mandate tests and district central offices control curriculum adoption process (Lorsbach, 2008).

A current “solution” that is gaining popularity in education policy today is “site based decision making or leadership” (Seidel & Shaveleson, 2007). As stipulated by Code of Canon Law, Catholic schools will always practice site-based leadership, making Catholic schools an ideal environment to study research on site-based leadership (Vatican, 2003). With organizations focused on education looking more at moving to site-based leadership models, there is a need to study how the model works in practice, what are the strengths, weaknesses, and outcomes of such practices. Using Catholic schools, the research seeks to identify the role of Catholic identity in supporting instructional leadership practices, in order to inform practitioners and education reformers of the value and role of institutional culture in supporting and improving education.

The literature contains only research deemed relevant, timely, and of scholarly quality. The researcher used studies conducted from 2000 to 2011, with an emphasis on research conducted from 2007 to 2011. However, the researcher did include one dissertation from 1995 due to being the only dissertation to focus on both, instructional leadership using the PIMRS and Catholic educators. Since the study was similar in nature and highlighted as an important dissertation, the researcher has included it despite not

meeting the year requirements. All research included was peer-reviewed and appeared in recognized scholarly research journals or trusted sources.

The literature review includes cites from thirty-six journal articles, six dissertations, six publications, a federal law, a conference transcript, and a website. All thirty-six-journal articles were peer-reviewed and publications are from reputable non-partisan sources, such as WestEd, and employ an extensive review process similar to a peer-review journal. The federal law, website, and several publications provide contextual background to the policy implications of the school accountability and the relevance and importance of site-based leadership in Catholic education.

Table 1: List of Sources

Type	Total	Percent
Dissertation	6	12%
Journal	35	70%
Law	1	2%
Meeting	1	2%
Publication	6	12%
Website	1	2%
Total	50	

As Table 1 demonstrates, the majority of the peer-reviewed research came from three journals:

1. School Effectiveness and School Improvement
2. Educational Administration Quarterly
3. Catholic Education: A Journal of Inquiry

The primary source for the literature review was School Effectiveness and School Improvement, which is not surprising since the topic of the dissertation itself. However, several other publications also provided quality peer review journal articles. The

researcher did not include all of the research in the literature review. Some research, while providing promising abstracts was not of the proper focus, methodology, or relevance to be included in the literature review.

The researcher presents the literature review in three streams and theoretical frameworks regarding site-based leadership model and student academic outcomes:

1. Instructional and Transformational leadership
2. Catholic School Leadership
3. Comparison of Catholic, charter, and public schools

In addition, the researcher presents a conclusion to unify the findings and present how the existing research will shape the dissertation and gaps in knowledge that the dissertation seeks to fill.

Under each theme, the literature review will present the findings of the various literature articles as they relate to the overall scope of research. To highlight key concepts, ideas, and gaps in knowledge, a discussion of consensus and contradictions (if any appear) will follow the findings. Finally, the theme will conclude with key concepts, summarizing and documenting the main points for each theme.

Instructional and Transformational Leadership

Of the fifty sources, twenty-five sources (50%) addressed themes of instructional and transformational leadership. The research as it relates to instructional and transformational leadership focused on ways “to better understand the work lives of principals” (Horng et al., 2010, p. 491), and primarily focused on either observational time use data or linking survey results to student academic performance data.

Using observational data several of the research studies identified statistically significant principal activities connected to improving student performance (Hornig et al., 2010). Several of the studies, primarily from Leithwood et al., found that principal behaviors associated with instruction leadership, e.g., classroom observation, had statistically significant effects on improving student academic outcomes, despite low effect sizes (Goldring, Porter, Murphey, Elliott, & Cravens, 2009; Leithwood & Jantzi, 2008; Leithwood et al., 2010; Witziers et al., 2003). However, not all of the research found the same connections. Hornig et al. (2010) found that principal behavior is more in line with transformational leadership, such as creating strong organization structure and goals. In addition, principal behavior led to improvements in student academic outcomes with a stronger effect size than those more commonly associated with instructional leadership (Hornig et al., 2010). Leithwood, while primarily finding stronger effects for instructional leadership behaviors, did find that transformational leadership tended to have stronger (via effect size) impact on student academic outcomes through indirect effects compared to instructional leadership (Leithwood & Jantzi, 2005). Through transformational leadership, teachers felt a more collaborative atmosphere, allowing them to be more effective teachers— i.e., indirect effects (Leithwood et al., 2010).

Despite the contradiction, principals had a greater impact on student achievement if they spent time engaging teachers on improving instructional leadership practices and focused their time on how teachers were teaching, and these findings were statistically significant with small to modest effect sizes.

Low effect sizes are not surprising given the social context of teaching and learning. As the research points out, many principals from low performing schools are

beset with disciplinary and parental issues that prevented them from spending more of their time in the classroom. The question on whether students' backgrounds effect leadership style continually plagues the research on principal leadership.

The research provides evidence that “higher-performing schools spent more time on organization management, day-to-day instruction, and external relations” as opposed to discipline and administrative issues (Horng et al., 2010, p. 509). The fact that lower performing schools tend to have smaller budgets, staff, and require more of the principal's time for disciplinary and administrative issues (Horng et al., 2010) further supports the evidence that the socio-economic background of the school is a factor. The socio-economic background of a school creates a paradox—does poor student performance lead to student disciplinary problems or student disciplinary problems lead to poor student performance? If poor student performance results in student disciplinary issues, than, over the long term it would be effective for a principal in a poor performing school to focus more time on instructional issues to improve discipline. However, if poor discipline leads to poor performance then the principal has no choice but to focus on the improving school culture, despite the research findings that this is an ineffective method of improving student academic outcomes. Hoping that, in time, discipline will improve student academic outcomes (Davis, Kearney; Sanders, Thomas, & Leon, 2011; Horng et al., 2010; Leithwood & Jantzi, 2005; Maslowski, Doolaard, & Bosker, 2008; Morris, 2010).

In addition to observational data, the studies used a survey of principals and student academic outcomes to identify tasks or behaviors related to improving student academic outcomes. The first of Dr. Leithwood and Jantzi studies (2005) explored the

role of transformational leadership in schools (primarily Eastern Canadian elementary and middle schools). Leithwood and Jantzi followed up their 2005 study with a detailed analysis of transformational leadership using a path analytic analysis. Leithwood and Jantzi designed their study to further test the role of the principal in improving student academic outcomes (Leithwood & Jantzi, 2008). In the second study, the authors sought to address the separate influence of district leadership, organizational structure, and that of the principal (Leithwood & Jantzi, 2008). In the third study (Leithwood et al., 2010), the authors continued to explore the connections between principal self-efficacy and effectiveness through the surveying of teachers and connecting results to student academic outcomes.

Like the research using observational data, the research continued to find a statistical significant connection between instructional leadership behavior and an increase in student academic outcomes. Most would not find this evidence surprising as it supports common sense and supports the notion of the principal as the instructional leader. As it relates to site-based leadership, the issue is how to support the principals so they can focus on instructional leadership. Central office authorities for Catholic school systems typically provide minimal support to principals, leaving them to manage both administrative and instructional tasks.

The research supports a site-based leadership management model, assuming, of course, that the principals make good instructional decisions. Thus, the research clearly indicates the necessity for research on practices and behaviors that affect student academic outcomes.

Within the research, there was a clear consensus on the most effective role of the principal—as an active instructional leader. However, there were some interesting contradictions in the research. In the Leithwood et al. (2010) they surveyed the teachers, rather than survey the principals on principal behavior. As documented earlier, the authors found that the leadership area where principals can most impact student outcomes is through supporting and nurturing teachers (Leithwood & Jantzi, 2008). In 2010, the analysis found that the “emotional path,” which encompassed the level of support felt by teachers, had no statistically significant impact on student academic outcomes (Leithwood et al., 2010). In this study, schools where principals worked to emphasize academic rigor (i.e., creating culture which is central to transformational leadership) were more successful and were statistically significant while schools that focused on supporting teachers had an impact on student academic outcomes, but the findings were not statistically significant.

Another area of contradictions was the view of principal leadership as direct and indirect. For example, Leithwood et al. (2010) view principal leadership as “indirect” in terms of its impact on student academic outcomes. However, there is not universal agreement about the whether or not principal effects are direct or indirect. Witzers et al.’s (2003) meta-analysis compared studies that viewed principal leadership in either direct or indirect effects. In direct effect models, one can measure principals’ practices effect on student academic outcomes. While in indirect effect models, one can only indirectly measure student academic outcomes because principal practices affect other variables, which in turn, affect student academic outcomes (Witzers et al., 2003).

The meta-analysis included over 40 studies, conducted between 1986 and 1996. The studies did present evidence that “school leadership does have a positive and significant effect on student achievement, however, the effect sizes are very small” (Witzers et al., 2003, p. 408). However, the authors note that since schools have a single principal and studies analyzed how one individual affected a large group, “a small effect size may still be very relevant” (Witzers et al., 2003, p. 415).

The meta-analysis still found the “direct effects” of principal leadership to be inconclusive. This inconclusive finding is particularly important, not just to this study, but to the whole concept of site-based leadership. If, in fact, a principal’s singular leadership has no statistically significant effect on student academic outcomes, is it necessary? Even more troubling, if principal leadership does not have direct effects, then why do so many schools that use site-based leadership tend to be successful—particularly when common conception is that it is a strong principal leader (for example, Geoffrey Canada, the founder of the Harlem Children’s Zone) is the very reason a school is successful.

Key points

- Principals are just one of the many factors that influence a school’s culture and student academic outcomes
- Since principals are typically only one individual in a school, their influence across a broad range of schools will vary (Witzers et al., 2008)
- How the principal impacts the school varies by personality and reality in which the school exists

Catholic School Leadership

Eight (16%) of the journal articles addressed Catholic school leadership. Within the four studies, two central themes developed. The first theme suggests that Catholic schools are inclusive and, teachers and principals are more likely to work as a team (Howe, 1995; Ozar, 2010). The second theme is that Catholic identity does support student academic outcomes (Hobbie et al., 2010). In fact, as Hobbie, et al. note “collegial leadership consists of goal consensus, support, and concern for teachers” (2010, p. 14), which lead to teachers being more willing to engage with their principal on improving instructional practice (2010). In effect, the findings have shown that Catholic schools have the ability to foster both instructional and transformational leadership.

As Hobbie et al. (2010) noted, “The perception of teachers about their collective efficacy affects their belief that they have the ability to plan and implement the instruction” showing both the dual modality of a Catholic school, driven largely by Catholic identity (2010, pg. 10). The key hypothesis of the research is the extent to which Catholic identity allows a school to explore both instructional and transformational leadership. Unlike charter and public schools, a person does not drive beliefs and goals person per se, rather by a faith that has followers in the billions and has been around for centuries.

These findings are consistent even amongst inner-city schools, where Catholic schools have continued to have a positive affect on student academic outcomes (Hallinan & Kubitschek, 2010). Despite not outperforming their suburban counterparts, students in inner-city Catholic schools outperformed their peers both in raw performance and growth over the course of a year (Hallinan & Kubitschek, 2010). Yet, these gains were not

consistent, and when statistically significant, had low effect size (Hallinan & Kubitschek, 2010). However, as Hallinan & Kubitschek (2010) note, “Research on school factors affecting achievement often has focused on what Catholic schools do well, such as establishing a school community, enforcing order and discipline, and creating a strong academic culture,” which demonstrates the ability of a Catholic school to serve both instructional and transformational leadership behaviors (2010, p. 166).

Indeed, there are examples of Catholic schools bridging the gap between instructional and transformational leadership. In Sydney, Australia, the Archdiocese of Sydney has created a “Catholic School Leadership Framework” which exemplifies the ability of a Catholic school to serve a dual leadership models. Within the Catholic School Framework, there is a support system built into the operating structures providing principals with needed guidance and support to handle much of the organizational tasks that so often flummox inner-city schools (Canavan, 2003). Through this framework, the Catholic schools can focus on teaching and learning effectiveness through school metrics focused on performance management (Canavan, 2003). While principals spend time on instructional leadership tasks, the supporting role of the Catholic Schools Office and parish provide support in transformational leadership tasks—which in turn is rooted in the teachings of the Catholic Church. Within each component of the framework, particular values of the Catholic Church drive schools, creating a culture that is supportive and expects academic rigor and faithfulness (Canavan, 2003).

In fact, the role of faithfulness is extremely important in not only creating successful academic environments, but also in allowing principals to develop instructional and transformational leadership skills. As Hobbie et al. (2010) documented

in their study, “In order to fulfill their role of teaching children to receive Jesus and live out his call to create the Kingdom of God on earth and in heaven, Catholic schools need to possess and foster the distinctive characteristics of Catholic school identity” (p. 7). However, Catholic faith does not merely create a conducive environment for student learning; it also creates an environment that attracts educators who are mission driven. Strong Catholic identity not only drives the academic program, but also inspires and motivates the teachers and community, creating a culture that “strengthens the heartbeat of the school” (Hobbie et al., 2010).

Key points

- Catholic schools do indeed exhibit both instructional and transformational leadership capacity
- Using the teachings of the Catholic Church, the Archdiocese of Sydney developed a Catholic School Leadership Framework that creates a supportive environment that holds schools accountable—at the same time creating a culture of both instructional and transformational leadership.
- Catholic identity is a non-person centric way of “strengthening the heartbeat of the school” (Hobbie et al., 2010).

Comparison between Catholic, charter, and public schools

Two (4%) of the journal articles addressed comparisons of Catholic, charter, and public schools directly. However, within that research, two main themes emerge. The first theme is that schooling is strikingly similar across sectors and throughout the last 100 years (Dorner et al., 2011; Staples, 2005). The second theme is that Catholic and charter schools tend to be similar in organizational structure and are not very easily

distinguished in the way they operate (Dorner et al., 2011). School types are almost identical in that a principal leads a school with teachers who lead students. In the standard model, schools assign students to teachers and organize both students and teachers together by either grade or subject (or both) with the principal as leader.

Regardless of the socio-economic background of the students or community, schools in the United States use identical organizational structure across sectors, where principals are in charge of teachers, who are in charge of students (Staples, 2005). Despite these similarities, there are differences, though limited. Both research studies agree that the similarities are many and the differences few. In particular, both studies cite two main differences; governance structure and how/why students attend the schools (Dorner et al., 2011; Staples, 2005). Traditional public schools are top-down institutions that have governing central office and school boards, which dictate and drive district/school wide goals and objectives (Staples, 2005). Today, many school districts are facing state and federal mandates of accountability, which is creating an even more top-down governance structure (Staples, 2005).

At the same time “organic” goals and objectives drive Catholic and charter schools. Even when public school standards form the basis of the goals and objectives, the implementation is more reflective of goal-orientated fashion as opposed to a process-orientated fashion (Dorner et al., 2011). However, due to increased accountability standards, research is finding that public schools have to find ways to build and create school communities within themselves which is one facet that separates Catholic and charter schools from public schools. In addition, parent expectations are driving Catholic and charter schools to adopt many of the instructional goals and standards of traditional

public schools, creating more a line between the three school types (Dorner et al., 2011). Indeed, Dorner et al. (2011), wrote “Based on these three assertions, we argue the following: While organizing for instruction differed in public and choice schools, the institutional environment— especially government regulation and its press for standardization and accountability— has permeated all schools’ efforts” (Dorner et al., 2011, p. 81).

Key points

- Catholic schools and charter schools excel at building organic structures that support instructional goals—an aspect of transformational leadership
- The structure of schooling is strikingly similar across school types
- Accountability models are pushing public schools to behave more like Catholic and charter schools and vice versa.

Final conclusion

Of the more intriguing and challenging findings of the literature review is the clear evidence that principals need independence to focus their time on instructional practice in their schools rather than administrative functions or other tasks. If principals are truly independent, who does the tasks not associated with improving student achievement?

It is within these findings that the researcher sees a clear need to study how effective principals in site-based leadership schools use their time to complete all the necessary tasks, while respecting the principals’ site-based leadership. Using these results, public and non-public schools alike can respond to the continuous drive from

policy makers and non-profit groups, such as the Bill and Melinda Gates Foundation, to use autonomy to improve student academic outcomes.

The results of the literature review indicate that when teachers and principals work together, share a common goal and spend their time on accomplishing the mission, rather than defining the mission, student academic outcomes will improve. In the era of accountability, accountability cannot be about a process, where teachers and principals are conducting assessments or completing an activity simply to accomplish the task of the accountability. The focus on process takes away from a goal-oriented mission and weakens student academic outcomes. Finally, the findings provide ample evidence of the necessity of creating a more decentralized school system, one that does not control the assignment of principals or teachers, as this creates an undue burden on creating mission cohesion, which, as the research indicates, is not a good use of principal leadership capital or time.

Research Questions

1. The researcher hypothesizes there is a direct positive relationship between instructional leadership behaviors of principals in Catholic elementary schools based on the school ratings on the archdiocesan growth model for Mid-Atlantic Catholic schools.

H_0 : There is no direct positive relationship between instructional leadership behaviors of principals in Catholic elementary schools based on the school ratings on the archdiocesan growth model for Mid-Atlantic Catholic schools.

2. The researcher hypothesizes there is a direct positive relationship between the strength of Catholic identity in a Catholic elementary school and the level of instructional leadership behaviors practiced by the principal.

H_0 : There is a no direct positive relationship between the strength of Catholic identity in a Catholic elementary school and the level of instructional leadership behaviors practiced by the principal.

3. What perceptions do Mid-Atlantic Catholic school principals and teachers have in regards to their responsibility for developing Catholic identity?

Chapter 3: Action-Oriented Methodology

Introduction

In Chapter III, the researcher provides an overview of the research methodology and offers the reader the opportunity to explore the methodology of the research and potentially replicate the findings of the research. The methodology section provides details on the site and population, research design, rationale, methods, and the ethical considerations for the dissertation. In addition, the research methodology provides the reader with an overview of the instruments used to measure leadership tasks.

Using results of the PIMRS and the end of year summative assessment, the researcher provides evidence of principal behaviors associated with improved student academic outcomes. In addition, the researcher answers the question of whether or not the strength of Catholic identity provides an “advantage” for school principals, by allowing them to focus on more instructional leadership behaviors.

Site and Population

Population description

The population consisted of 58 Catholic elementary schools in a Mid-Atlantic region of the United States of America. Tables two to seven provide details on gender and ethnic descriptive statistics for the Catholic elementary schools and the principal and students in the Mid-Atlantic diocese. Four regions make up the diocese where the schools located, each represented by a pseudonym. The regions cover urban, suburban, and rural areas. Teacher demographic data are currently not available due to a lack of data; however, the researcher collected demographic data on teachers at the time of their participation in the PIMRS. As tables five to seven show, the schools serve an ethnically

diverse population, but are decidedly Catholic.

The researcher selected the population because of the diversity of the type of schools (rural, suburban, and urban), as well as the diversity of the student population, allowing the researcher to have access to a sample population that is truly representative of the nation as a whole. The diverse school types and population allow the researcher to better understand the context of Catholic identity's role in supporting student academic achievement and creating culture in the school. Having a diverse population allows the researcher to answer the research questions and to apply the results to a broader range of schools. For instance, if all of the schools served primarily one race or type of school, it would be difficult to apply those results to schools serving dissimilar students or environments. In this case, the diverse student population and school types allow for the results to be applied more generally.

Table 2: Number of Schools in the Mid-Atlantic Catholic Diocese

Region	Schools	Students
	N	N
A	11	2,568
B	22	6,878
C	15	3,976
D	10	2,103
Total	58	15,525

Table 3: Descriptive Statistics of Principal Population: Gender

Region	Gender		Total
	Male	Female	
A	5	6	11
B	5	17	22
C	4	11	15
D	7	3	10
Total	21	37	58

Table 4: Descriptive Statistics of Principal Population: Ethnicity

Region	Ethnicity					Total
	African American	Asian	Caucasian	Hispanic	Other	
A	3	0	7	0	1	11
B	1	0	21	0	0	22
C	2	2	11	0	0	15
D	0	0	10	0	0	10
Total	6	2	49	0	1	58

Table 5: Descriptive Statistics of Student Population: Gender

Region	Gender		
	Male	Female	Total
A	1,289	1,279	2,568
B	3,479	3,399	6,878
C	1,967	2,009	3,976
D	1,005	1,098	2,103
Total	7,740	7,785	15,525

Table 6: Descriptive Statistics of Student Population: Ethnicity

Region	Ethnicity					Total
	African American	Asian	Caucasian	Hispanic	Other	
A	1,058	35	1,044	273	158	2,568
B	799	406	4,308	882	483	6,878
C	2,055	265	1,095	215	346	3,976
D	164	84	1,642	49	164	2,103
Total	4,076	790	8,089	1,419	1,151	15,525

Table 7: Descriptive Statistics of Student Population: Religion

Region	Religion		Total
	Catholic	Non-Catholic	
A	1,701	867	2,568
B	6,144	734	6,878
C	2,594	1,382	3,976
D	1,759	344	2,103
Total	12,198	3,327	15,525

Sampling Strategy

Since the focus of the dissertation is the role of Catholic identity in supporting instructional leadership, the population consists of Catholic school educators. Because the diocese covers a wide geographic footprint and has a diverse teaching and student population, initially, the researcher developed a stratified sample methodology. After conducting the random stratified sample and inviting schools to participate, several strata did not have participants. Therefore, the researcher used a cluster sampling strategy to using the random stratified sampling to ensure that the participants represented the diversity of the 34 Mid-Atlantic Catholic elementary schools initially identified.

The original sample consisted of 34 schools from the 58 diocesan elementary schools that are part of a parish. In the dioceses, there are approximately 2,000 teachers and principals in the 58 schools, and to have a large enough sample size, 34 schools were chosen so that the researcher would have at least 600 teachers and principals in the sample. In order to select the 34 sample schools, the research coded schools on four criteria:

1. Region
 - a. Region 1-Primarily Urban
 - b. Region 2- Primarily Suburban
 - c. Region 3- Primarily Suburban
 - d. Region 4- Rural
 - i. Sub-region 1- Rural
 - ii. Sub-region 2- Rural
 - iii. Sub-region3-Rural

2. School type
 - a. Urban (1)
 - b. Suburban (2)
 - c. Rural (3)
3. Ethnicity
 - a. Majority African American (1)
 - b. Majority Hispanic (2)
 - c. Majority White (3)
 - d. No majority (4)
4. Religion
 - a. Majority Catholic (1)
 - b. Majority non-Catholic (0)

The geographic location determined the first two criteria, region and school type. Schools located in specific areas were designated by their local government jurisdiction and where that specific area is considered by the dioceses as urban, suburban, or rural. Ethnicity and religion were calculated based on the percent of students by each category. In order for a school to be considered “majority X” the percent of students identified as X, had to be greater than the combined percentage of all other ethnicities. For example, School A has 88% African American, 10% Hispanic, and 2% other, school A is (1) majority African American ($88\% > 10\% \text{ Hispanic} + 2\% \text{ Other}$). If school B has 30% African American, 10% Hispanic, 20% White, and 40% other, school B is (4) no majority as no one ethnicity is greater than the percent of the other combined three ethnicities ($30\% \text{ African American} < 10\% \text{ Hispanic} + 20\% \text{ White} + 40\% \text{ other}$, or 40%

other < 30% African American + 10% Hispanic + 20% White, etc.). For religion, it was either (1) majority Catholic or (2) majority non-Catholic. Using this methodology, the researcher came up with 15 unique strata:

Table 8 List of Strata and Frequency Distribution by Each Demographic Type

Strata	Region	Ethnicity	Type	Religion	# of Schools
1	1	1	1	0	5
2	1	1	1	1	1
3	1	2	1	1	1
4	1	3	1	1	4
5	2	1	2	1	2
6	2	2	2	1	1
7	2	3	2	1	17
8	2	4	2	1	2
9	3	1	1	0	2
10	3	1	2	0	1
11	3	1	2	1	7
12	3	3	2	1	2
13	3	4	2	1	3
14	4	3	2	1	3
15	4	3	3	1	7

Next, to select the schools the researcher gave each strata a weight, which was determined by multiplying the number of schools by the sum of the number of sample schools (32) divided by the total population of schools (58):

Equation 1: School Weight Equation

$$\text{Cal. Weight} = \# \text{ of schools} * (32 \div 58)$$

Table 9 List of Strata and Calculated and Adjusted Weight for Final Study

Strata	# of Schools	Cal. Weight	Adj. Weight
1	5	2.84	3
2	1	0.57	1
3	1	0.57	1
4	4	2.28	2
5	2	1.14	1
6	1	0.57	1
7	17	9.00	9
8	2	1.14	1
9	2	1.14	1
10	1	0.57	1
11	7	3.98	4
12	2	1.14	1
13	3	1.71	2
14	3	1.71	2
15	7	3.98	4
Total		32	34*

Note. Due to rounding the total number of schools sampled is 34 not 32

The researcher chose a stratified sampling methodology to ensure that the sample population would truly represent the population. In an attempt to maintain a true proportional sample population, the total number of sample schools is actually 34, not 32. Therefore, the number of sample schools increases by two schools to ensure that the integrity of the stratified sample, increasing the number of schools to 34 was necessary.

One of the strengths of choosing the diocese is that it covers a range of geographic and socio-economic areas, providing the researcher with the ability to have a sample population, not unlike most public and non-public school districts across the country.

The researcher selected principals and teachers employed at each of the randomly selected schools between January and June 2012 to participate in the PIMRS. After participating principals and teachers completed the instrument, the researcher assigned

each school their specific growth/attainment ranking based on the school's performance on the archdiocesan growth model.

In addition, the researcher derived a subsequent interview sample using a convenience sampling method to provide an understanding of the role that the principal plays in creating a culture in the school and to what effect does Catholic presence provide a foundation for any and all activity in the school.

Methodology

The purpose of this study is to examine Catholic school principal behaviors, as measured by the PIMRS, to identify the degree of instructional leadership between different growth ratings for each school. In addition, the study will also identify to what extent the role of Catholic identity, as measured by the FCI, allows principals to focus on instructional leadership.

The PIMRS is a Likert Scale instrument, and as such, results are ordinal data. Likert Scale data typically is a range of numbers, either one to five or one to seven (less common are one to four or one to three). The PIMRS is a one to five range, ranging from a five "Almost Always" to a one "Almost Never." Clearly, it is possible to rank the data from one to five, but since there is not an equal distance between each ranking, one cannot use typical interval statistical methods, such as ANOVA (Rainer, Christopher, McCollins, & Ramalhoto, 2007, p. 609). In addition, the author did not design the PIMRS to provide one unifying number to determine if a principal is a strong or weak instructional leader. Rather, the author designed the PIMRS to measure 15 different aspects of instructional leadership. To address these limitations, the researcher used factor analysis to identify any statistically significant relationship between each of the 15

aspects of instructional leadership, as measured by the PIMRS, compared to the school's growth ranking.

The researcher employed factor analysis because of the large number of variables that define instructional leadership in the PIMRS. The PIMRS has 10 unique attributes (or regions) of instructional leadership (Hallinger, N.D., p. 2-4):

1. Framing the School's Goals
2. Communicating the School's Goals
3. Supervision and Evaluation of Instruction
4. Curricular Coordination
5. Monitoring Student Progress
6. Protecting Instructional Time
7. Visibility
8. Incentives to Improve Teaching
9. Promoting Instructional Improvement and Professional Development
10. Providing Incentives for Learning

Since there is no single measure of instructional leadership, each region is independent of the other, the researcher used factor analysis to identify how each of the 10 regions interacts with both the school growth rating and the level of Catholic identity.

Using factor analysis the researcher was able to identify which of the 10 variables influences Catholic identity or academic performance. By using factor analysis, the researcher was able to do more than identify if there was an interaction, between instructional leadership and Catholic identity or academic performance as whole, but to

what extent and to degree do each individual 10 regions impact Catholic identity and academic performance.

Sample Size Estimation

Power analysis using the software program G*Power guided the sample size requirements for this study (Faul, Erdfelder, Buchner, & Lang, 2009) to confirm whether 34 schools was an adequate sample of the 58 Mid-Atlantic Catholic elementary schools. The power analysis used an independent sample test where two groups will be compared following the completion of the data collection of the primary dependent variable: overall PIMRS score. The researcher postulates that the differences between the two groups means will correspond to a medium effect size (0.3) in exceeding Cohen's (1992) recommendation of differences between cell means. An effect size is the smallest immediate effect that is clinically meaningful in the target population for the outcome measure of interest. In this case, the overall PIMRS score. Power will be set at 0.95, meaning there would be an 95% probability of reaching statistical significance if there is a difference between the two groups' mean scores.

Table 10: Sample Size Estimation

Analysis: A priori: Compute required sample size			
Input:	Tail(s)	=	One
	Effect size $ \rho $	=	0.3
	α err prob	=	0.05
	Power (1- β err prob)	=	0.95
Output:	Noncentrality parameter δ	=	3.3133098
	Critical t	=	1.6589535
	Df	=	109
	Total sample size	=	111
	Actual power	=	0.9503016

For this study, with an effect size of 0.30, to achieve a power of 0.95 at a significance level of $\alpha = 0.05$, a total of 34 schools represents 60 percent of the

population with minimum of 600 principals and teachers used to eliminate or substantially reduce the chance of sampling error. Given the sample size of 111 (see table 10), the sample of 34 and 600 principals and teachers is enough to meet the minimum sample size assuming a response rate of 20% or 120 responses.

Rationale: Using calculated probabilities

How to determine sample size to reduce the risk level of *sampling error* became an issue in designing this study. In an attempt to address this issue, the researcher used a backward design approach to select a targeted sample size of 34.

Site description

The researcher collected demographic and assessment data from 34 Mid-Atlantic Catholic elementary schools that were in operation from school year 2003-04 to school year 2010-11. The data collection occurred after approval from the Drexel University Institutional Review Board had approved the dissertation. The data resides on a database, which the researcher has already been granted access by the diocese. As per tradition, a Catholic elementary school serves students in grades kindergarten (or prekindergarten) to grade eight.

Site access

The Superintendent of Catholic Schools and the Drexel University Institution Review Board has given written permission for the study. Furthermore, the researcher obtained permission from each participating principal.

Research Design and Rationale

The research consisted of two stages:

1. Quantitative

2. Qualitative

The quantitative stage of the research consisted of 15 Catholic elementary schools that were part of the randomly selected sample. Initially, the researcher designed the quantitative stage of the study to use regression analysis, however after conducting a pilot study, the data did not meet all of the assumptions of the regression analysis:

1. The dependent variable has a linear relationship to the independent variable
2. The probability distribution for the dependent variable has the same standard deviation for each value of the independent variable
3. The dependent variables are both random and roughly normally distributed

In the pilot study the researcher used regression analysis to generate scatterplots to ensure that the dependent variable is random, and histograms to ensure that there is a normal distribution within each dependent variable. Ideally, the researcher would have used regression analysis to compare the results on 10 components of instructional leadership (as measured by the PIMRS) and the result of the archdiocesan growth model. However, doing so was impossible because the independent variable would have been the same for each response. Since only one school participated in the pilot, it was not possible to compare the responses on the PIMRS and the growth model. For example, to determine the constant (B_1) in linear regression the equation is:

Equation 2 Linear Regression Constant

$$B_1 = \frac{\sum(X - \bar{X})(Y - \bar{Y})}{\sum(X - \bar{X})^2}$$

In this equation, X is equal to the independent and Y the dependent variable. If X were to equal zero, this would create an illegal mathematical function (division by a 0).

Therefore, the pilot study tested the three regression assumptions on Catholic identity (independent variable) and the ten regions of the PIMRS (dependent variable).

After running data analysis for the pilot study, it became clear that regression analysis would not be an appropriate statistical tool. In place of regression analysis, the research used factor analysis in the full study. The greatest challenge employing regression analysis is the inability to clearly define the variables as independent and dependent, as well as the ability to control for “unseen factors.”

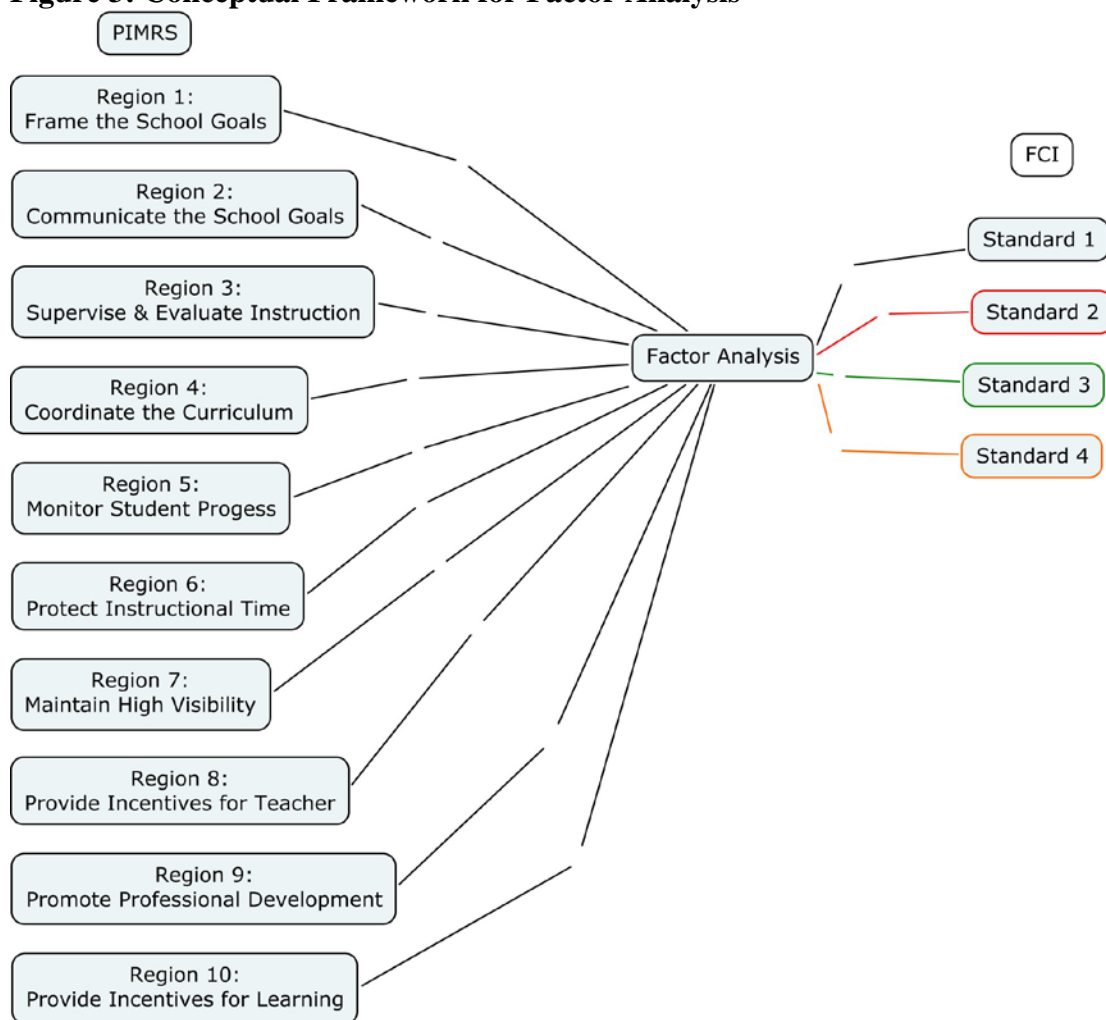
Factor analysis allowed the researcher to discover if there is a pattern in the strength of the FCI compared to the ten individual “regions” of the PIMRS. While regression would provide evidence that the FCI would predict outcomes on the PIMRS it proved to be ill-suited for the research. The reason factor analysis fits the research better is

- A) Regression analysis could not completely test the methodology (due to the division by 0 error)
- B) The researcher is not able to isolate potential “unseen factors,” such as respondent’s religious views, degree of agreement with Catholic teaching, etc., all of which could have a significant impact on how a person might respond

Since the design of factor analysis is to “discover simple patterns in the pattern of relationships among variables” and “discover if the observed variables can be explained largely or entirely in terms of a much smaller number of variables called factors,” it is ideal (Darlington, N.D.).

For the purpose of the research, the researcher analyzed the overall results of the FCI, as one factor, using the Statistical Package for Social Science (SPSS) software's factor analysis function to identify any patterns between the strength of Catholic identity and the strength of instructional leadership on the PIMRS (see figure 3: Conceptual Framework for Factor Analysis).

Figure 3: Conceptual Framework for Factor Analysis



For the qualitative stage, the researcher interviewed three teachers and the principal of one sample school, selected using a convenience sampling. The researcher derived the interview questions from the pilot school, where the principal and the teachers were able to provide significant feedback about the instrument tools, the

hypothesis of the dissertation, and help develop questions for the quantitative research component of the dissertation. The interviews provided the researcher with the practitioner insights and helped to provide context to the overall dissertation.

Research Methods

In stage one, the researcher used IBM's statistical software package, SPSS, to conduct a random sample to select schools to participate in the PIMRS and FCI. The researcher assigned random numbers to each of the 58 Mid-Atlantic Catholic schools and used the random sample function to select 34 schools. Upon selecting the random sample, the researcher invited individual schools to participate in the research by completing the PIMRS and FCI. Invited schools participated in both the PIMRS and FCI and one school participated in one-on-one interviews with the researcher.

Stages of Data Collection

There were two stages of data collection. The first stage was the quantitative stage where the researcher used SPSS to conduct a random sample to select schools to participate in the PIMRS and FCI.

For the qualitative stage, the researcher used a convenience sampling method to interview the principal and three teachers to delve deeper into the hypothesis and to ensure that the surveys were clear and easy to understand.

Instrument Description

The Consortium of Catholic Universities developed the FCI to measure Catholic school effectiveness through four pillars:

1. Governance
2. Finance

3. Education

4. Catholic Identity

For the purpose of this research, the researcher is focusing solely on the rubric developed for Catholic identity. The researcher selected the rubric for two reasons: first, the rubric represents the collective work on identifying effective practices for Catholic schools, and second, the host dioceses incorporate the rubric in the accreditation process for the Catholic schools.

The FCI is an assessment developed by a consortium of Catholic Universities and is part of the AdvancedEd accreditation process (an accreditation system for K-12 elementary schools), designed to measure key attributes of Catholic identity in a Catholic school. The FCI consist of four standards (The Catholic School Standards Project, 2011):

Standard 1: An excellent Catholic school is guided and driven by a clearly communicated mission that includes a commitment to Catholic identity rooted in Gospel values, faith formation, academic excellence, and service.

Standard 2: An excellent Catholic school adhering to mission provides a rigorous academic program for religious studies and catechesis in the Catholic faith, set within a total academic curriculum that integrates faith, culture, and life.

Standard 3: An excellent Catholic school adhering to mission provides opportunities outside the classroom for student faith formation and action in service of social justice.

Standard 4: An excellent Catholic school adhering to mission provides opportunities for adult faith formation and action in service of social justice.

Based on the four standards, the researcher will create a four-point rubric for teachers and principals to rate their school and measure its strength of Catholic identity.

The author of the PIMRS, Phillip Hallinger, Ph.D., designed the instrument to measure the level of instructional leadership in principals in elementary, middle/junior

high, and high schools. The PIMRS measures three dimensions of instructional leadership and ten instructional leadership regions (Hallinger, 2008):

1. Defining school mission
 - a. Frames the school's goals
 - b. Communicates the school's goals
2. Managing the instructional program
 - a. Coordinates the curriculum
 - b. Supervises and evaluates instruction
 - c. Monitors student progress
3. Developing school learning climate
 - a. Protects instructional time
 - b. Provides incentives for teachers
 - c. Provides incentives for learning
 - d. Promotes professional development
 - e. Maintains high visibility

Dr. Hallinger designed the PIMRS in the early 1980's in response to the growing interest in instructional leadership in principals and the "lack of valid and reliable instrumentation for exploring the role empirically" (Hallinger, 2008). Since the inception of the PIMRS, it has become the most widely used instructional leadership survey in PK-12 education (Hallinger, 2008) and is the reason the researcher selected the instrument for this dissertation.

Description of Each Method(s) Used

Based on the pilot study, the researcher employed factor analysis to assess the relationship between the 10 regions of the PIMRS and the FCI to the result of the diocesan growth model. Factor analysis was used because factor analysis allows the researcher to statistically identify the interaction between each of the 10 regions of the PIMRS compared to the FCI and results of the diocesan growth model. This is important because there is no one single result from the PIMRS, and the different regions may affect student academic outcome differently than other regions. Finally, how the 10 regions interact with the result of the FCI may also vary across the different regions of the PIMRS. By using factor analysis, the researcher is able to identify these unique and specific interactions so that the results are more robust and useful for Catholic school administrators. Therefore:

- The Null hypothesis states the growth score rating is independent of the level of instructional leadership and strength of Catholic identity in the school is independent on the level of instructional leadership.
- The Alternative hypothesis states the growth score rating is dependent on the level of instructional leadership and strength of instruction leadership in the school is dependent on Catholic identity.

For the qualitative portion of the dissertation, the researcher used a grounded theory approach and interviewed a principal and a convenience sample of teachers. The researcher asked teachers to volunteer to participate in the qualitative portion and used questions developed during the pilot study (Appendix F).

Instrument Description

The study used two instruments, the PIMRS and FCI. The PIMRS is a statistically valid principal leadership instrument designed by Dr. Phillip Hallinger to assess principals in “three dimensions of the instructional leadership construct: Defining the School’s Mission, Managing the Instructional Program, and Promoting a Positive School Learning Climate” (Hallinger & Murphy, 1985). The PIMRS is a behaviorally anchored rating scale aligned with “statements of critical job related behaviors on which raters can base their appraisal of an individual’s performance within a given dimension of a job” (Hallinger, N.D.). The PIMRS uses a Likert scale to measure 10 critical job areas (Hallinger, N.D., p. 2-4):

1. Framing the School’s Goals
2. Communicating the School’s Goals
3. Supervision and Evaluation of Instruction
4. Curricular Coordination
5. Monitoring Student Progress
6. Protecting Instructional Time
7. Visibility
8. Incentives to Improve Teaching
9. Promoting Instructional Improvement and Professional Development
10. Providing Incentives for Learning

Principals and teachers selected to participate took the PIMRS.

The FCI is an assessment developed by a consortium of Catholic Universities and part of the AdvancedEd accreditation process (an accreditation system for K-12

elementary schools), designed to measure key attributes of Catholic Identity in a Catholic school. The FCI consist of four standards (The Catholic School Standards Project, 2011, p. 7:

Standard 1: An excellent Catholic school is guided and driven by a clearly communicated mission that includes a commitment to Catholic identity rooted in Gospel values, faith formation, academic excellence, and service.

Standard 2: An excellent Catholic school adhering to mission provides a rigorous academic program for religious studies and catechesis in the Catholic faith, set within a total academic curriculum that integrates faith, culture, and life.

Standard 3: An excellent Catholic school adhering to mission provides opportunities outside the classroom for student faith formation and action in service of social justice.

Standard 4: An excellent Catholic school adhering to mission provides opportunities for adult faith formation and action in service of social justice.

Based on the four standards, the researcher created a four-point rubric for teachers and principals to rate their school and measure the strength of Catholic identity.

Participant selection, Identification and Invitation

The researcher selected participants from Catholic elementary schools in a Catholic Diocese in the Mid-Atlantic region. The researcher used SPSS to randomly select schools. In addition, the researcher selected one school to participate in interviews.

Data Collection

The researcher collected data using proprietary existing data from the Mid-Atlantic Catholic schools database (see appendix E). The initial data came from principals and teachers selected to participate in the PIMRS and FCI. After completion of the PIMRS and FCI, the research used growth model data provided by the central office on the overall school level results to conduct factor analysis to identify relationship between the 10 regions of the PIMRS and the results of the diocesan growth model. The

growth model results are stored centrally, and accessing the data is part of the approval provided by the diocese (see appendix E). In addition, the researcher collected interviews from a randomly selected school.

Data Analysis

In order to conduct the data analysis, the researcher used the results of the Mid-Atlantic Catholic school's value added growth model. To report the results of the research, the researcher followed Creswell's (2008) four steps for reporting quantitative data:

- A) Summarize the major results
- B) Explain why the results occurred
- C) Advance limitations
- D) Suggest future research (p. 207).

Each of the four steps allowed the researcher to present the results of the statistical analysis, the hypothesis testing, and the conclusions resulting from the dissertation.

More specifically, the research will result in further understanding the role of instructional leadership in improving student academic outcomes, particularly in the context of Catholic education, and clarification in how principals in Catholic elementary schools can be effective. If the data supports the researcher's hypothesis, the central office will have research validating the FCI as an effective tool for evaluating Catholic identity, and a model to implement the instrument. In addition, the research will help differentiate Catholic schools from charter and public schools for parents, education reformers, and policy makers. Furthermore, the research will provide practical research

for education reformers looking to expand site-based leadership models to charter and public schools.

Ethical Considerations

In order to protect the identity of the schools and to ensure cooperation, the researcher provided all participating schools with pseudonyms to protect their identity. Once the analysis and interviews were complete, the researcher permanently destroyed documents containing the “key” identifying each pseudonym to prevent any possible identification. In addition, the researcher did not use, publish, or discuss student names in any part of the dissertation. In addition to pseudonyms for schools, participating principals and teachers also received pseudonyms as well. The goal of the research is to identify best practices and to provide principals with guidelines and research to help improve their practice.

As with any research, the dissertation received Institutional Review Board (IRB) approval. The researcher conducted the research in such a way that protects the rights of the participants, that ensures the benefits outweigh the risks, and that there is equitable distribution of both risk and benefits. However, as with all research, there are areas of concern, in terms of meeting the expressed and applied norms set forth by IRB.

Respect of persons

Respect for persons requires an informed consent of all participants and in the case of minors, the consent of their legal guardians or parents. The researcher asked principals and teachers that participated in the leadership management survey or the interview to sign a consent form. Schools that did not have proper consent were excluded from the research. The researcher did not seek parental permission to use student test

scores for stage one of the research. The reason the researcher did not seek consent from parents is two-fold. First, the research employees historical test data, which cannot adversely affect students. Second, end of year summative data is diagnostic and, therefore, the sole purpose of the data is to assess student performance as measured against a national norm group. In addition, since the diocese requires end of year summative assessment of all students in grades two through eight, there is no isolation of vulnerable populations or populations overly precluded or included in the assessment. Therefore, there is little to no risk to any student participant in the research nor need for consent.

Beneficence

The end of year assessment was not used to rank students, teachers, or principals outside of categorizing aggregate data by school, and the researcher provided all assurances to the school to ensure that the researcher kept records confidential. The research will provide a benefit to the schools by establishing links between school effectiveness via a growth model and effective instructional practices. In short, upon the conclusion of the research, the Mid-Atlantic Catholic schools, charter and public schools will benefit by having access to usable research to improve instruction and inform how best to implement site-based leadership models.

Justice

In terms of the Catholic perspective, which must be the guiding force of this research, ensuring justice for participants is of primary concern. The researcher neither isolated nor excluded any one school, ethnic group, or demographic background from the research. In addition, the researcher provided no group privilege or benefit from the study

over another group. The overall intent is to identify leadership practices that the research deemed most effective in improving student academic outcomes to ensure that all students are participating in an academic program that promotes the student's academic progress no matter their background—in essence, ensuring justice.

Chapter 4: Findings from the Data

Introduction

Based on the analysis of the research on instructional and transformational leadership and Catholic schools, the researcher developed a hypothesis based on the evidence in the literature that unlike traditional public schools, which exhibit instructional leadership, and charter schools, which exhibit transformational leadership, Catholic schools exhibit traits from both types of leadership. This led to the hypothesis that there is something different and unique about Catholic schools that separates them from both traditional and charter schools. Indeed, the primary difference, of course, is their Catholic identity. Thus, the researcher postulates that the presence of Catholic identity acts as a form of transformational leadership, allowing the principal to focus on instructional leadership.

The purpose of the research is to determine the relationship between instructional leadership and the diocesan growth model, the relationship between instructional leadership and Catholic identity, to what degree do principals and teachers view themselves as responsible for Catholic identity and the culture of the school in general. The relationship between instructional leadership and academics (via diocesan growth model) and Catholic identity are quantitative questions and were determined using factor analysis. These findings were followed up and supported using comparative grounded theory method, where the researcher interviewed a principal and teachers to identify themes on their thoughts and beliefs about their role in developing Catholic identity and culture, and Catholic identity's role in supporting the academic mission of the school.

In order to accomplish the research, the researcher established the following four research questions:

1. The researcher hypothesizes there is a direct positive relationship between instructional leadership behaviors of principals in Catholic elementary schools based on the school ratings on the diocesan growth model for Mid-Atlantic Catholic schools.

H_0 : There is no direct positive relationship between instructional leadership behaviors of principals in Catholic elementary schools based on the school ratings on the diocesan growth model for Mid-Atlantic Catholic schools.

2. The researcher hypothesizes there is a direct positive relationship between the strength of Catholic identity in a Catholic elementary school and the level of instructional leadership behaviors practiced by the principal.

H_0 : There is a no direct positive relationship between the strength of Catholic identity in a Catholic elementary school and the level of instructional leadership behaviors practiced by the principal.

3. What perceptions do Mid-Atlantic Catholic school principals and teachers have in regards to their responsibility for developing Catholic identity?

Findings

Quantitative Participants.

The population for the study represented 58 schools in a Catholic diocese in the United States of America. The population schools are elementary schools that serve students in early learning grades (pre-kindergarten or Kindergarten) to grade eight.

Schools were located in three distinct regions, urban, suburban, and rural and served an economically and ethnically diverse population. The diocese was an ideal diocese to use because of the heterogeneous population, allowing the findings to be replicable regions across the country.

The total population consisted of 58 Catholic elementary schools serving over 15,000 students, approximately 2,000 teachers, and 58 principals. From this population the researcher selected a sample of 34 schools using a cluster sampling methodology (based on the four distinct regions of the diocese) resulting in 566 teachers and 34 principals (total sample size of 600). As with any study utilizing a voluntary sample, not every person selected in the sample participated. As reflected in Table 11, region C had more respondents than any other region, this was despite using a cluster sampling methodology that weighted each region by the total number of schools in the population. In this particular diocese, Region B had the largest number of schools in both the population and sample. Over representation of some regions occurred despite efforts to keep the respondents in alignment with their overall representation in the population (in particular region C). Of the 34 schools, 15 schools participated (44%) with 119 participants, of which 104 were teachers and 15 were principals (see table 12).

Table 11: Percent of Respondents by Region

Name	Percent
A	12%
B	20%
C	50%
D	18%
Grand Total	100%

Table 12: # of Respondents by Position Type

School	Teacher	Principal	Total
Gregory XIII	10	1	11
Marcellus II	6	1	7
St. Agatho	6	1	7
St. Boniface I	12	1	13
St. Cornelius	14	1	15
St. Crispus	2	1	3
St. Damasus I	8	1	9
St. Leo I	5	1	6
St. Linus	1	1	2
St. Lucius I	8	1	9
St. Monica	2	1	3
St. Peter Claver	7	1	8
St. Soter	3	1	4
St. Sylvester I	6	1	7
Theodore I	14	1	15
Grand Total	104	15	119

The majority of respondents were female (80%) and Caucasian (76%) (Refer to tables 13 and 14 respectively). The general over representation of female and Caucasian respondents does reflect their same over representation in the population as a whole (Refer to tables 2 and 3 respectively). Therefore, the researcher does not believe this over representation will negatively impact the findings.

Table 13: Percent of Respondents by Gender

School	Female	Male	No Response
Gregory XIII	73%	27%	0%
Marcellus II	100%	0%	0%
St. Agatho	100%	0%	0%
St. Boniface I	62%	15%	23%
St. Cornelius	73%	0%	27%
St. Crispus	33%	67%	0%
St. Damasus I	89%	11%	0%
St. Leo I	100%	0%	0%
St. Linus	100%	0%	0%
St. Lucius I	78%	22%	0%
St. Monica	100%	0%	0%
St. Peter Claver	88%	13%	0%
St. Soter	75%	25%	0%
St. Sylvester I	57%	29%	14%
Theodore I	87%	13%	0%
Grand Total	80%	13%	7%

Table 14: Percent of Respondents by Ethnicity

School	African American	Asian	Caucasian	Hispanic	Native American	No Response
Gregory XIII	9%	0%	91%	0%	0%	0%
Marcellus II	14%	0%	86%	0%	0%	0%
St. Agatho	14%	0%	71%	14%	0%	0%
St. Boniface I	8%	0%	77%	0%	0%	15%
St. Cornelius	6%	0%	75%	0%	6%	13%
St. Crispus	67%	0%	0%	0%	0%	33%
St. Damasus I	33%	0%	67%	0%	0%	0%
St. Leo I	0%	0%	67%	0%	0%	33%
St. Linus	0%	0%	100%	0%	0%	0%
St. Lucius I	44%	0%	56%	0%	0%	0%
St. Monica	0%	0%	100%	0%	0%	0%
St. Peter Claver	0%	0%	100%	0%	0%	0%
St. Soter	0%	0%	100%	0%	0%	0%
St. Sylvester I	0%	0%	67%	0%	0%	33%
Theodore I	0%	13%	80%	7%	0%	0%
Grand Total	12%	2%	76%	2%	1%	8%

Table 15: Percent of Respondents by Years at Sample School

School	1 Year	2-4 Years	5-9 Years	10-15 Years	More than 15 Years
Gregory XIII	0%	55%	45%	0%	0%
Marcellus II	100%	0%	0%	0%	0%
St. Agatho	0%	0%	86%	14%	0%
St. Boniface I	31%	69%	0%	0%	0%
St. Cornelius	13%	13%	73%	0%	0%
St. Crispus	67%	0%	0%	33%	0%
St. Damasus I	11%	22%	44%	22%	0%
St. Leo I	0%	83%	0%	17%	0%
St. Linus	0%	100%	0%	0%	0%
St. Lucius I	11%	78%	11%	0%	0%
St. Monica	0%	33%	33%	0%	33%
St. Peter Claver	13%	38%	50%	0%	0%
St. Soter	100%	0%	0%	0%	0%
St. Sylvester I	0%	14%	71%	14%	0%
Theodore I	27%	73%	0%	0%	0%
Grand Total	22%	41%	31%	5%	1%

One of the more interesting findings was the years of experience principals and teachers have in their sample school. The vast majority of respondents (72%) had either 2-4 or 5-9 years of experience with the respondents with 15 or more years the smallest (1%) group (Refer to table 15). Due to lack of data from the diocese, years of experience data is not available for principals and teachers in the population, so there is no way to know if this is reflective of the overall population.

However, based on data collected from the population and sample, the respondents reflected the same level of diversity of the type of schools (rural, suburban, and urban), as well as the diversity of the principal and teacher population, allowing the researcher to have access to a sample population that is truly representative of the diocese as a whole.

Instrument.

The study consisted of two instruments, the FCI and the PIMRS. The researcher selected the FCI and PIMRS for two different reasons. The researcher selected the FCI because the Catholic Higher Education Collaborative (CHEC) developed it and the host diocese incorporates the rubric in the accreditation process for the Catholic schools. The researcher selected the PIMRS because it is one of the most widely used instructional leadership surveys in use and has tested validity and reliability (Hallinger, 2008).

Catholic identity is not an easy concept to measure and there are differing opinions on how to or whether one can measure it. However, Catholic identity clearly plays an important role in Catholic schools, as it is the one factor that truly separates Catholic education from all other types of K-12 schools. As noted in the literature review, like traditional public and charter schools, Catholic schools use a similar format of delivering instruction in organized class structure with an instructional leader (the principal) observing and managing teachers, who in turn observe and manage students (Dorner et al., 2011). To that end, the researcher looked for an independent instrument that was widely accepted as valid and capable of providing a single attribute of Catholic identity. Having a tool that can provide some measure of Catholic identity is important beyond the purpose of testing the hypothesis of the research. As the one single unique factor of Catholic schools, Catholic identity is the key to understanding the unique benefit of Catholic education. An additional benefit of selecting the FCI is that the diocese in which the research is conducted in, is incorporating the FCI into the accreditation process for their schools. Since the diocese is using the FCI as part of its accreditation process,

this provides further support for using the FCI, as the diocese has accepted this as an accurate and appropriate measure of Catholic identity.

CHEC developed the FCI to measure Catholic school effectiveness through four pillars:

1. Governance
2. Finance
3. Education
4. Catholic Identity

For the purpose of this research, the researcher is focusing solely on the rubric developed for Catholic identity. The FCI measures key attributes of Catholic identity in Catholic schools through four standards (The Catholic School Standards Project, 2011):

Standard 1: An excellent Catholic school is guided and driven by a clearly communicated mission that includes a commitment to Catholic identity rooted in Gospel values, faith formation, academic excellence, and service.

Standard 2: An excellent Catholic school adhering to mission provides a rigorous academic program for religious studies and catechesis in the Catholic faith, set within a total academic curriculum that integrates faith, culture, and life.

Standard 3: An excellent Catholic school adhering to mission provides opportunities outside the classroom for student faith formation and action in service of social justice.

Standard 4: An excellent Catholic school adhering to mission provides opportunities for adult faith formation and action in service of social justice.

Using the four standards, teachers and principals rated their school using a four-point rubric. The researcher averaged the results of the four-point rubric together and created one measure of the strength of Catholic identity for each school.

In addition to the FCI, the study also used the PIMRS. Unlike Catholic Identity, instructional leadership is more widely accepted as a measurable form of leadership in a

school (Goldring, Porter, Murphey, Elliott, & Cravens, 2009; Leithwood & Jantzi, 2008; Leithwood et al., 2010; Witziers et al., 2003). While the diocese does not have a recognized measure of instructional leadership (as it does with Catholic identity), the researcher selected the PIMRS because of its statistical validity and extensive use. The author of the PIMRS, Phillip Hallinger, Ph.D., designed the instrument to measure the level of instructional leadership in principals in elementary, middle/junior high, and high schools. The PIMRS measures three dimensions of instructional leadership and ten instructional leadership regions (Hallinger, 2008):

4. Defining school mission
 - a. Frames the school's goals
 - b. Communicates the school's goals
5. Managing the instructional program
 - a. Coordinates the curriculum
 - b. Supervises and evaluates instruction
 - c. Monitors student progress
6. Developing school learning climate
 - a. Protects instructional time
 - b. Provides incentives for teachers
 - c. Provides incentives for learning
 - d. Promotes professional development
 - e. Maintains high visibility

Dr. Hallinger designed the PIMRS in the early 1980's in response to the growing interest in instructional leadership in principals and the "lack of valid and reliable instrumentation

for exploring the role empirically” (Hallinger, 2008). Since the inception of the PIMRS, it has become the most widely used instructional leadership survey in PK-12 education (Hallinger, 2008) and is the reason the researcher selected the instrument for this dissertation.

Reliability Analysis of the Principal Instructional Measurement Rating Scale.

The principle concern for measuring the reliability for the study was for the PIMRS. Of the instruments, only the study used the PIMRS individual results, and therefore, the researcher only checked the internal consistency for the PIMRS. Using SPSS, the researcher ran reliability measure using the Cronbach’s alpha equation (equation 2).

Equation 3: Cronbach’s alpha Equation

$$\alpha = \frac{N \cdot \bar{c}}{v + (N - 1) \cdot \bar{c}}$$

Based on the results of the test for internal consistency, each region had a Cronbach’s alpha score of .73 or higher, which is above .7—the level generally accepted as the minimum level of internal consistency (Creswell, 2008). As table 16 illustrates, the Cronbach’s alpha scores suggest a high rate of internal consistency (Table 16).

Table 16: Cronbach's alpha for PIMRS

Region	Cronbach's Alpha
1. Frame the School Goals	0.899
2. Communicate The Schools Goals	0.788
3. Supervise and Evaluate Instruction	0.872
4. Coordinate the Curriculum	0.865
5. Monitor Student Progress	0.815
6. Protect Instructional Time	0.730
7. Maintain High Visibility	0.873
8. Provide Incentives for teachers	0.896
9. Promote Professional Development	0.886
10. Provide Incentives for learning	0.808

The Cronbach's alpha scores represent respondents who participated in the PIMRS. All ten regions of the PIMRS show a high level of internal reliability.

Interestingly, the two areas with the weakest scores, communicating the school goals and protecting instructional time, are areas that are most contentious in any school today—with the rise of accountability acting as a tax on principal/teacher time.

Dr. Hallinger, the author the PIMRS, provides the content validity for the PIMRS (Hallinger, N.D.). To determine content validity, Dr. Hallinger used

Four professionals familiar with the instructional management functions of school principals (three principals and one vice principal), who had not been involved in the generation of the job behaviors, were enlisted to assist in the content validation of the instrument. They were each given a randomly ordered list of the potential items and a sheet of paper with eleven columns headed by the names of the functional categories (e.g., framing the school's goals or monitoring student progress). They were then asked to assign each item to the category in which they felt the item belonged. If an item did not fit in any of the categories, it was left unassigned.

After this process was completed, eighty-one items remained within the eleven functional categories. These items were reviewed with the participating Superintendent and ten of the items were discarded in order to decrease the number of items in certain categories and the length of the questionnaire overall. The eleven categories and their assigned items, seventy-one in total, formed the rating instrument.

In terms of the FCI, CHEC determined the content validity. In terms of internal reliability, the average response on the FCI determined the level of Catholic identity, not individual responses, and the researcher did not determine the Cronbach's alpha. Please review appendix G for more detailed reliability data.

Procedures for conducting the factor analysis.

To conduct the factor analysis, the researcher used SPSS software and ran two sets of analysis. The first set of analysis compared the variables for Catholic identity to the ten regions of the PIMRS and the second set of analysis compared variables for

academic growth and the ten regions of the PIMRS. The reason the researcher conducted the analysis twice was to answer research questions 1 and 2 individually and to ensure that the variance from one did not affect the other. The charts and tables that will follow will present the findings first for Catholic identity followed by academic growth.

Assumptions of Factor Analysis.

Factor analysis, as with all inferential statistics, the data must conform to certain set of assumptions in order to interpret the results. To use factor analysis, the data needs to meet the following criteria:

1. The variables must be on the same scale, or converted to Z-scores
2. The determinant must not equal zero
3. Kaiser-Meyer-Olkin Measure of Sampling Adequacy is above .6
4. Bartlett's Test of Sphericity significance is equal to or less than $p \leq .05$

In order for SPSS to properly employ factor analysis, the data for all the variables must be on the same scale. All variables, Catholic identity, Growth, and the 10 regions of the PIMRS are on a numeric likert-type scale. However, Catholic identity and Growth range from one to four and the PIMRS ranges from one to five. Since the values for each are not on the same scale the researcher created a z score for each variable, allowing the data to fit the first assumption of factor analysis.

The next assumption is that the determinant, as determined by SPSS, is not equal to zero. One can deduce that the matrix is unique when the determinant is a non-zero (Edmonds, 1967), meaning the matrix created by SPSS is different enough to uniquely identify potential factors from the data. For the study, this is important, because the research is attempting to identify the unique role of Catholic identity and instructional

leadership in supporting academic achievement in Catholic schools. If the determinant were to equal zero, then the variables would be indistinguishable and therefore have no unique impact. As noted in table 17, the determinant is not equal to zero.

Table 17: Determinant for the Correlation Matrix

Correlation Matrix
0.001*

*The correlation matrix for both Catholic identity and growth were equal to 0.001

The Kaiser-Meyer-Olkin (KMO) test determines the “appropriateness of factor analysis,” and researchers typically accept a value of .5 or above (Dziuban & Shirkey, 1974). The closer to 1, the stronger the measure of adequacy and in this particular case, the KMO is equal to .911 and .899 for Catholic identity and academic growth respectively (Table 18). In addition to KMO, Bartlett’s Test of Sphericity “tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 and all off diagonal elements are 0” (UCLA, 2012). As table 18 indicates, the significance is high with $p \leq .05$ for both Catholic identity and academic growth. Having met both KMO and Bartlett’s Test of Sphericity, the data meets all four assumptions of factor analysis.

Table 18: KMO and Bartlett's Test of Sphericity

Catholic Identity		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.911
Bartlett's Test of Sphericity	Approx. Chi-Square	772.420
	df	55
	Sig.	.000

Academic Growth		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.899
Bartlett's Test of Sphericity	Approx. Chi-Square	778.139
	df	55
	Sig.	.000

After testing for the assumptions of factor analysis, the next steps are to explore the outcomes of factor analysis itself. The first output to consider in factor analysis is communalities. Communalities identify the “proportion of each variable's variance that can be explained by the factors (e.g., the underlying latent continua)” (UCLA, 2012). In table 19 we see that the initial output, which identifies the combined squared multiple correlation of all other variables (i.e., the regression of Catholic identity and all ten regions of the PIMRS on Growth) compared to one variable, shows that there is a strong correlation—a value of one. The extraction is also strong for all variables with a value of .5 or higher for every region except region six (protecting instructional time).

Table 19: Communalities

Catholic Identity			Growth		
	Initial	Extraction		Initial	Extraction
Zscore(CI)	1.000	.867	Zscore(Growth)	1.000	.888
Zscore: Region 1	1.000	.706	Zscore: Region 1	1.000	.707
Zscore: Region 2	1.000	.720	Zscore: Region 2	1.000	.733
Zscore: Region 3	1.000	.646	Zscore: Region 3	1.000	.643
Zscore: Region 4	1.000	.717	Zscore: Region 4	1.000	.687
Zscore: Region 5	1.000	.718	Zscore: Region 5	1.000	.748
Zscore: Region 6	1.000	.447	Zscore: Region 6	1.000	.418
Zscore: Region 7	1.000	.542	Zscore: Region 7	1.000	.512
Zscore: Region 8	1.000	.637	Zscore: Region 8	1.000	.653
Zscore: Region 9	1.000	.584	Zscore: Region 9	1.000	.602
Zscore: Region 10	1.000	.647	Zscore: Region 10	1.000	.637

Extraction Method: Principal
Component Analysis.

Extraction Method: Principal
Component Analysis.

In the initial data, there were twelve factors (Growth, Catholic identity, and the 10 PIMRS regions). SPSS identified two unique factors for both sets of analysis using factor analysis. In the first run of factor analysis, the first two factors explain 66% of the total variance with each subsequent factor explaining less and less of the overall variance (Table 20). Additionally, in the second run of the factor analysis, the first two factors explain 66% of the total variance, too (Table 20). The scree plot (figure 4) provides further support for Table 20, demonstrating the two components with high Eigenvalues, and a dramatic drop off after the second component in both runs of the factor analysis. In factor analysis, it is necessary to report Eigenvalues because Eigenvalues “measures the variance in all the variables which is accounted for by that factor” (Garson, 2012). They are calculated and used in deciding how many factors to extract in the overall factor analysis.

Table 20: Total Variance Explained

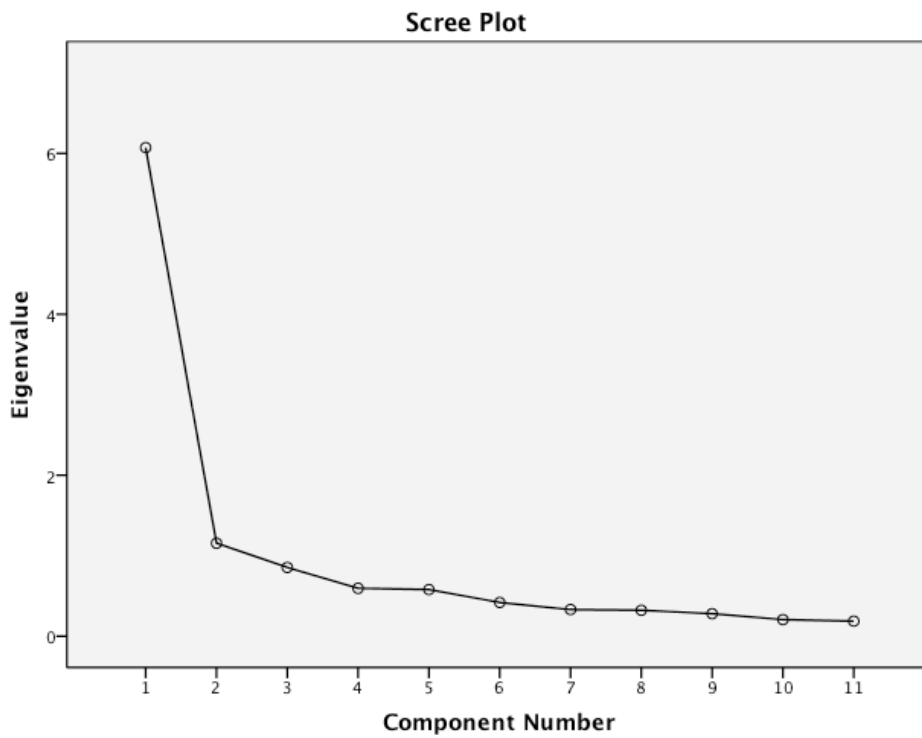
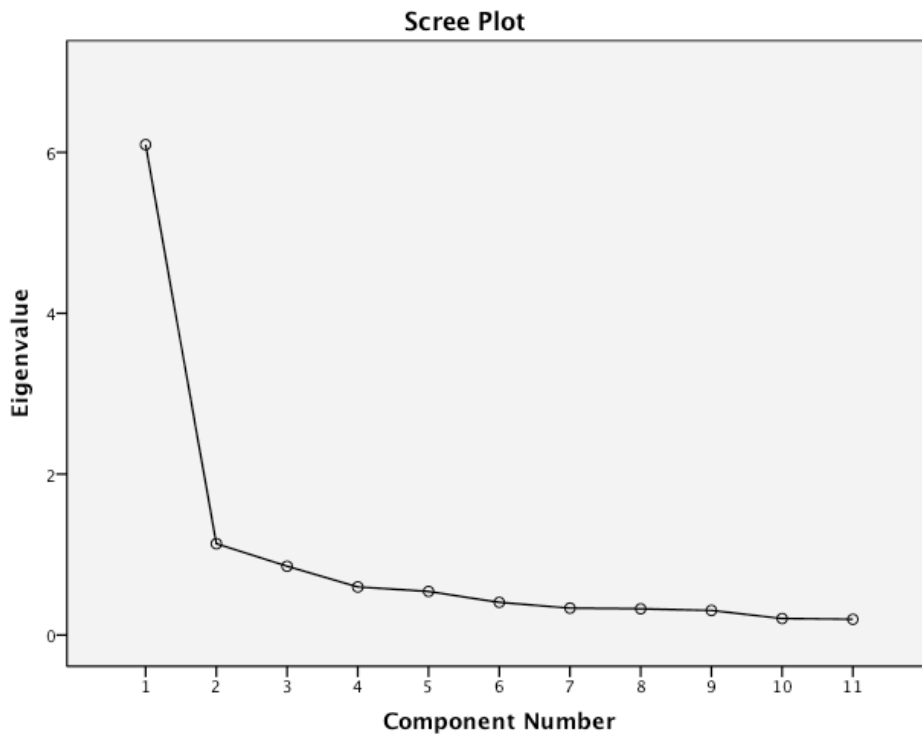
Catholic Identity									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.096	55.419	55.419	6.096	55.419	55.419	5.894	53.585	53.585
2	1.135	10.321	65.740	1.135	10.321	65.740	1.337	12.155	65.740
3	.855	7.776	73.516						
4	.598	5.435	78.951						
5	.542	4.930	83.881						
6	.406	3.691	87.572						
7	.334	3.039	90.611						
8	.327	2.969	93.580						
9	.305	2.777	96.357						
10	.205	1.865	98.222						
11	.196	1.778	100.000						

Extraction Method: Principal Component Analysis.

Academic Growth

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.072	55.197	55.197	6.072	55.197	55.197	6.057	55.064	55.064
2	1.156	10.506	65.703	1.156	10.506	65.703	1.170	10.638	65.703
3	.854	7.768	73.471						
4	.595	5.409	78.880						
5	.579	5.265	84.145						
6	.419	3.811	87.956						
7	.330	3.004	90.960						
8	.322	2.929	93.890						
9	.280	2.542	96.432						
10	.206	1.872	98.304						
11	.187	1.696	100.000						

Extraction Method: Principal Component Analysis.

Figure 4: Scree Plot

In addition to the Eigenvalues, the factor matrix also provides important information on how each of the variables interacts with the two factors that are significant. Table 21 provides correlations for each variable compared to the two factors individually.

Table 21: Factor Matrix

Catholic Identity Component Matrix^a			Academic Growth Component Matrix^a		
	Component			Component	
	1	2		1	2
Zscore(CI)		.914	Zscore(Growth)		.940
Zscore: Region 1	.812		Zscore: Region 1	.808	
Zscore: Region 2	.845		Zscore: Region 2	.844	
Zscore: Region 3	.797		Zscore: Region 3	.794	
Zscore: Region 4	.825		Zscore: Region 4	.821	
Zscore: Region 5	.846		Zscore: Region 5	.844	
Zscore: Region 6	.624		Zscore: Region 6	.629	
Zscore: Region 7	.694		Zscore: Region 7	.697	
Zscore: Region 8	.794		Zscore: Region 8	.796	
Zscore: Region 9	.746		Zscore: Region 9	.750	
Zscore: Region 10	.775		Zscore: Region 10	.780	

Extraction Method: Principal
Component Analysis.

a. 2 components extracted.

Extraction Method: Principal
Component Analysis.

a. 2 components extracted.

Overall Factor Analysis Findings

Table 20 identifies two factors for both the Catholic identity and academic growth. In both cases, factor one consists solely of instructional leadership regions, and labeled as “Instructional Leadership.” Factor two consists of either Catholic identity or academic growth. Since both are elements of the school, the researcher labeled the second factor as “School Elements.” Since the Catholic identity ranking and academic

growth are each part of a different factor than the PIMRS, the data suggest that perhaps there is not a direct connection between instructional leadership and either Catholic identity or academic growth. By being in different factors, the variance Catholic identity and academic growth explains is separate from the variance the PIMRS explains.

Research question 1.

The researcher hypothesizes there is a direct positive relationship between instructional leadership behaviors of principals in Catholic elementary schools based on the school ratings on the diocesan growth model for Mid-Atlantic Catholic schools.

H_0 : There is no direct positive relationship between instructional leadership behaviors of principals in Catholic elementary schools based on the school ratings on the diocesan growth model for Mid-Atlantic Catholic schools.

The purpose of factor analysis is to identify any relationship that may exist between variables that may not seem connected at first (UCLA, 2012). As table 19 (academic growth) demonstrates that extraction is .89, which is relatively high value and provides evidence that academic growth explains 89% of variance in the other variables. This data provides evidence there is a connection between instructional leadership and growth. However, the factor matrix (table 21) demonstrates that academic growth only explains the variance for School Elements. That is, academic growth is interacting with an “unseen” variable, which does not have a relationship with the ten regions of the PIMRS. As described in chapter 5, this is a surprising finding since much of the research presented in chapter II finds a direct connection between instructional leadership and

academic performance.

Reproduction of Table 21, with emphasis added (highlighted in yellow)

**Academic Growth
Component Matrix^a**

	Component	
	1	2
Zscore(Growth)		.940
Zscore: Region 1	.808	
Zscore: Region 2	.844	
Zscore: Region 3	.794	
Zscore: Region 4	.821	
Zscore: Region 5	.844	
Zscore: Region 6	.629	
Zscore: Region 7	.697	
Zscore: Region 8	.796	
Zscore: Region 9	.750	
Zscore: Region 10	.780	

Extraction Method: Principal
Component Analysis.

a. 2 components extracted.

While there is a strong correlation with factor two, there is no such correlation with factor one. Therefore, there is not enough evidence to reject the null hypothesis. Appendix H supports this conclusion, in the correlation matrix table. These findings are further compounded by the fact that factor analysis found no significant ($> .5$) correlation in the correlation matrix (Refer to appendix H) .

Research question 2.

The researcher hypothesizes there is a direct positive relationship between the strength of Catholic identity in a Catholic elementary school and the level of instructional leadership behaviors practiced by the principal.

H_0 : There is a no direct positive relationship between the strength of Catholic identity in a Catholic elementary school and the level of instructional leadership behaviors practiced by the principal.

As with the relationship between instructional leadership and academic growth, table 19 demonstrates that extraction is .87 (similar to the .89 for growth), which is relatively high value and provides evidence that Catholic identity explains 87% of variance in the other variables. However, as with academic growth the factor matrix (table 21) demonstrates that Catholic identity only explains the variance for School Elements. The School Elements variable is an unseen variable, which does not have a relationship with the ten regions of the PIMRS. Instead, the variance for School Elements is explained by Catholic identity and academic growth.

Reproduction of Table 21, with emphasis added (highlighted in yellow)

**Catholic Identity
Component Matrix^a**

	Component	
	1	2
Zscore(CI)		.914
Zscore: Region 1	.812	
Zscore: Region 2	.845	
Zscore: Region 3	.797	
Zscore: Region 4	.825	
Zscore: Region 5	.846	
Zscore: Region 6	.624	
Zscore: Region 7	.694	
Zscore: Region 8	.794	
Zscore: Region 9	.746	
Zscore: Region 10	.775	

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Qualitative Analysis.

Research question 3 is strictly qualitative in nature. Using Glaser and Strauss's grounded theory methodology, the researcher followed the substantive theory to focus on who Catholic school principals and teachers viewed as responsible for Catholic identity and whether or not Catholic identity is separate from any one person in the school, and rather a manifestation of the teachings of the greater Catholic Church.

To generate valid theory using the substantive theory, the researcher focused on collecting evidence, using questions (Appendix F) to provide the groundwork for identifying the attitudes and beliefs of Catholic school principals and teachers. For this study, the researcher selected one school, via a convenience sampling methodology, to participate in two sets of interviews. The first interview was with the principal, and the second interview was with three teachers. The researcher interviewed the teachers in a focus group format so that they could elaborate on each other's responses and provide evidence to generate theory. Through creating conceptual categories (which appear under each respective research question), the researcher was able to illustrate the concepts of each theory.

However, before one can truly use the grounded theory methodology to generate theory, there must be a true comparative study done, to illuminate findings. Due to the limited research available on instructional leadership in Catholic schools, the researcher used interview data from the pilot study to compare and contrast to the results of the study interview. In addition, the comparative study allowed the researcher to develop a much deeper theory using this comparative study and the evidence gleaned from the interview sets.

Qualitative Participants.

The participants for the qualitative portion of the study all participated in the quantitative portion as well (detailed output in Appendix I). There were two qualitative groups, the pilot and study group. The pilot group consisted of one principal and two teachers. All three pilot study participants were Caucasian and female with varying degrees of experience. The school employed all three participants in the pilot group for three years or more:

Pilot principal—Caucasian female principal in her first principalship since graduating from a master's program in education leadership. The principal served as a Catholic schoolteacher for seven years before becoming a principal. The principal has served in this position for three years.

Pilot teacher 1—Caucasian female middle school teacher, with an emphasis on science instruction. Taught in Catholic education for eight years, including three years in the current school. Prior to teaching in the teacher's current school, she taught in South America, Los Angeles, and Minneapolis (all in Catholic schools) as part of a Catholic Service and outreach organizations. In addition to the eight years in Catholic education, the middle school teacher taught two years in public schools in Minneapolis, as well. Pilot teacher 1 is certified to teach science with a middle school endorsement.

Pilot teacher 2—Caucasian female elementary school teacher. Taught only in Catholic schools for five years, four of which are in the current school. Pilot teacher 2 is a certified teacher and beginning a master's program in education

The study group was much different from the pilot group. The participants were all Caucasian, but the principal was male and the experience ranged from a first year middle school religious teacher to a 10-year technology veteran teacher. What made this group so interesting is the principal is not going to return at the end of the school year. Having accepted another position in a Catholic school, the school was an ideal selection since both question 3 test the theory that Catholic identity is independent from the principal, and this offered an opportunity to speak to people who were about to test the theory in action. There was no relation between the selection of the school and the fact the principal was leaving at the end of the school year, but it proved to be a significant benefit.

Study principal—Caucasian male in his third year as principal, which is his first principalship. The principal is in his final year of his Ph.D. in Catholic education leadership and upon conclusion of the school year will be leaving to accept a principal position in another Catholic school outside of the diocese.

Study teacher 1—Caucasian female with 10 years of teaching experience, all in one school. Study teacher 1 teaches technology for grade kindergarten to 8. Technology is the only subject she has taught in her 10 years. In addition to certification in elementary instruction, study teacher 1 also holds a master's degree in instructional technology.

Study teacher 2—Caucasian female with one year of teaching experience. Study teacher 2 is in the process of receiving her certification in history with a middle school endorsement. Study teacher 2 does hold a master's in theology from a prominent Catholic university and regularly leads student youth groups and camps focused on the Catholic faith.

Study teacher 3—Caucasian female kindergarten teacher with a certification in early learning instruction has taught for six years. Study teacher 3 has only taught for three years in the current school.

The responses from both the pilot and study school generate four key themes:

Sense of Community

Sense of Foundation

Integration of Faith

Strong Behavior/Academic Expectations

The four themes appeared consistent in both the pilot and study schools. From these four themes, a general theory began develop where the principals and teachers repeatedly spoke of the role of Catholic identity as if it were an entity itself and that Catholic identity seems to stretch beyond the classroom and individual subjects. From this theory, we can answer the research question 3.

Research question 3.

What perceptions do Mid-Atlantic Catholic school principals and teachers have in regards to their responsibility for developing Catholic identity?

Much of the interviews collected highlight the intersection of faith in the daily lives of children and academics. The published literature demonstrates a unique quality within Catholic schools that allows them to utilize both instructional and transformational leadership qualities in ways that other schools cannot. The research questions ask what perceptions do principals and teachers have in regard to their responsibility for developing Catholic identity. This research question seeks to understand if Catholic school principals view Catholic identity as a non-person-centric transformational

leadership force within the school, allowing the principal to focus on instructional leadership, or if they view it as an aspect of their daily duties where the Catholic identity is the sole responsibility of the principal.

In answering this question, all of the respondents felt a necessary and purposeful mission to teach the faith and to ensure that Catholic identity existed and was strong in the school. The study principal saw the responsibility resting upon the principal and pastor or pastors.

I think it should be a partnership between the principal and the pastor, or whatever pastoral leadership is in the school, in our case there is a team of three pastors and I think it is important that the pastoral vision is implemented to a large degree that the priest are consulted on any type of religious celebration to make sure that any religious celebration is in line with the mission and vision of the parish.

In addition, the study principal saw the teachers playing an integral role too:

I think their role, more than any, in ensuring that they are living according to the values presented in their lesson and also there is a non-tangible aspect where the teachers really infuse the school culture with their own experience with Catholicism, whether it be their own personal pilgrimages or their own personal witness of their Catholic faith.

The teachers in the schools further supported these views as well. Particularly, Study teacher 2, who said:

I feel that the principal is the captain of the ship, but we are all rowing.....We are the foundation and the pillar of it. As the teacher you set the tone set the agenda you are directing it, laying the ground work for that to be there

The findings are parallel to the pilot group who said:

I think that is part of Catholic social teaching and values taught in the Church and daily prayer and things like, as a teacher I can use, I can re-emphasize something from a sermon or what Jesus would want us to do, you know something biblical kind of reinforcing it in the classroom, but I feel like that aspect of it is already in place and I don't have to do too much in that area.

These findings show a dual reality, one where Catholic identity is a strong ever-present force in the school, something that is beyond them as a person and something that they depend on and use to improve and enhance their instruction. At the same time, they all felt a personal responsibility to Catholic identity; they felt the need to nurture it and grow it and took pride in its strength and disappointment in its weakness. In one way, it may seem to disprove the research question, that it is not extrinsic of the principal or teachers, but a part of them. However, as the pilot teacher 2 noted, "I would not be here if it were not Catholic," and study teacher 2 echoed the same thoughts, "It is the sole purpose of being here, I would be doing something else if not for the Catholic faith in the school," and the study principal said, "Catholic education is responsible for everything that I have, if not for Catholic education I would be delivering packages for UPS..... definitely not teaching and most certainly not a principal." These quotes are important, because in every case what brought the individual to the school, what brought them to teach in a Catholic school was the Catholic faith and the Catholic identity of the school. What attracted the principals and teachers to Catholic schools was the Catholic identity, without it, the principals and teachers would not be there. Therefore, contextually, there is proof that Catholic identity, does, in fact, exist outside of individual

because without Catholic identity being an important and integral piece of the school, the principals and teachers would choose another school to teach.

Summary

In terms of the quantitative analysis, the research failed to reject the null hypothesis for either research question 1 or 2. In both cases, there was some correlation, but the evidence was not strong enough to reject either null hypothesis. In the correlation matrix table (Appendix G) there is strong correlation between many of the 10 regions of the PIMRS, but between variables for Catholic Identity and growth, there is no significant correlation.

However, the qualitative analysis shows that, indeed, Catholic identity does provide a foundation to support instructional leadership in the school that is not inherent in anyone person. For example, a middle school teacher said, in referring to the value of Catholic identity, "I think that it is part of Catholic social teaching and values taught in the Church and daily prayer. As a teacher I can use, or reemphasize something from a sermon or what Jesus would want us to do. Another example is from the pilot school principal, who said:

Catholic values as a foundation allows us to have a valid back up for our expectations for our students to behave and provide a foundation for the work ethic and to respect the value of each person and the value of yourself. I found that it allows us to provide an environment with less distractions in a way that the foundation gives us a reason for having those expectations and validates it for us.

The study school provided similar input. Study teacher 2 said:

There is something that makes it easier for you as a teacher, for example if you are teaching about marriage, we know what the Church teaches, and I can teach that because it is in the standards and what I am supposed to teach. So it provides a sense of protection, it is not so much what I personally want to teach, but what I am supposed to teach. The Catholic identity protects the teacher.

And teacher 3 added, “I think it flows through every level, every subject starts with Catholic faith and move out from there,” providing more evidence of the intrinsic nature of Catholic identity in the school, ever present and in every facet.

Appendix I provides a coded analysis of each of the interviews with the principal and two teachers. Throughout the interviews, the interviewees continually spoke of how Catholic identity provides a built-in foundation, a source of support, and a motivation for instructional elements in the school life. Furthermore, the interviewees cited several examples of Catholic identity, spilling over into the life of the child outside of the classroom.

Chapter 5: Interpretation, Conclusions, and Recommended Actionable Solution

As stated in chapter I, there is a growing gap in understanding Catholic school principal behaviors and the implications on student achievement. Considering that much of the extensive research on effective principal leadership focuses on traditional public and charter schools (Hallinger, 2010), and Catholic schools across the country continue to close at “alarming rates” (NCEA, 2011), the researcher identified a distinct and important need to study and understand principal leadership in Catholic schools.

With Catholic identity being the one unique attribute of Catholic schools (Dorner et al., 2011), Catholic schools need to understand what role it plays in supporting student achievement and utilize it to separate themselves from the crowded market place of K-12 education, in particularly in urban areas. Finally, with such a strong emphasis and push to support charter schools to improve public education, the public sector can learn a lot about what can make an effective site-based leadership school that is scalable and replicable across many neighborhoods, cities, and demographic backgrounds.

Interpretation of Findings and Results

The findings in chapter IV were decidedly mixed. On the one hand, the qualitative findings found that the teachers viewed Catholic identity as an important aspect of student achievement and supporting principal leadership. Principals and teachers alike found Catholic identity indispensable to their daily and professional lives. However, the quantitative analysis did not find a statistically significant relationship between Catholic identity and the level of instructional leadership in the school or academic performance (Refer to table 21). The findings presented in chapter IV suggest that there is a disconnect between the view of instructional leadership, Catholic identity, and student performance.

The findings presented in chapter IV, however, do allow the research to generate a theory to explain the disconnect. Unlike traditional public and groups of charter schools, Catholic schools are not a unified school system or group. Many are familiar with the traditional school district model that includes a school board (either elected or appointed by a mayor), a superintendent, and a central office (or district) staff that oversee and lead schools within the school system. Likewise, groups of charter schools (such as KIPP) utilize a board of directors, a chief academic officer, and a central office staff to lead their schools. Schools in both the traditional public and the group charter model all receive their funding and support directly from the overseeing entity which is either the local school district or the charter school management organization. The ability to employ staff and control funding drives the key authority. In Catholic schools, the reverse is true. Catholic arch/dioceses receive the funding and support from the parish of which the school is part of the pastoral mission.

While many parishes and schools utilize arch/diocesan tuition assistance funding, this money too comes from parishes in the form of contributions from the arch/bishop's appeal. With much of the power and authority resting in the hands of the parish, principals, working with their pastor, have much more authority than traditional public schools and that leads to a greater variation between schools. The increased power also places more responsibility on the principals, which takes time away from traditional instructional and transformational leadership tasks (i.e., raising money through fundraising).

The increased power creates a unique model that while it may appear on the surface to be similar to charter schools (Dorner et al., 2011), truly is not. Catholic school

principals reflect both instructional leadership and transformational leadership because the structure of Catholic schools requires principals to divide their time between instructional leadership, transformational leadership, and nonacademic tasks. In addition, the qualitative analysis provided direct evidence that Catholic identity did drive the culture of the school and by being the force behind the culture is indeed a form of transformational leadership. However, Catholic identity needs a person to implement it with fidelity, and by both job function and expectation, that person is typically the principal. So in Catholic schools principals have a responsibility for the culture, to support the transformational leadership, but themselves are required to spend time and effort implementing Catholic identity. In addition, principals act as instructional leaders and exemplify the aspects of instructional leadership. Because of these dual roles, Catholic schools are not in the middle of instructional and transformational leadership by design or choice, but rather by necessity. Without a true overarching leadership that unifies and directs schools, many tasks become the purview of the principal and thus, reflective of the principal's unique personality and leadership traits.

Conclusion

With principals applying their unique perspective and personality to their leadership style, and with no central authority of leadership over each school (outside of teaching the Catholic faith), Catholic schools are so unique they are neither reflective either of instructional or transformational leadership. Each school, is in essence, a school district amongst itself. Even in teaching the faith, while strictly directed by the arch/diocese, Catholic schools demonstrate a certain level of charisms that are reflective of both the tradition of the school and the parish community itself. The unique elements

of each school's charism are a perfect example of how, while providing a source of transformational leadership, the principal and parish leadership drive Catholic identity. This leads to unique, and still authentic, expressions of the one Catholic faith. For example, during the interview with participants from the study school, a teacher noted that she uses the faith tradition to strengthen her science lessons, using the teachings of St. Francis of Assisi, to help provide a Catholic context to lessons on composting and environmental stewardship. Perhaps another school would have chosen a different perspective, i.e., the tenant of social teaching, yet both would have been using one unified Catholic teaching to help provide context to science instruction.

While the quantitative findings did not find a statistical relationship between Catholic identity, instructional leadership, and student achievement, it is clear through the qualitative findings that Catholic identity does indeed provide a universal force within the school to help build and develop a culture in the school. By having Catholic identity as the foundation, principals and teachers are able to build a culture, which receives its authority primarily through parents purposefully enrolling their children in the school. One of the several themes that repeatedly appeared between the pilot and study school interviews was how Catholic schools were a special place. In each case, principals and teachers talked about how students and parents feel that they have an exceptional opportunity to learn what others just do not have, and they need to respect that. The feeling of a singular purpose stems from an academic environment that focuses not just on the intellectual development of the child, but the spiritual aspect—which helps contextualize and provide a purpose greater for being in the school.

The one question that remains unanswered is the authenticity of the Catholic identity. The purpose of the FCI was to provide the researcher with a sense of the authentic Catholicity of the school. However, with the pilot and study school quantitative interviews providing evidence of the robust and significant affect Catholic identity has on how, why, and what the teachers teach, one would think the quantitative results would provide some agreement with the qualitative data. Yet, the qualitative data found no strong connection between Catholic identity and instructional leadership—in either a positive or negative direction.

Clearly both principals and teachers believe that Catholic identity is an important aspect to their daily instruction. Without Catholic identity, the school would not only lose its purpose, but its character. However, the Catholic identity must be real, authentic and permeate every aspect of the school. While the findings provide evidence that neither strong student performance nor Catholic identity had any relationship with instructional leadership, the researcher was able to document the unique site-based leadership environment for Catholic schools, which in itself helps explain why Catholic schools exist between instructional and transformational leadership. There is clear value of a nonperson centric leadership in a school, from instilling the importance of students doing their best (a repeated theme in every interview) to commitment by teachers and principals to students on a deep and intimate level going beyond what a check list or rubric for a classroom observation.

Recommendations

The research began with a question:

What is the relationship between Catholic identity and instructional leadership and student academic performance and Catholic identity?

While the quantitative data was inconclusive, the qualitative data provided clear evidence of the strong role Catholic identity plays in building culture in the school (a typical transformational leadership trait) and supporting instruction in the classroom. What the findings suggest is that, Catholic identity does indeed act as the transformational leadership in the school, but it does not act on its own, it needs the principals and teachers to implement Catholic identity in an authentic way. While the FCI provides evidence of Catholic identity from the perspective of the teachers and principals, dioceses should measure the level of Catholic identity from the perspective of the students and parents. By measuring the level of Catholic identity from the viewpoint of the students and parents, diocese can better understand the level of Catholic identity that has reached the family level. In many cases, a diocese may find that the staff believes they are integrating Catholic identity into every level of instruction, but the families do not have the same perception. Without the family participation, there is a disconnect between student achievement, instructional leadership, and Catholic identity. The resulting disconnect may, at least partially, explain the discrepancy between the quantitative and qualitative results.

In addition, the qualitative data also suggest that dioceses need to do more to support the overall day-to-day functions of school operations for Catholic schools. In both the pilot and study interviews, the principals spoke of the significant burden Catholic school principals face when dealing with the need to ensure enrollment, collection of tuition, and raising funds, all tasks not in the purview of traditional public

and charter school principals. The increased burden comes at a cost of lost time on both instructional and transformational leadership tasks, spending time neither in improving instruction nor academic achievement. In order to help principals, diocese should consider consolidating uniform and non-instructional tasks, such as ordering books and supplies, at a central office level, and freeing principals to focus on developing a strong Catholic identity and academic program.

The purpose of the research was not just to inform Catholic schools—there is a benefit in this research for traditional public and charter schools. As stated earlier, traditional public schools are increasingly exploring site-based leadership models to improve academic achievement, to qualify for new sources of revenue from groups such as the Gates Foundation, and to qualify for Race to the Top and other federal government programs. Charter school management organizations are also exploring ways to improve student performance to attract more families and foundation funding. With both traditional public and charter schools looking to implement site-based leadership management models, Catholic schools provide a model to identify what practices work in improving student achievement and what practices lead to taxing principal's time and distracting principals and teachers from improving student academic performance and instruction.

Based on the findings, traditional public schools are already implementing processes to overcome some of the obstacles of site-based leadership. For example, most traditional public schools utilize bulk purchasing and streamline finance systems to ensure that not only are schools utilizing cost effective strategies, but principals are not spending time searching for vendors. In a true site-based leadership model, a principal

would manage the selection and ordering of textbooks themselves. Yet, based on the evidence presented in the qualitative data, having the authority and responsibility to select and purchase textbooks act as a “tax” on the principal time.

However, there are several areas where traditional public schools need to change, for instance, the hiring and firing of teachers needs to rest, as it does with Catholic schools, in the hands of the principal. Principals, ultimately, are the instructional leaders of the school. As instructional leaders, the principals need to have the power to staff the teachers that best serve the needs of the community. In interviewing teachers, both the pilot and study group repeatedly spoke of the importance of hiring the right staff. In both instances of the pilot and study group, teachers saw the ability to employ staff as one of the most direct and consequential ways that a principal can implement, lead, and support the day-to-day instruction in the classroom. Realizing that daily classroom observation of teachers is unrealistic, and not desired, hiring the right staff not only is important for the students, but important for the rest of the teaching staff.

Charter schools view the principal as the instructional leader in a similar way as Catholic schools. However, unlike Catholic schools, Charter schools need to find a nonperson centric way of establishing the culture of the school. Principals and teachers repeatedly identified Catholic identity as an unseen force in supporting the academic mission of the school. Consistently, principals and teachers identified Catholic identity as the reason that students and parents strived to perform their best academically. Additionally, Catholic identity was a catalyst for principals and teachers to perform their best. As more and more schools look towards “pay to performance” and other monetary initiatives to attract employees or improve performance, Catholic schools highlight the

need for an intrinsic tool to attract and motivate employees. As Daniel Pink noted, for knowledge-based work monetary incentives are not the best or most effective way to improve performance (Pink, 2011).

Clearly, adopting Catholic teaching is not the answer for traditional or charter schools, as the First Amendment of the United States Constitution and other issues make this prohibitive. Therein lies the challenge for traditional and charter schools—the need to find a way to intrinsically motivate principals, teachers, and students. By decentralizing power to the local level (the principal in the school), traditional public schools can move towards developing a community based education process that can use the community as a source for a nonperson centric force to motivate principals, teaches, and students. Utilizing many of the concepts that exist today, such as STEM, Art focused, or green/environmental schools, public school districts can create a more community based school model.

Summary

In many ways, for Catholic schools to survive, they must become more like traditional public schools, and to improve traditional public schools, they must become more like Catholic schools. Catholic schools have long survived in a world where their costs were minimal to non-existent thanks to the work of women religious, priest, and the strong financial support of parish congregations. As with the traditional public school counterparts, spiraling costs have put many Catholic schools in jeopardy. In order to survive and to reestablish their purpose and mission—Catholic schools need to build systems of support to “off-load” many of the non-academically essential tasks from principals and schools, and find ways to support principals and teachers to create more

uniform leadership models so that principals and teachers can continue to work towards improving instruction.

Catholic identity is the one unique attribute of a Catholic school, and through that one unique attribute, Catholic schools have access to a replicable and powerful source of transformational leadership, each in different and unique contexts. The flexibility of Catholic identity allows for a true site-based leadership model that can take the best attributes of a traditional public school model and adopt it to the historical site-based leadership model present in every Catholic school.

However, to utilize Catholic identity as a form of transformational leadership, dioceses need to ensure that principals and schools are not burdened down by nonacademically essential functions that do not directly influence the day-to-day instruction. There are some functions, such as hiring, which clearly need to remain in the hands of the principals, and even tasks such as choosing particular textbooks to use are appropriate functions of the principal. However, dioceses need to work with schools to eliminate or reduce principal tasks that do not contribute directly to improving student academic performance and instructional practice.

Finally, dioceses need to place a significant emphasis on supporting principals new to their job and school. Dioceses need to provide more funding for professional development and resources for new principals to strengthen the Catholic identity through workshops, support materials, mentorship programs, and accountability models that emphasize time spent in the classroom and on the Catholic identity of the school. Given the ever decreasing presence of religious teachers and principals in Catholic schools, there is a great threat that Catholic schools will lose the old charisms (Jesuits,

Dominicans, Benedictines, Franciscans) which represent the true foundation of Catholic identity for Catholic schools over the last 100 plus years.

Further Research Questions

As documented in the literature review, there is a clear advantage of instructional leadership in supporting student achievement. Additionally, there is a clear strength, presented in the qualitative analysis, of Catholic identity in supporting the transformational aspects of the school. However, the quantitative analysis did not provide any evidence that Catholic identity supported instructional leadership. As noted in the findings, the data analysis only used student output (academic achievement) and did not use any measure of student/family input (a student or families perception of the level of Catholic identity or instructional leadership present in the school). Therefore, the researcher concludes that the following questions will help further expand the research into instructional leadership beyond simple bivariate models and include more complex models, and thus, a deeper understanding of instructional leadership.

1. How often do family/student perspectives on Catholic identity and instructional leadership agree with those of the
 - Faculty/Staff?
 - Principal/Leadership?
2. What is the relationship between how families/parents view instructional leadership behaviors of principals in Catholic elementary and student academic achievement?
3. What is the relationship between how families/parents view Catholic identity Catholic schools and student academic achievement?

4. How can non-religious schools build tangible examples of non-person centric leadership outside of a religious institution?

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List of Appendices

Appendix A-Detailed Source List.....	111
Appendix B-Permission to Use the Principal Instructional Management Rating Scale. .	113
Appendix C-Principal Instructional Management Rating Scale.....	114
Appendix D-Framework for Catholic Identity Rubric.....	121
Appendix E-Approval to Conduct Research.....	122
Appendix F-In Person Qualitative Questions for Principal and Teachers.....	123
Appendix G-Reliability Output from SPSS.....	124
Appendix H-Factor Analysis Output from SPSS.....	128

Appendix A-Detailed Source List

Source Type and Name	Total	Percent
Conference		
American Education Research Association	1	2%
Dissertation		
A comparison study between instructional and transformational leadership theories: Effect on student achievement and teacher job satisfaction	1	2%
A comparison of leadership roles of public and private elementary school principals	1	2%
Identifying principals' practices that affect achievement and accreditation of public elementary, middle, and high schools in Virginia	1	2%
Instructional leadership in Catholic elementary schools: An analysis of personal, organizational, and environmental correlates	1	2%
Religiosity and transformational leadership in K-8 school principals	1	2%
Teacher and principal perceptions of effective transformational leadership: An exploration of guiding practice and personal beliefs	1	2%
Journal		
American Economic Review	1	2%
American Educational Research Journal	1	2%
Australian Education Review	1	2%
Catholic Education: A Journal of Inquiry and Practice	4	8%
Educational Administration Quarterly	6	12%
EducationNext	1	2%
Harvard Educational Review	1	2%
Journal of Educational Change	1	2%
Education and Urban Society	1	2%
School Effectiveness and School Improvement	8	16%
Leadership and Policy in Schools	2	4%
American Journal of Education	1	2%
Science Educator	1	2%
Educational Research and Evaluation	2	4%
Educational Management Administration & Leadership	1	2%
Educational Policy	1	2%
Review of Educational Research	1	2%
New Directions for Youth Development	1	2%

Law		
Washington, DC: United States Congress.	1	2%
Publication		
Educational research: Planning, conducting, and evaluating quantitative and qualitative research; Third Edition	1	2%
Introduction to Research in Education; Sixth Edition	1	2%
Measuring Principal Performance: How rigorous are commonly used principal assessment instruments	1	2%
Saving American Urban Catholic School: A Guide for Donors	1	2%
Teacher effects as a measure of teacher effectiveness construct validity considerations in TVAAS	1	2%
The policies and practices of principal evaluation: A review of the literature	1	2%
Website		
Vatican	1	2%
Total	50	100%

Appendix B-Permission to Use the Principal Instructional Management Rating Scale

October 24, 2011

Jeremy McDonald

Dear Jeremy:

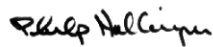
As copyright holder and publisher, you have my permission as publisher to use the *Principal Instructional Management Rating Scale (PIMRS)* in your research study. In using the scale, you may make unlimited copies of any of the three forms of the PIMRS.

Please note the following conditions of use:

1. This authorization extends only to the use of the PIMRS for research purposes, not for general school district use of the instrument for evaluation or staff development purposes;
2. *The user must include a reliability analysis in the study if suitable quantitative data has been collected;*
3. The user agrees to send a soft copy of the *completed study* to the publisher upon completion of the research.
4. The user agrees to send a soft copy of the *data set* and coding instructions to the publisher upon completion of the research in order to enable further instrument development.

Please be advised that a separate *permission to publish* letter will be sent after the publisher receives a soft copy of the completed study and I have confirmed that you included a reliability analysis.

Sincerely,



Professor Philip Hallinger
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Sarasota FL, 34243
Hallinger@gmail.com

Appendix C-Principal Instructional Management Rating Scale

**PRINCIPAL INSTRUCTIONAL MANAGEMENT
RATING SCALE**

Principal Form

Published by:

Dr. Philip Hallinger

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Principal Form 2.0

**THE PRINCIPAL INSTRUCTIONAL MANAGEMENT
RATING SCALE**

PART I: Please provide the following information if instructed to do so by the person administering the instrument:

- (A) District Name: _____
- (B) Your School's Name: _____
- (C) Principal's Name: _____
- (D) Number of school years you have been principal at this school:
 ___ 1 ___ 5-9 ___ more than 15
 ___ 2-4 ___ 10-15
- (E) Years, at the end of this school year, that you have been a principal:
 ___ 1 ___ 5-9 ___ more than 15
 ___ 2-4 ___ 10-15

PART II: This questionnaire is designed to provide a profile of your leadership. It consists of 50 behavioral statements that describe principal job practices and behaviors. You are asked to consider each question in terms of your leadership over the past school year.

Read each statement carefully. Then circle the number that best fits the specific job behavior or practice as you conducted it during the past school year. For the response to each statement:

- 5 represents *Almost Always*
 4 represents *Frequently*
 3 represents *Sometimes*
 2 represents *Seldom*
 1 represents *Almost Never*

In some cases, these responses may seem awkward; use your judgement in selecting the most appropriate response to such questions. Please circle only one number per question. Try to answer every question.

Thank you.

To what extent do you . . . ?

	ALMOST NEVER			ALMOST ALWAYS	
I. FRAME THE SCHOOL GOALS					
1. Develop a focused set of annual school-wide goals	1	2	3	4	5
2. Frame the school's goals in terms of staff responsibilities for meeting them	1	2	3	4	5
3. Use needs assessment or other formal and informal methods to secure staff input on goal development	1	2	3	4	5
4. Use data on student performance when developing the school's academic goals	1	2	3	4	5
5. Develop goals that are easily understood and used by teachers in the school	1	2	3	4	5
II. COMMUNICATE THE SCHOOL GOALS					
6. Communicate the school's mission effectively to members of the school community	1	2	3	4	5
7. Discuss the school's academic goals with teachers at faculty meetings	1	2	3	4	5
8. Refer to the school's academic goals when making curricular decisions with teachers	1	2	3	4	5
9. Ensure that the school's academic goals are reflected in highly visible displays in the school (e.g., posters or bulletin boards emphasizing academic progress)	1	2	3	4	5
10. Refer to the school's goals or mission in forums with students (e.g., in assemblies or discussions)	1	2	3	4	5
III. SUPERVISE & EVALUATE INSTRUCTION					
11. Ensure that the classroom priorities of teachers are consistent with the goals and direction of the school	1	2	3	4	5
12. Review student work products when evaluating classroom instruction	1	2	3	4	5

	ALMOST NEVER			ALMOST ALWAYS	
13. Conduct informal observations in classrooms on a regular basis (informal observations are unscheduled, last at least 5 minutes, and may or may not involve written feedback or a formal conference)	1	2	3	4	5
14. Point out specific strengths in teacher's instructional practices in post-observation feedback (e.g., in conferences or written evaluations)	1	2	3	4	5
15. Point out specific weaknesses in teacher instructional practices in post-observation feedback (e.g., in conferences or written evaluations)	1	2	3	4	5
IV. COORDINATE THE CURRICULUM					
16. Make clear who is responsible for coordinating the curriculum across grade levels (e.g., the principal, vice principal, or teacher-leaders)	1	2	3	4	5
17. Draw upon the results of school-wide testing when making curricular decisions	1	2	3	4	5
18. Monitor the classroom curriculum to see that it covers the school's curricular objectives	1	2	3	4	5
19. Assess the overlap between the school's curricular objectives and the school's achievement tests	1	2	3	4	5
20. Participate actively in the review of curricular materials	1	2	3	4	5
V. MONITOR STUDENT PROGRESS					
21. Meet individually with teachers to discuss student progress	1	2	3	4	5
22. Discuss academic performance results with the faculty to identify curricular strengths and weaknesses	1	2	3	4	5
23. Use tests and other performance measure to assess progress toward school goals	1	2	3	4	5

	ALMOST NEVER			ALMOST ALWAYS	
24. Inform teachers of the school's performance results in written form (e.g., in a memo or newsletter)	1	2	3	4	5
25. Inform students of school's academic progress	1	2	3	4	5
VI. PROTECT INSTRUCTIONAL TIME					
26. Limit interruptions of instructional time by public address announcements	1	2	3	4	5
27. Ensure that students are not called to the office during instructional time	1	2	3	4	5
28. Ensure that tardy and truant students suffer specific consequences for missing instructional time	1	2	3	4	5
29. Encourage teachers to use instructional time for teaching and practicing new skills and concepts	1	2	3	4	5
30. Limit the intrusion of extra- and co-curricular activities on instructional time	1	2	3	4	5
VII. MAINTAIN HIGH VISIBILITY					
31. Take time to talk informally with students and teachers during recess and breaks	1	2	3	4	5
32. Visit classrooms to discuss school issues with teachers and students	1	2	3	4	5
33. Attend/participate in extra- and co-curricular activities	1	2	3	4	5
34. Cover classes for teachers until a late or substitute teacher arrives	1	2	3	4	5
35. Tutor students or provide direct instruction to classes	1	2	3	4	5
VIII. PROVIDE INCENTIVES FOR TEACHERS					
36. Reinforce superior performance by teachers in staff meetings, newsletters, and/or memos	1	2	3	4	5
37. Compliment teachers privately for their efforts or performance	1	2	3	4	5

	ALMOST NEVER			ALMOST ALWAYS	
38. Acknowledge teachers' exceptional performance by writing memos for their personnel files	1	2	3	4	5
39. Reward special efforts by teachers with opportunities for professional recognition	1	2	3	4	5
40. Create professional growth opportunities for teachers as a reward for special contributions to the school	1	2	3	4	5
IX. PROMOTE PROFESSIONAL DEVELOPMENT					
41. Ensure that inservice activities attended by staff are consistent with the school's goals	1	2	3	4	5
42. Actively support the use in the classroom of skills acquired during inservice training	1	2	3	4	5
43. Obtain the participation of the whole staff in important inservice activities	1	2	3	4	5
44. Lead or attend teacher inservice activities concerned with instruction	1	2	3	4	5
45. Set aside time at faculty meetings for teachers to share ideas or information from inservice activities	1	2	3	4	5
X. PROVIDE INCENTIVES FOR LEARNING					
46. Recognize students who do superior work with formal rewards such as an honor roll or mention in the principal's newsletter	1	2	3	4	5
47. Use assemblies to honor students for academic accomplishments or for behavior or citizenship	1	2	3	4	5
48. Recognize superior student achievement or improvement by seeing in the office the students with their work	1	2	3	4	5
49. Contact parents to communicate improved or exemplary student performance or contributions	1	2	3	4	5
50. Support teachers actively in their recognition and/or reward of student contributions to and accomplishments in class	1	2	3	4	5

ABOUT THE AUTHOR

Professor Dr. Philip Hallinger, author of the *Principal Instructional Management Rating Scale* (PIMRS), received his doctorate in Administration and Policy Analysis from Stanford University. He has worked as a teacher, administrator, and professor and as the director of several leadership development centers. He has been a consultant to education and healthcare organizations throughout the United States, Canada, Asia, and Australia. He is currently Professor and Executive Director of the College of Management, Mahidol University, in Thailand.

The *PIMRS* was developed with the cooperation of the Milpitas (California) Unified School District, Richard P. Mesa, Superintendent. As a research instrument, it meets professional standards of reliability and validity and has been used in over 150 studies of principal leadership in the United States, Canada, Australia, Europe, and Asia.

The scale is also used by school districts for evaluation and professional development purposes. It surpasses legal standards for use as a personnel evaluation instrument and has been recommended by researchers interested in professional development and district improvement (see, for example, Edwin Bridges, *Managing the Incompetent Teacher*, ERIC, 1984). Articles on the development and use of the *PIMRS* have appeared in *The Elementary School Journal*, *Administrators Notebook*, *NASSP Bulletin*, and *Educational Leadership*.

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Appendix D-Framework for Catholic Identity Rubric

Core Catholic Identity Standards	4	3	2	1
<p>Standard 1: An excellent Catholic school is guided and driven by a clearly communicated mission that includes a commitment to Catholic identity rooted in Gospel values, faith formation, academic excellence, and service.</p>	<p>The school has a tangible and clear mission and instruction that are deeply guided and driven by a obvious commitment to Catholic identity rooted in Gospel values, faith formation, academic excellence, and service.</p>	<p>The schools mission and instruction is connected to Catholic identity rooted in Gospel values, faith formation, academic excellence, and service but is weak in some areas.</p>	<p>The schools mission and instruction is connected to Catholic identity rooted in Gospel values, faith formation, academic excellence, and service in only core subjects.</p>	<p>The schools mission and instruction is not connected to Catholic identity rooted in Gospel values, faith formation, academic excellence, and service.</p>
<p>Standard 2: An excellent Catholic school adhering to mission provides a rigorous academic program for religious studies and catechesis in the Catholic faith, set within a total academic curriculum that integrates faith, culture, and life.</p>	<p>The school incorporates a rigorous academic program for religious studies and catechesis in the Catholic faith in every subject taught at the school.</p>	<p>The school incorporates a rigorous academic program for religious studies and catechesis in the Catholic faith in most, but not all subjects taught at the school.</p>	<p>The school incorporates a rigorous academic program for religious studies and catechesis in the Catholic faith in a few subject taught at the school.</p>	<p>The school does not incorporate a rigorous academic program for religious studies and catechesis in the Catholic faith in any subject other than religion.</p>
<p>Standard 3: An excellent Catholic school adhering to mission provides opportunities outside the classroom for student faith formation and action in service of social justice.</p>	<p>The school provides opportunities outside the classroom for student faith formation and action in service of social justice in an authentic and practical way that engages students to more deeply understand their faith.</p>	<p>The school provides opportunities outside the classroom for student faith formation and action in service of social justice in limited capacity or grades.</p>	<p>The school periodically provides opportunities outside the classroom for student faith formation and action in service of social justice, but lacks full integration of faith formation and action in service of social justice.</p>	<p>The school provides no or very limited opportunities outside the classroom for student faith formation and action in service of social justice.</p>
<p>Standard 4: An excellent Catholic school adhering to mission provides opportunities for adult faith formation and action in service of social justice.</p>	<p>The school actively engages parents and other adults to participate in adult faith formation and action in service of social justice in an authentic and practical way that engages the community to more deeply understand their faith and provides a model for students.</p>	<p>The school provides limited opportunities for adult faith formation and action in service of social justice, but only for parents with children enrolled in the school.</p>	<p>The school provides limited opportunities for adult faith formation and action in service of social justice, but only for parents with children enrolled in the school.</p>	<p>The school provides no or very limited opportunities for adult faith formation and action in service of social justice.</p>

Appendix E-Approval to Conduct Research



ARCHDIOCESE OF WASHINGTON

Archdiocesan Pastoral Center: 5001 Eastern Avenue, Hyattsville, MD 20782-3447
 Mailing Address: Post Office Box 29260, Washington, DC 20017-0260
 301-853-4500 TDD 301-853-5300

Date: December 1, 2011

To: Jeremy McDonald
 Principal Investigator
 Drexel University
 Philadelphia, PA 19104
 619-204-7023, jam36@drexel.edu

From: Deacon Bert L'Homme, Ph.D. *BLL*
 Superintendent for Catholic Schools
 Archdiocese of Washington

Research Title: Instructional Leadership and Student Achievement: The Role of Catholic Identity in Supporting Instructional Leadership

Approval Date: December 1, 2011

Expiration Date: December 31, 2012

The attached research proposal was approved on December 1, 2011 and you may commence your project. Please note that this approval is granted for a maximum of one year.

Your next steps are as follows:

1. Contact the principals concerning this study and provide copies of all research materials related to the study.
2. Obtain permission or denial, from each principal, to conduct the study at their school. Please submit a copy of the written approval or denial to the Principal Investigator and the Superintendent for Catholic Schools.
3. Submit an abstract and final report to the participating school(s) and the Catholic Schools Office.

Please remember:

1. Seek and obtain approval from the Superintendent for Catholic Schools for any modifications to the approved protocol.
2. Promptly report any unexpected or otherwise significant adverse effects encountered in the course of this study to the Catholic Schools Office within 72 hours. This includes information obtained from sources outside the Archdiocese of Washington and the Catholic Schools Office that reveals previously unknown risks from the procedures used in this study.

c: K. Branaman, Associate Superintendent for Catholic Schools

Appendix F-In Person Qualitative Questions for Principal and Teachers

1. How do you feel Catholic Identity effects you as a principal/teacher?
2. Who do you feel is responsible for establishing Catholic identity in the school?
3. What core role do teachers play in establishing Catholic identity
4. What core role does the principal play in establishing Catholic identity
5. How does the departure of a principal affect the culture and Catholic identity of a school?
6. Do you feel Catholic Identity adds something unique to the school?
7. Does Catholic identity affect the academic portion of the school?
8. Does having Catholic identity help you in your duties in your school?
9. How do you incorporate Catholic identity into your role in the school?
10. How does Catholic identity affect students outside of the classroom/school?

Appendix G-Reliability Output from SPSS

Scale: Region 1

Case Processing Summary

		N	%
Cases	Valid	103	67.3
	Excluded ^a	50	32.7
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.899	5

Scale: Region 2

Case Processing Summary

		N	%
Cases	Valid	101	66.0
	Excluded ^a	52	34.0
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.788	5

Scale: Region 3

Case Processing Summary

		N	%
Cases	Valid	103	67.3
	Excluded ^a	50	32.7
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.872	5

Scale: Region 4**Case Processing Summary**

		N	%
Cases	Valid	101	66.0
	Excluded ^a	52	34.0
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.865	5

Scale: Region 5**Case Processing Summary**

		N	%
Cases	Valid	103	67.3
	Excluded ^a	50	32.7
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.815	5

Scale: Region 6**Case Processing Summary**

		N	%
Cases	Valid	104	68.0
	Excluded ^a	49	32.0
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.730	5

Scale: Region 7**Case Processing Summary**

		N	%
Cases	Valid	101	66.0
	Excluded ^a	52	34.0
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.873	5

Scale: Region 8**Case Processing Summary**

		N	%
Cases	Valid	100	65.4
	Excluded ^a	53	34.6
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.896	5

Scale: Region 9**Case Processing Summary**

		N	%
Cases	Valid	103	67.3
	Excluded ^a	50	32.7
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.886	5

Scale: Region 10**Case Processing Summary**

		N	%
Cases	Valid	102	66.7
	Excluded ^a	51	33.3
	Total	153	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.808	5

Appendix H-Factor Analysis Output from SPSS

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Zscore(Growth)	.0000000	1.0000000	118
Zscore(CI)	.0000000	1.0000000	118
Zscore: Region 1	.0000000	1.0000000	118
Zscore: Region 2	.0000000	1.0000000	118
Zscore: Region 3	.0000000	1.0000000	118
Zscore: Region 4	.0000000	1.0000000	118
Zscore: Region 5	.0000000	1.0000000	118
Zscore: Region 6	.0000000	1.0000000	118
Zscore: Region 7	.0000000	1.0000000	118
Zscore: Region 8	.0000000	1.0000000	118
Zscore: Region 9	.0000000	1.0000000	118
Zscore: Region 10	.0000000	1.0000000	118

Correlation	Growth	CI	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	Reg. 10
Growth	1.00	-0.54	-0.08	-0.01	-0.03	0.01	-0.11	0.10	0.07	0.13	0.17	0.16
CI	-0.54	1.00	0.23	0.14	0.21	0.25	0.17	-0.03	0.01	0.10	0.04	0.00
Region 1	-0.08	0.23	1.00	0.75	0.63	0.69	0.64	0.45	0.39	0.56	0.55	0.56
Region 2	-0.01	0.14	0.75	1.00	0.62	0.75	0.69	0.51	0.46	0.55	0.57	0.62
Region 3	-0.03	0.21	0.63	0.62	1.00	0.56	0.66	0.38	0.59	0.70	0.44	0.57
Region 4	0.01	0.25	0.69	0.75	0.56	1.00	0.68	0.51	0.45	0.58	0.60	0.54
Region 5	-0.11	0.17	0.64	0.69	0.66	0.68	1.00	0.45	0.56	0.62	0.62	0.63
Region 6	0.10	-0.03	0.45	0.51	0.38	0.51	0.45	1.00	0.31	0.42	0.46	0.53
Region 7	0.07	0.01	0.39	0.46	0.59	0.45	0.56	0.31	1.00	0.61	0.58	0.53
Region 8	0.13	0.10	0.56	0.55	0.70	0.58	0.62	0.42	0.61	1.00	0.55	0.59
Region 9	0.17	0.04	0.55	0.57	0.44	0.60	0.62	0.46	0.58	0.55	1.00	0.50
Region 10	0.16	0.00	0.56	0.62	0.57	0.54	0.63	0.53	0.53	0.59	0.50	1.00

a. Determinant = .001

Correlation Matrix^a

--

a. Determinant = .001

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.876
Bartlett's Test of Sphericity	Approx. Chi-Square
	833.348
	df
	66
	Sig.
	.000

Communalities

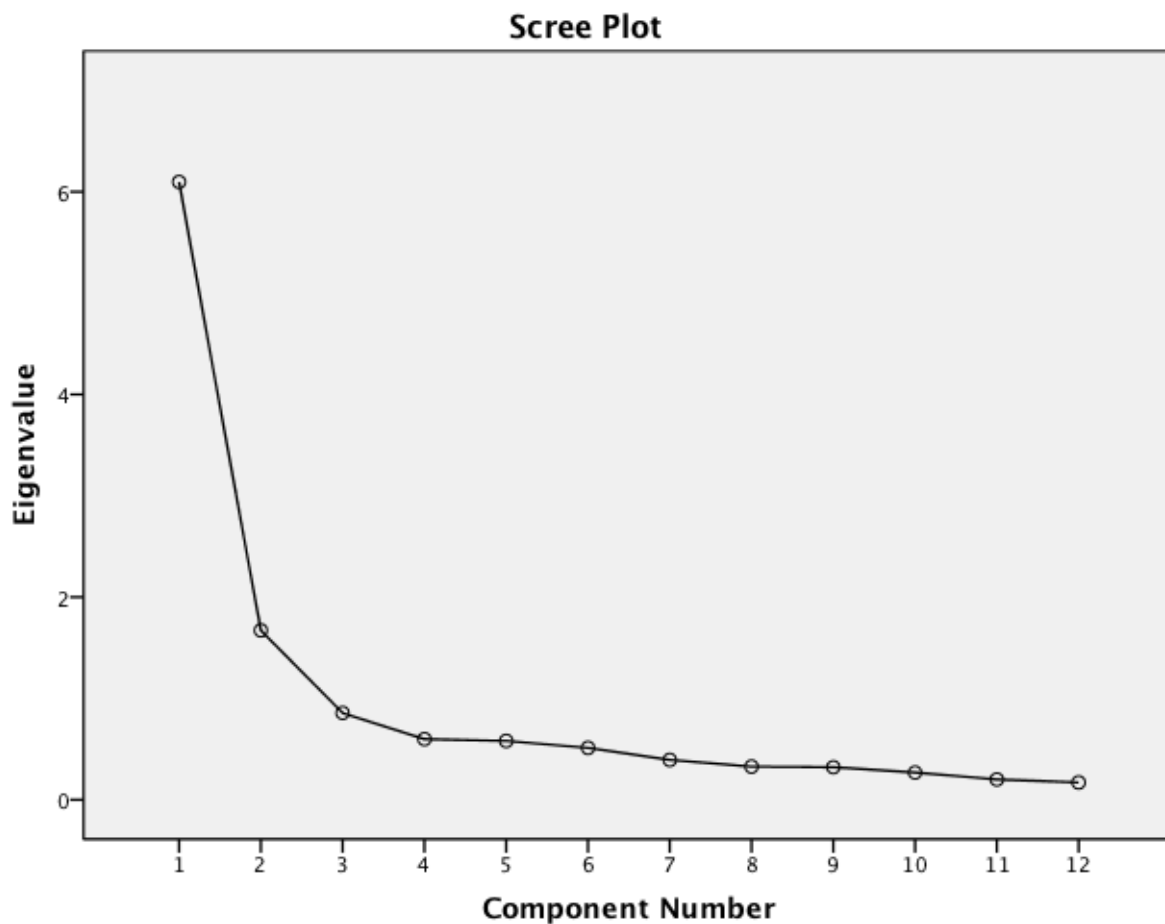
	Initial	Extraction
Zscore(Growth)	1.000	.753
Zscore(CI)	1.000	.743
Zscore: Region 1	1.000	.690
Zscore: Region 2	1.000	.717
Zscore: Region 3	1.000	.644
Zscore: Region 4	1.000	.694
Zscore: Region 5	1.000	.727
Zscore: Region 6	1.000	.424
Zscore: Region 7	1.000	.505
Zscore: Region 8	1.000	.643
Zscore: Region 9	1.000	.589
Zscore: Region 10	1.000	.639

Extraction Method: Principal Component Analysis.

Total Variance Explained

Comp.	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Var.	Cum. %	Total	% of Var.	Cum. %	Total	% of Var.	Cum. %
1	6.097	50.811	50.811	6.097	50.811	50.811	6.078	50.648	50.648
2	1.672	13.930	64.741	1.672	13.930	64.741	1.691	14.092	64.741
3	.857	7.138	71.879						
4	.599	4.989	76.868						
5	.581	4.839	81.706						
6	.512	4.270	85.976						
7	.394	3.280	89.257						
8	.327	2.725	91.982						
9	.322	2.683	94.665						
10	.269	2.240	96.905						
11	.201	1.675	98.579						
12	.170	1.421	100.000						

Extraction Method: Principal Component Analysis.



Component Matrix^a

	Component	
	1	2
Zscore(Growth)		.867
Zscore(CI)		-.844
Zscore: Region 1	.812	
Zscore: Region 2	.844	
Zscore: Region 3	.796	
Zscore: Region 4	.825	
Zscore: Region 5	.845	
Zscore: Region 6	.625	
Zscore: Region 7	.694	
Zscore: Region 8	.795	
Zscore: Region 9	.747	
Zscore: Region 10	.776	

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component	
	1	2
Zscore(Growth)		.867
Zscore(CI)		-.844
Zscore: Region 1	.812	
Zscore: Region 2	.844	
Zscore: Region 3	.796	
Zscore: Region 4	.825	
Zscore: Region 5	.845	
Zscore: Region 6	.625	
Zscore: Region 7	.694	
Zscore: Region 8	.795	
Zscore: Region 9	.747	
Zscore: Region 10	.776	

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Rotated Component Matrix^a

	Component	
	1	2
Zscore(Growth)		-.863
Zscore(CI)		.854
Zscore: Region 1	.798	
Zscore: Region 2	.838	
Zscore: Region 3	.788	
Zscore: Region 4	.816	
Zscore: Region 5	.836	
Zscore: Region 6	.636	
Zscore: Region 7	.703	
Zscore: Region 8	.800	
Zscore: Region 9	.757	
Zscore: Region 10	.787	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Component Transformation Matrix

Component	1	2
1	.998	.066
2	.066	-.998

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Appendix I-Coded Interviews for Pilot and Study Schools

Key:

Sense of Community

Sense of Foundation

Integration of Faith

Strong Behavior/Academic Expectations

Transcript from Pilot School Interview

Principal = Pilot School Principal

Teacher 1= Middle School Teacher

Teacher 2= 5th grade teacher

1 **Researcher-** In terms of the survey where able to understand all the questions

2 **Principal-** My only questions came you know the same kind of questions I had before, I
3 don't know how directly the questions pertain to principal since I have someone helping
4 me do this. So some of the questions some of the vice-principal does, so I couldn't do it
5 all without her. My duties are split. It is a demanding school... it really is

6 **Principal-** The thing too is that some of the things are guided by policy, so the policy
7 says that for teachers with three years or under you need to do two formal observations
8 and everyone else gets one, obviously I do those but umm than we also do informal walk
9 thoughts too, but it is my choice to do this, not required, you know so it kind of ...
10 otherwise the questions seemed very, normal questions.

11 **Teacher 1-** I didn't, Yeah I understood all the questions

12 **Teacher 1=** So when I answered the questions I answered it assuming like that Principal
13 gives role to vice-principal technically she is like making sure it gets done, so I kind of
14 answer it as she getting it done, it might not be her directly but she is making sure it gets
15 done

16 **Researcher-** What about the survey on Catholic identity

17 **Principal-** Catholic identity survey seemed pretty straightforward, I thought it was
18 interesting one question I had was about adult programs, because I wouldn't really have
19 anything to do with adult programming. I just thought that was more of a parish decision,
20 at the school we wouldn't have anything like, but at the parish there are plenty of things
21 like that, they do plenty of outreach to all kinds of people of all ages and different facets
22 of the community and I didn't know it was my place or if it was the school and parish
23 altogether.

24 **Researcher-** Any other thoughts

25 **Principal-** No

26 **Teacher 1-** No, not about the surveys

27 **Researcher -** In terms of the Catholic identity and the school.... How does Catholic
28 identity help you as a teacher?

29 **Teacher 1-** For me as a teacher I think that K-8 schools can have.. it is a really neat
30 model younger students around the older ones and develop certain skills, but I think in
31 the Catholic school model there are natural values that are taught so I find that kids in
32 general that kids in general are very respectful to one and other and I think that is part of
33 catholic social teaching and values taught in the church and daily prayer and things like.
34 As a teacher I can use , I can reemphasize something from a sermon or what Jesus would
35 want us to do, you know something biblical kind of re-enforcing it in the classroom, but I
36 feel like that aspect of it is already in place and I don't have to do too much in that area,
37 but it is helpful have those sort of natural values already there, rather than being as a
38 teacher having to come up with them. It makes the school more functional and smoother,
39 because that is who we are

40 **Principal-** In a similar way I think that having Catholic values is a foundation allows us
41 to have valid for back up for our expectations for our to behave and work ethic, the value
42 of each person and the value of yourself. Why it is so important to do your work and to
43 learn and put forth a good effort help one other, succeed academically goes hand in hand,
44 so because, it is the whole child approach, so because your nurturing that spiritually side,
45 it helps the academic side as well, it kind of pull its self up, It is like a discipline, not in a
46 negative way, but it is training yourself to be a better person all around, and to allows us

47 to put the extra emphasis on learning, not just academically but about yourself and one
48 another, what is important in life. I found that it allows us to provide an environment with
49 less distractions in a way that foundation gives us a reason for having those expectations
50 and validates it for us.

51 **Researcher-** In terms of the vice-principal, how does that work?

52 **Principal-** She is a part-time instructional coach and part-time assistant principal

53 **Researcher-** the duties are split, not a personal role

54 **Principal-** I have, She is in charge of curriculum instruction piece, as a Catholic school
55 principal you are both transformational and instructional leadership, as the principal I am
56 responsible for everything as Catholic school principal and because it is such a
57 demanding community, it really is, and because the school needed so much change I
58 really couldn't do it myself and I am luck to have another person on board to take a piece
59 of it, so vice-principal is in charge of everything but I oversee it and she communicates
60 everything to me. I can have her handle professional development sessions, and follow up
61 with teachers, and go in the classrooms. Since she has come back I can start my
62 walkthroughs again. With her I can start to observe classrooms more, I had to deal with a
63 lot of community stuff, marketing, academic concerns from parents. Sometimes I meet
64 with the parents with my vice-principal. It is nice that we can have someone who is a
65 coach and who can help me with the different task. It is definitely more effective, it
66 works really well.

67 **Principal-** Communicating is a big part, I spend most of my time communicating. I don't
68 think anyone can really understand everything that you do. There is so much coming

69 from the diocese and there are lot more expectations, it is just good to have someone help
70 out and you really should be alone anyways.

71 **Researcher-** Since the parish and school are separated, do you participate a lot with the
72 parish

73 **Principal-** We do, we have mass every week, we are so lucky because Fr. XXX likes to
74 do that, it is a great experience, everyone is so well behaved. Everyone reads and serves.

75 We do that every week, we used to do confession, but the schedule hasn't allowed, all the
76 sacraments, we are very involved in the parish. We are very connected, the priest comes
77 here and sees the kids. Fr. XX used to come here more before he took on other
78 responsibilities. We are very involved in the parish

79 **Researcher**—what are your thoughts on my theory that Catholic identity supports
80 instructional leadership?

81 **Teacher 1-** I would definitely agree with that, I taught in two other schools, I choose to
82 be in Catholic school and I know what to expect and I like the environment. All the
83 things are in place, in terms of just having the similar types of identity and values.
84 Myschools were different ethnically and geographically, one was in Chile, one in
85 Washington State, and here in THE DIOCESES, and they were all very different but the
86 Catholic culture was the same across all three

87 **Principal-** I think that the tie between Catholic identity and instructional piece allows us
88 to set the stage for students to succeed both academically and spiritually. Just you know,
89 build more look at the whole child building morally and intellectually. I think if you just
90 look at once side, you miss the other. Besides those two aspects work well together and if
91 they work together and kind of feed off each other, strengthen each other.

92 **Teacher 1-** I am kind of struck to by the parents in our school that are not Catholic but
 93 choose to send their kids here, I think that choice supports the idea that they are here for
 94 education. We have parents from different backgrounds who could choose other private
 95 schools but choose Catholic schools because of the unique culture and values. They
 96 would have other opportunities, but the choose our values. Tying that in overall that gives
 97 a good school environment.

98 **Principal-** I think it is very supportive, that sense of Catholic identity lends a support of a
 99 sense of community. I went to public school my whole life and taught in Catholic school,
 100 but I worked in some public school, some are fine but I think that the difference I noticed
 101 is in the sense of community, that support and genuine caring that is present, the whole
 102 school genuinely cares.

103 **Transcript from Pilot School Second Interview**

104 **Researcher-** In terms of the survey where able to understand all the questions

105 **TEACHER 2-** Yes, umm I understood what the questions where asking, but sometimes
 106 it was hard to understand how it applied to our school, but I understood the questions, but
 107 if didn't I just wouldn't answer. There was one where I didn't have any knowledge of
 108 what the question was asking so I just didn't answer.

109 **Reseacher-** So, the structure of St. Peters made the questions difficult to answer, not to
 110 understand, but to answer,

111 **TEACHER 2-** well, I just I knew that there was a principal and vice-principal, and a
 112 counselor and I was just wondering how much to consider all those components, just in
 113 answering academic goals, like specific academic goals, a lot of that comes from our
 114 vice-principal, so I know that it comes from the principal, but again I just didn't know

115 how much to consider that. Again, I know all the things on there connect here, in one way
116 or another

117 **Researcher-** In terms of Catholic identity, how do you feel it interacts with the way you
118 teach

119 **TEACHER 2-** It really supports the idea of creating community in the classroom. I know
120 that when I am putting together my classroom management strategies I can just umm ,
121 look to Catholic identity issues and social teachings and things like that for background
122 and I know that it makes me feel a little bit more comfortable because I know there are
123 certain kinds of support systems in place that already fall in line with what I am going
124 for, you know like, being kind to your neighbor is an obvious choice, if you are the first
125 person in the room, getting chairs for the people in your row, you know, small, little
126 things that make a difference in the classroom function and the community

127 **TEACHER 2-** And I think that there is an expectation for Academic excellence, there is
128 not a choice to not try or not really care about something. I mean if we are here, and
129 teaching it is because it is part of a grand plan, I don't, I don't know...

130 **Researcher-** So I am not challenging, I just want to dig deeper on that, what is it about
131 Catholic identity that supports the academic excellence?

132 **TEACHER 2-** I just I guess I just throw it back too, if I had to think about it would
133 probably would be just a strong sense of self, a responsibility to your self, to your
134 community, to, umm , try... or just show up, you are here, it is a privilege to be in a place
135 where, where it is just not for everyone , it sounds a little... I mean... It is not a public
136 school, there is a choice in the matter when you come here, and families make that choice

137 together and the students are very much interested in in their own education and to
138 proving to there families that they are interested in succeeding as well.

139 **Researcher-** My dissertation is about Catholic identity supporting the instructional
140 leadership of the principal.... How do you feel about that, what is your professional
141 experience working in Catholic school , How does Catholic identity inform your
142 instruction?

143 **TEACHER 2-** the lessons are already there, but I am just honing in on something

144 **Researcher-** I mean, how do you feel about my general theory, in terms of your
145 professional practice?

146 **TEACHER 2-** Before I came to SCHOOL, I was in St. Paul public school, I work in... I
147 spent a lot of time in a lot of them... I spent time as a teacher.... Every school you went
148 in to there were things that were the same... and you could expect to... if you had issues,
149 well it is not issues, but everything was the same if you where in eastern St. Paul it was
150 the same in western St. Paul, and I guess that is kind of the point, they want to make it
151 uniform, or have uniform practice, being in Catholic school that we are working to set
152 ourselves apart and making coming to this school a unique experience, but there is still a
153 foundation that we share with other Catholic school , I haven't spent too much time
154 traveling around to too many Catholic school, but it is nice but if you find something that
155 is rooted in Catholic Teaching you can run with it, there is room to be more creative or
156 classroom, because some things are already in place. But when you say that Principal in
157 Catholic school are mixture of both, I was thinking that it is both here, there is a focus on
158 streamlining and organizing the curriculum. Everybody is using writing traits, story town.
159 So grade to grade expectations are building upon what was happening the year before, so

160 academically things are more consistent and streamlined from year to year, but there is an
161 awareness that you want each class to have its own experience so you can be creative.

162 **Researcher-** one of the paradoxes in the research that most people would say Catholic
163 identity is rigid, this is the way you live your life, but when you talk to Catholic school
164 educators they have freedoms that don't exist. That is part of my theory, that Catholic
165 identity doesn't exist in a person but is in the culture.....Catholic identity is scalable, as
166 long as you believe in it and are committed to it, but so what I am hearing is that you
167 have the freedom to use the foundation of CI...

168 **TEACHER 2-** and then kind of adjusted for the needs of the group, it really is, umm, it
169 changes yearly on what you focus on, what the students need. Academics, mostly, I have
170 a pretty good system down, I know who is going to go where with what, how to help the
171 kids struggling and give the advance kids enrichment, that is coming more easy to me.
172 the challenging and fun part is getting involved with a new group of kids to find out what
173 they need both academically and socially. As a fifth grade teacher it is really important
174 time for the kids because as they move into middle school they become less receptive to
175 teachings that focus on how they live their life the right way.....

176 **Researcher-** Do you feel that you spend time teaching behavior or expectations or do
177 feel that the children come with that already?

178 **TEACHER 2-** Umm , there is a good part of it that certain things are glaring obvious that
179 needs to be addressed in front of the whole class, there is I think a lot of expectations are
180 in place in terms of behavior and as far as those things go, I don't dedicate whole class
181 teachings to social moorings, but if something happens I can address it quickly. The big

182 issues are really understanding the people around you, I mean in 5th grade that is the big
183 thing, by the time you leave 5th grade you need to
184 understand that you are not you know, there are other people in the class and how you
185 can treat other people you don't get along with, umm . And so the rules of the classroom
186 are handled early on in the year, for a small bit of time, but the fall in very quickly with
187 the classroom. They will correct the substitute teacher or their parents and I have had
188 parent teacher conference where they say that their child has put in
189 place a rule from the school, saying this is the way we do it at class. Maybe the fact that I
190 don't spend that much time on it, I have never really, as a result of the catholic
191 experience that I never thought about it. There are certain things that are in place that are
192 cultural that maybe growing up in a Catholic community I can make the leap and say you
193 know...

194 **Researcher-** anything else or thoughts

195 **TEACHER 2**—no that is pretty much it...

196 END

Culture of Catholic Identity

Sense of Community

Sense of Foundation

Integration of Faith

Strong Behavior/Academic Expectations

Transcript from Study School Interview

Principal = Study School Principal

Teacher 1= Technology Teachers Grades K-8

Teacher 2= Middle School Religion Teacher

Teacher 3= Kindergarten Teacher

1 **Researcher:** How do you feel Catholic identity affects the way you/your principal
2 operate?

3 **Principal:** Well for me , my primary mission and reason in being a Catholic school
4 administrator is to give back to Catholic education, from which I greatly benefited
5 through my school career, that means the reason I get up is to make sure that the faith is
6 being passed on to the students here and so I take it very seriously, I ensure that the level
7 of catechism is excellent, that we celebrate important feast days. So as an example,
8 instead of taking (SCHOOL PATRON SAINT) off, we have a statutory precession and
9 other religious celebrations.

10 **Teacher 1:** very important, it is why we are here

11 **Teacher 2:** Essential reason.... As the religion teacher, I feel that it is the primary reason
12 for the existent reason, it is very important

13 **Teacher 3:** I think it flows through every level, every subject starts with Catholic faith
14 and move outs from there

15 **Researcher:** Who do you feel is responsible for establishing CI in the life of the school?

16 **Principal:** I think it should be a partnership between the principal and the pastor, or
17 whatever pastoral leadership is in the school, in our case there is a team of three pastors
18 and I think it is important that the pastoral vision is implemented to a large degree that
19 the priest are consulted on any type of religious celebration to make sure that any
20 religious celebration is in line with the mission and vision of the parish.

21 **Teacher 1:** I feel that all of us are important

22 **Teacher 2:** I feel that the principal is the captain of the ship, but we are all rowing

23 **Teacher 3:** He is the coxen, shouting out the instruction, but we are the ones rowing.

24 **Researcher:** What role do the teachers play?

25 **Principal:** The teachers are crucial are, they are according to Canon law, I think it is
26 Canon Law 810, are expected to live a certain probity of life, they are expected to be
27 Christian examples for the students, at every level of Catholic education from graduate
28 school to pre-k. Teachers are expected and must be Christian examples, so I think their
29 role, more than any, in ensuring that they are living according to the values presented in
30 their lesson and also there is a non-tangible aspect where the teachers really infuse the
31 school culture with their own experience with Catholicism, whether it be their own
32 personal pilgrimages or their own personal witness of their Catholic faith.

33 **Teacher 1:** We bring in to our curriculum and our lesson and connect it

34 **Teacher 2:** We are the foundation and the pillar of it. As the teacher you set the tone set
35 the agenda you are directing it, laying the ground work for that to be there

36 **Teacher 3:** And you allow for religious instruction to take over at any given point of the
37 day, when something comes up you bring in the gospel of the day. Our rules that we read
38 every day have Jesus above them, a smiling picture of Jesus, because we can say this is
39 how we want Jesus to look when we are behaving. Everything that we are doing, we are
40 bringing Jesus in to it, every conflict we are using biblical passage to remind them to direct
41 their day, and asking Jesus for help in everything that they do

42 **Researcher:** What role do you play as a principal/What role does your principal play?

43 **Principal:** I think it has been very easy for me to kind of bolster the Catholic culture the
44 way that I want to, because I am empowered to and I think this gets at your theory, as
45 long as it is kosher with the pastoral vision I am able to do programs, like we wrote,
46 scripted, and produced a play on the conversion of St. Paul, the statuary procession we

47 started that, that was under my direction. Ensuring that the children are ready for the
48 sacraments, I can personally ensure that since I can talk to each student and basically
49 assess their preparedness of the sacraments.

50 **Teacher 2:** I think he as really done a fine job of hiring people, which would be under
51 the mission of Catholic identity. Also supporting, if I ever what do something, he is like
52 please go. There is never a fear of too much, you know.

53 **Teacher 3:** Implementing little things that have such a huge impact on the day like
54 starting the day with the gospel and praying with teachers and then hearing the gospel
55 over the announcement and then we hear it in mass, and it just continues and makes it
56 feel that the gospel is at the center of the day. I have gone in with questions before with
57 things and he says I trust you, what ever you want to do is fine. That is so empowering to
58 know that he is just going to let me do it, and say well you need to rewrite that, or that is
59 not exactly right.

60 **Researcher:** When you leave as Principal/the principal leaves, how do you feel it will
61 affect the culture of Catholic identity?

62 **Principal:** I hope that I established and instilled a lasting a desire to ensure to ensure
63 there is a strong Catholic Identity here, one of the things we did, today we started out
64 with an opening prior to (SCHOOL PATRON SAINT) that we have used two years ago,
65 a thirty day prayer that we did together for higher enrollment, the next year we added 70
66 students and we attribute this to the powerful intercession to our success and we remind
67 ourselves of the powerful intercession through prayer and my hope is that we these
68 traditions that we established under my leadership will continue.

69 **Teacher 1:** It depends on who is new principal. Each principal has their own way of
70 creating and encourage

71 **Teacher 2:** I think that our principal set a very high bar, the new person will have a
72 challenge in meeting the expectations for this position

73 **Teacher 3:** I am hopeful because my husband is on the hiring committee..... I just keep
74 saying make sure they are good and our continuing the Catholic Identity. For me, my
75 sons go here, so I have a very vested interest in seeing the strong Catholic identity
76 continue.

77 **Researcher:** Do you have find that Catholic identity is something special in the school or
78 in Catholic education in general?

79 **Principal:** I think only because I can't speak for Catholic education as a whole, but I can
80 speak from working at a lot of schools, I want to say that we do pride ourselves on
81 ensuring that children are provided outstanding faith formation and that is done through
82 hiring outstanding qualified teachers for example our middle school teacher has a
83 master's degree in theology and that was a hire we made to ensure that our school had
84 strong Catholic identity for our success in the upper grades, by virtue her expertise, she
85 has shared across grade levels special aspects of the faith to wide range of grades.

86 **Teacher 1:** It is so important in todays world.

87 **Teacher 2:** I personally wouldn't be here if it were not Catholic.

88 **Teacher 3:** If I didn't I wouldn't spend 10,000 dollars. Not only that, we could all be
89 making a whole lot more money in Public schools, so we are here for the mission over
90 everything else

91 **Researcher:** How does Catholic identity affect the academic life of the school?

92 **Principal:** I think that it is hand in hand because the way that the faith is delivered and
93 presented to the children, it is presented partially in an academic way, but through the
94 religious instruction, the children come to the realization that doing your best in all aspect
95 of their life is crucial. So being a good Catholic also means honoring your mother and
96 father and the way the way that they do that as students is to achieve their potential and
97 even beyond. So I think that is one example in the way those two interacts. To put it in
98 general terms student achievement and academic success, is some how, correlated to their
99 success and safe development in the school.

100 **Teacher 1:** On a student level, it encourages them to do what is right and what is right
101 for students is to study and do the best they can do.

102 **Teacher 2:** As the middle school religion teacher, it is taken seriously, we have very high
103 standards, and our religion class is not just a fufu. I also think that there is a sense of
104 privilege being here, that this is a special place that needs to be treated that way and that
105 they have to work hard to be here—it is not taken for granted.

106 **Teacher 3:** I think parents who are seeking a religious education also general value a
107 strong academic program and we have a lot of support that other schools may not enjoy.
108 There is also a brother and sisterhood mentality, where people support others to do their
109 best because of Christian values

110 **Researcher:** Do you feel that this being a Catholic school and having the teachings of the
111 Catholic church make your job easier?

112 **Principal:** Absolutely, In fact, I would be in education if it wasn't for Catholic education.
113 So yes, it makes my job easier, a delight, uhm, it provides so many opportunities to
114 enrich the school culture. There is also this important unifying factor, in a vary diverse

115 population—we have people in five or so different countries. We celebrate our diversity
116 and the faith is what unifies the school. Yes we are from different parts of the world and
117 walks of life but we all believe

118 **Teacher 1:** Absolutely, we care about each other more, and our students. Our care
119 through the Christian faith, brings out the best in the students, parents, and the whole
120 community

121 **Teacher 2:** There is something that makes it easier for you as a teacher, for example if
122 you are teaching about marriage, we know what the Church teaches, and I can teach that
123 because it is in the standards and what I am supposed to teach. So it provides a sense of
124 protection, it is not so much what I personally want to teach, but what I am supposed to
125 teach. The Catholic identity protects the teacher

126 **Teacher 3:** I was taking a class on teaching science at a local museum and the public
127 teachers were saying they couldn't even talk about evolution because it is such divisive
128 topic and you know in a Catholic school, we don't have that issue because we can just
129 discuss it in its scientific merit. So we can even talk about other faiths, but we are not
130 required to teach them all the faiths or none.

131 **Researcher:** How do you incorporate your faith in your job as principal/teacher?

132 **Principal:** I think that it shapes every decision I make. Every decision I make so every
133 single decision made for the school as to have faith life and Catholic identity, or at least
134 in context of passing on the faith. It pervades the work of the principal, working in the
135 Catholic school. Everything from the treatment of teachers, students, parents, my
136 relationship with superiors who are priest. All of this is shaped by the fact that this is a
137 Catholic school. It is not about hanging a crucifix on the wall, it really is about the

138 relationships you develop with the teachers, students, parents, pastors.... All of that is in
139 context that we are a crucial arm of the Church, we are responsible for passing on the
140 faith to the children of the Catholic church. So that is something that we pride ourselves
141 and take very seriously. Every aspect of the job, It is not like I come to work and think oh
142 my gosh I have some mind numbing aspect of my job were I say, this is the Catholic part
143 of my job and this is the normal part of the job that say a public school leader would
144 have.

145 **Teacher 1:** In technology, we have done spiritually bouquets, and have done a lot of
146 research on saints through the internet. There is so many things to bring it in too

147 **Teacher 2:** in history, it flows very nicely, the history of the church is so deep that it can
148 be tied to everything

149 **Teacher 3:** I just incorporate it everything. Even a lesson on composting we mentioned
150 St. Francis and called the worms brother worms.

151 **Researcher:** How do you feel Catholic identity affects students outside of the classroom

152 **Principal:** It is hard to engage, because my interaction beyond school is limited. I see
153 them at mass and sport events. But I will say that from what I hear when a student goes
154 on to high school and college I sense the teaching of the faith has an affect on the
155 decisions they make, helps guide them in making decisions—a source of success for them
156 since their faith has guided their decision making for the better. I would say that Catholic
157 identity has had a pretty profound affect on them the way they behave beyond 8th grade.
158 Than again, you have to think about the role of the parents. If the parents are sacrificing
159 for them to attend a Catholic school, you would have to assume that the parents are

160 supportive of Catholic faith and morality and Christian discipleship beyond school
161 hours—so it is not just the school hours that matter.

162 **Teacher 1:** I think the character taught here goes beyond the classroom and the school. It
163 follows them out in their life, so they have the development of good character with the
164 support of the school, parents, and Church, they have a strong foundation and they are not
165 going to crumble and if they do, they know where to go

166 **Teacher 2:** I think we see the typically problems, we see bad behaviors, maybe online or
167 coming from home, typically temptations, but we have the ability to address the
168 formation, of what is right and wrong, and this gives them tools to try and meet those
169 challenges/behaviors head on and make the right choice.

170 **Teacher 3:** They learn so much, my 6th grader was just giving us a litany of prayers he
171 knows, he was spouting it off and my husband teaches Scripture at Catholic University,
172 and he didn't even know some of the prayers

