THE CATHOLIC UNIVERSITY OF AMERICA

Factors Impacting Catholic School Teacher Turnover Including Alternative Teacher Certification

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Elizabeth Youngs

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Factors Impacting Catholic School Teacher Turnover Including Alternative Teacher Certification

Elizabeth Youngs

Director: Merylann J. Schuttloffel, Ph.D.

The purpose of this dissertation study was to examine the factors that impact Catholic school teacher turnover with special attention to alternative route to teacher certification. Teacher turnover has a negative impact on the school organization economically, and a negative effect on student success. Factors tested in this study as having an impact on teacher turnover, in addition to route to certification or licensure, include teacher characteristics, school characteristics, and working conditions. The study also compared the percentage of teacher turnover in the Archdiocese of Denver Catholic Schools to national teacher turnover statics, and factors that impact teacher turnover locally with national trends. Teachers new to the Archdiocese of Denver Catholic Schools between 2001 and 2006 were the focus for this study.

Data were obtained from 284 current and former Archdiocese of Denver Catholic Schools teachers through a 55-item survey developed by the researcher. The survey was modeled on the National Center for Educational Statistics Teacher Follow-up Survey which also provided the national numbers for comparison in this study. Regression
analyses and Chi-square tests were used to determine which of the factors might be predictive of teacher retention or attrition.

The findings of this study show that for the six-year period studied, alternatively certified beginning teachers had the same as or a higher percentage of retention than traditionally certified beginning teachers. Findings also show that family circumstances, size of the school, and the diversity of student ethnicity are the factors that are most predictive of teacher attrition or retention. The age of the teacher and the lack of evidence of student service in support of Catholic social justice teachings were the next most significant factors predicting teacher turnover. The study shows that teachers are more likely to continue teaching in Archdiocese of Denver Catholic Schools when the evidence of the Catholic identity indicators matches the importance placed on that indicator by the teacher.

The results of this dissertation study extend the research on teacher retention and have implications for school principals who hire teachers in Catholic schools, for archdiocesan superintendents, and institutions of higher education that train teachers.
This dissertation by Elizabeth Youngs, SCL fulfills the dissertation requirements for the doctoral degree in Catholic Educational Leadership and Policy Studies approved by Merylann J. Schuttlof&ell, Ph. D., as Director, and by John J. Convey, Ph. D., and Leonard De Fiore, Ed. D. as Readers.

__________________________________________
Merylann J. Schuttlof&ell, Ph. D., Director

__________________________________________
John J. Convey, Ph. D., Reader

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Leonard De Fiore, Ed. D., Reader
DEDICATION

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Chapter One
Introduction

Effective teachers are recognized as the key determinant of student success (Convey, 1992; Darling-Hammond, 2007; Education, 2002). There is a national consensus that “what teachers know and can do makes the critical difference in what children learn” (Carroll & Others, 2003, p. 5). Saunders’ value added research suggests that students who experience effective teaching for three consecutive years or more will be successful in their education careers, and that students who experience ineffective teachers in consecutive years will fall behind and may never catch up with their grade-level peers. The challenge facing the educational community—in public schools, private schools, and Catholic schools alike—is how to ensure that all students have access to effective teachers. Teachers in Catholic schools are integral to the evangelizing mission of the Church but must also be effective educators in the academic aspects of this mission (Convey, 1992; USCCB, 2005).

It is difficult to provide a quantitative measure of teacher effectiveness. One presumed indicator of teacher effectiveness is possession of a professional license or certificate issued by a state education agency. The requirements for being a “highly qualified” teacher under the No Child Left Behind Act (NCLB) include full state certification (U.S. Department of Education, 2002; 2004). This license may be obtained in the traditional manner of earning a bachelor’s degree in education, or through an
alternative route. This dissertation study examines the relationship between method of certification and teacher retention. Another measure of teacher effectiveness is the number of years of teaching experience. The organizational factors of a school, such as the size of the school, the level of poverty of the students, administrative and peer support, and the characteristics of the teachers themselves impact how long teachers stay in individual schools and in the profession. The Schools and Staffing Survey (SASS) and Teacher Follow-up Survey (TFS) conducted by the National Center for Educational Statistics (NCES) at intervals since 1987 provide a database for examining these characteristics and drawing some conclusions about teachers who remain in teaching and those who leave.

The characteristics of teachers licensed through a traditional undergraduate program are somewhat different from those of teachers licensed through an alternative route. Comparing the mobility patterns of teachers coming to the profession through traditional routes and those entering through alternative routes may provide some insights into ways to retain teachers and increase their effectiveness. This study focuses on those patterns within the context of a Catholic school system/archdiocese.

**Conceptual Framework**

Effective teachers are the most important in-school factor in student learning (Convey, 1992; Darling-Hammond, 2007; Education, 2002). Beginning teachers gain in effectiveness over the first three to five years of their experience. Teacher turnover, especially in those formative years, is costly for the organization—the school
community—which has spent time, money, and personnel resources recruiting, interviewing, inducting and mentoring the new teachers, and when these teachers leave the school or the profession the organization does not benefit from the growth in the teacher’s experience and effectiveness. It is costly for students who are exposed to beginning teachers who are usually less effective than experienced teachers (Ingersoll, 2001, p. 505).

Teacher characteristics are important in the study of teacher turnover (Allen, 2005; Hanushek et al., 2004; Ingersoll, 2003). Beginning teachers bring with them their age, gender, family circumstances, ethnicity, and level of experience. Research identifies these as characteristics that impact the level of retention, mobility or attrition for beginning teachers (SASS 1999, 2003; TFS 2000, 2004). New teachers are impacted by the characteristics of the school in which they find themselves (Ingersoll, 2001). These schools are small (300 students or fewer) or large (600 students or more); they are located in urban, suburban, or rural areas; they are public or non-public—Catholic, non-Catholic, or non-religious. The grade level and subject area in which teachers work, and whether or not students share the same ethnicity as their teachers impact the retention/mobility level (stayers), or attrition (leavers) of beginning teachers. The working conditions in the schools where beginning teachers work influence their retention, mobility, or attrition (Ingersoll, 2003). These working conditions include the support and mentoring beginning teachers get from administrators and peers, the amount of autonomy they experience about the decisions they make within their classrooms, the size of the classes they teach,
the sense of community they experience, their level of satisfaction about the level of learning their students demonstrate, and, when the school is a Catholic school, the satisfaction with the sense of mission and vision they experience there (Convey, 1992).

Teachers come to the teaching profession and are certified as professionals through traditional routes, that is through a college or university preparation course of studies that leads to a state teacher license, or through non-traditional routes, that is a fast-tracked program of academic input and on-the-job training for individuals with college degrees in areas other than education that also leads to a state teacher license. The first three of these factors that impact teacher turnover: teacher characteristics, school characteristics, and working conditions, are well researched and found in a variety of literature about both public schools and Catholic schools. The fourth, route to teacher certification, is also mentioned in the literature, but there is a gap in the research about the turnover of teachers in Catholic schools based on their route to certification. This dissertation study addresses the effect the route to certification has on turnover of teachers in Catholic schools.

Figure 1 represents the conceptual framework for this study. The framework describes the four sets of factors impacting beginning teachers. This representation shows that these factors: teacher characteristics, school characteristics, working conditions, and route to certification, influence the retention/mobility or attrition of beginning teachers in the education profession.
Figure 1

A Conceptual Framework of Factors Impacting Teacher Turnover

Factors Impacting Teacher Turnover
- Teacher Characteristics
- School Characteristics
- Working Conditions
- Route to Certification

Teacher Characteristics
- Age
- Gender
- Family circumstances
- Teaching experience
- Grade level/Subject

School Characteristics
- Size
- Location
- Public versus private
- Catholic school culture

Working Conditions
- Autonomy
- Administrative support
- Class size
- Student characteristics

Route to Certification
- Traditional route
- Alternative route

Beginning Teachers

Teacher Turnover
Retention/Mobility
Attrition

Retention/Mobility
- Traditional Route
- Causes
- National data
- Local data

- Alternative Route
- Causes
- National data
- Local data

Attrition
- Traditional Route
- Causes
- National data
- Local data

- Alternative Route
- Causes
- National data
- Local data
Many factors influence teacher turnover (Ingersoll, 2003). Included among these factors are the qualities and characteristics of the teachers employed at the school (Allen, 2005; Hanushek et al., 2004); the characteristics of the school itself such as size and location; student characteristics such as ethnicity, and poverty level. The working conditions at the school include level of teacher autonomy, class size, and administrative support (Ingersoll, 2001, SASS; 2002 TFS), and for Catholic schools the alignment of culture, mission, and sense of the school community with ideals of the teacher (Convey, 1992).

Among the organizational characteristics impacting teachers are the route the teacher has taken to certification (Darling-Hammond & Sclan, 1996; Feistritzer, 2005a). One route to certification is the traditional approach to the teaching profession through a college or university teacher preparation program. Another is a more recently established preparation program where candidates enter the profession through an alternative certification route. Some or all of these factors impact how long a teacher stays at the same school growing in experience and effectiveness, moves to another school, or leaves the profession completely (Ingersoll, 2001).

Teacher turnover costs hiring agencies resources of time and money and impacts the quality and quantity of effective teachers available to schools. The investment by schools in hiring, nurturing, and retention of new teachers will pay dividends in student achievement and school effectiveness after these teachers have gained experience. If teachers leave a school too soon, this investment is lost to the school community.
Three of the four sets of factors—teacher characteristics, school characteristics, working conditions at the school—impact the retention of all beginning teachers. The fourth characteristic—route to certification or licensure—divides beginning teachers into separate groups. This dissertation study examines whether or not that fourth characteristic has an impact on teacher retention when the other three factors are similar.

**Teacher Characteristics**

The teacher characteristics of interest to this study are gender, ethnicity, family circumstances, age, years of experience, and grade level/subject area taught. Teachers are primarily female (79%) and white (86%) as reported by the Schools and Staffing Survey (SASS). One of the primary interests for the teaching profession among women is the opportunity it affords them to take time away from the profession to raise a family (Allen, 2005). Age is a significant indicator of teacher turnover. Most beginning teachers coming into the profession through a traditional route are in their twenties. A graph of the age of teachers who leave the field would resemble a U-shaped curve showing that rates of decline are steep in the first years and then level out until teachers reach retirement age when they again increase. The highest rate of attrition is among teachers under the age of 30. Teachers entering the profession through an alternative route tend to be older and have already had experience in one or more occupations. Ingersoll (2001) cites age as “the most salient predictor of the likelihood of their turnover” (p. 518). Research suggests that 25% to 37% of teachers who leave teaching return to the profession at some point, possibly after their children are grown. This dissertation study does not directly address
the group of teachers who return to the profession. Teachers with less experience are more likely to leave teaching than those with more experience. Over 50% of teachers leave the profession with five years of experience or less. Those who teach math and special education have a higher turnover rate than those who teach other subjects. Some are attracted to the vocational aspects of teaching, some to teaching as a profession, and some people intentionally become teachers for a brief time to be of service in high need locations, to gain experience, or as an interim job before moving on to another career.

**School Characteristics**

An analysis of SASS and TFS data (Ingersoll, 2001; NCES) shows that teacher turnover is higher in private schools than in public schools. It is higher in religious non-Catholic schools than in Catholic schools or non-sectarian schools. It is higher in high-poverty schools than in low-poverty schools and in small schools (those with fewer than 300 students) than in larger ones (those with 600 students or more). Teacher turnover is higher in urban schools than in either suburban or rural schools. Analyses of SASS/TFS data (Ingersoll, 2001, Marvel, 2007) show that smaller private schools have the highest turnover rate, and that it is higher “than the rate in high-poverty public schools, and is more than double the national average for other kinds of employees” (Ingersoll, p. 516).

**Working Conditions**

The working conditions in Catholic schools that have been identified as strengths are relationships with administrators, autonomy and self-determination in classes, relationships with peers, and positive interactions with students (Convey, 1992).
Conditions such as inadequate administrative support, poor salary, student discipline problems, lack of faculty influence, and lack of student motivation rank high as the causes of dissatisfaction that make teachers leave the profession (Ingersoll, 2001). The compatibility of a teaching assignment to the qualities of the teacher influences teacher retention. Alternative route teachers may have a higher rate of retention based on the specific, on-the-job training provided by these programs (Allen, 2003). This dissertation study adds data to support this possibility in Catholic schools.

**Route to Teacher Certification**

The traditional route to teacher certification is through state approved teacher education programs provided by accredited colleges or universities. Graduates of these programs have a degree that qualifies them for a state teaching certificate or license. Traditional route teachers tend to be white, younger, and include a higher number of females compared to alternative route teachers who tend to be older, have a higher percentage of males, and more people of color.

Certification is an institutional method of ensuring a threshold competency for teachers, and a mark of sustained and continuing professional eligibility. An alternative route to certification provides a program for college graduates with non-education degrees to enter the profession. The alternative route to teacher certification is a market-driven movement designed to allow career-changers to become teachers without completing a traditional education degree. These teachers tend to be older, higher
percentage male, and more ethnically diverse. These teachers are given on-the-job
training for a specific school environment (Feistritzer, 2005).

Teacher Turnover

The primary reason for the need for new teachers is a lack of pre-retirement
teachers rather than other circumstances such as the movement to smaller class sizes, an
increase in enrollment, or retirement of the current workforce. The high attrition rate
among young, inexperienced teachers is responsible for significant cost and loss of
investment. Recruiting, hiring, orienting and mentoring new teachers represent a
significant organizational investment. This investment will pay off if teachers remain
with the organization as they improve and reach their peak effectiveness over the first
three to five years of their professional experience. The investment will pay off in student
achievement and success in learning as well as economic benefits to the organization. If
teachers move from one school to another, the investment will still benefit students, but
the original school will have lost a trained teacher and will need to do the recruitment,
hiring, and orientation process again.

Teacher turnover is higher than the average employee turnover among other
professions (Ingersoll, 2001). Some turnover is healthy for an organization since it allows
the organization to weed out ineffective members, and allows for innovative, creative
newcomers. But, too much turnover among teachers is costly to the organization,
teaching profession, and the successful learning of the student population.
Statement of the Problem

Research shows that turnover of teachers is high in Catholic schools, especially in high-poverty schools, and in smaller schools (Ingersoll, 2001; Yeager, Benson, Guerra, & Manno, 1985). This may be due to lower pay in Catholic schools as compared to public schools, but there may also be some organizational reasons for teachers leaving these Catholic schools such as a mismatch between the ideals of the teacher and the focused, specific mission of these schools (Ingersoll, 2001). The organizational structure of schools can account for some of the mobility of teachers. Catholic schools strive to be communities of learners. In fact, the aspect of learning to be community from the lived experience of community that Catholic schools offer is one of the essential five marks of a Catholic School (Miller, 2005).

“The most important and accurate statistics on teacher retention are inevitably local” (Allen, 2003, p. 43). This dissertation study analyzes the retention patterns of beginning traditionally licensed teachers in the Archdiocese of Denver Catholic Schools (AoDCS) as well as participants of the Colorado Department of Education (CDE) Alternative Licensure Program administered by AoDCS in partnership with Regis Jesuit University. This alternative licensure program has been in effect since 1997. This dissertation study compares the retention patterns of alternatively licensed teachers hired between the 2001-02 school year and the 2006-07 school year with that of traditionally licensed teachers hired during those same years by AoDCS. It compares these results to the national SASS and TFS data. In particular, this study describes whether or not
Catholic school teachers with certification through alternative routes have a different pattern of retention, leaving the profession, or moving within the profession than AoDCS teachers with traditional certification.

**Significance of the Study**

This study is significant because of its specific focus on alternatively certified teachers in Catholic schools. A considerable number of alternatively certified teachers are in Catholic schools. The Notre Dame University Alliance for Catholic Education (ACE) program, a type of alternative teacher preparation program, currently supplies teachers to Catholic schools in 30 communities nationwide (ACE website) including the AoDCS. More than 300 alternatively licensed teachers in Colorado have entered the profession through the AoDCS in partnership with Regis Jesuit University in Denver. This study extends previous research about the climate of Catholic schools and the satisfaction of teachers in Catholic schools with added data provided by the SASS and TFS. It builds on analyses of SASS and TFS data done by Ingersoll (2001) and his additional focus on organizational characteristics of schools. Exploring patterns of retention may lead to strategies for greater teacher retention in Catholic schools. This study contributes to leadership decisions about employment of teachers based on routes to teacher certification. The findings of this study also give important direction to Catholic colleges and universities that prepare teachers for service in Catholic schools.
Research Questions

The questions for this dissertation study consider whether or not the characteristics that impact beginning teachers can predict trends in teacher turnover. The questions are:

1. What factors are important predictors that Archdiocese of Denver Catholic Schools teachers will remain in teaching (stayers) or leave the teaching profession (leavers)?
2. How do these factors differ for teacher stayers and teacher leavers?
3. How does the percentage of attrition of traditionally certified teachers in Archdiocese of Denver Catholic Schools compare to the percentage of attrition of alternatively certified teachers in Archdiocese of Denver Catholic Schools?
4. How does the national rate of teacher attrition between the 2001-02 school year and the 2006-07 school year compare to the attrition rate in the Catholic schools in the Archdiocese of Denver during this same time period?

Hypotheses of the Study

The two hypotheses for this study are as follows:

2. A lower percentage of alternatively licensed teachers hired in the Archdiocese of Denver Catholic Schools between 2001 and 2006 left teaching than the percentage of teachers nation-wide.

Limitations of the Study

This study has several limitations. One is due to the characteristics of alternative licensure programs. First, alternative licensure programs vary widely and are difficult to clearly define (Feistritzer, 2005). Research seems to indicate, however, that the criteria between programs nationally are more comparable than the criteria within individual state programs. Another limitation is the perceived problem with the SASS and TFS data regarding teacher certification. There is some evidence that teachers do not know in which category to place their certification status, so self-reporting about their certification status may be in question (Ballou, 1998; Legler, 2002; Shen, 1998).

This study is also limited in that the hiring practices of Catholic schools generally reflect the requirements of the state in which they reside. Teachers in some Catholic schools are state certified; some Catholic schools do not require state certification and are certified by the school system, that is the diocese, or an independent school organization; and some teachers in Catholic schools have no official certification although they have the requisite characteristics for certification (Convey, 1992; Yeager et al., 1985). The target population for this study is teachers in a medium sized Catholic archdiocese. The results may not translate to larger or smaller (arch)dioceses. For these reasons it is difficult to generalize from the AoDCS to other Catholic schools.
Definition of Terms

The following terms have been identified for use in this study.

Alternative Teacher Licensure – a way for non-education majors to earn teacher certification or licensure without attaining another degree, specifically one in the field of education. For this study, alternative licensure is understood as any license conferred through a non-traditional route. On the SASS and the TFS, teachers are asked to respond to the question about certification with one of six options: (1) Full certification – by a body other than the state, (2) regular/standard certification, (3) probationary/initial state certification, (4) provisional/alternative certification, (5) temporary, or (6) emergency certification. Option 4 is clearly identified in the footnotes as alternative certification. Approximately 4.5% of teachers surveyed identified this as their level or method of certification (Feistritzer, 1994; Ingersoll, 2001; SASS, 1998, 2001). In this dissertation study “licensure” and “certification” will be used interchangeably.

Traditional (or regular) route to teaching – earning an undergraduate degree in education and qualifying for a teaching certificate or license from a given state (Feistritzer, 1994, p. 132).

Non-traditional route to teaching – any of several models of alternative teacher licensure/certification.

Beginning teachers – selected and used in this study to group together a set of teachers and meaning classroom teachers of record for the first time, with five or fewer years of experience. They may be traditionally or non-traditionally certified.
Teacher retention – maintaining teacher employment in the same school for consecutive years (Ingersoll, 2001).

Teacher mobility – teachers remain in the teaching profession but move from one school to another, from one district to another, or from one state to another (Ingersoll, 2001).

Teacher attrition – teachers leaving the teaching profession (Ingersoll, 2001).

Teacher turnover – both teacher mobility and teacher attrition are considered turnover because the effect for a school is the same whether the teacher leaves the school and stays in the profession, or leaves the profession (Ingersoll, 2001).

National Center for Education Statistics (NCES) – the primary federal entity for collecting and analyzing data related to education.

Schools and Staffing Survey (SASS) – a source of data compiled by the NCES and used to study teachers’ demographic characteristics and mobility patterns. SASS has been conducted by the NCES in 1987, 1990, 1993, 1999, 2003, and 2007.

Teacher Follow-up Survey (TFS) – a further source of information gathered by NCES one year after each SASS from the teachers responding to the SASS. The TFS was conducted in 1988, 1991, 1994, 2000, 2004, and 2008.
Summary

Chapter 1 lays out the purpose of this study. It gives an introduction to the topic and provides a conceptual framework. It identifies the elements of the conceptual framework and defines important terms. It provides the hypothesis and research questions for the study. In the next chapter, the current literature about the subject of this study will be presented.
Chapter Two

Review of Related Literature

In this chapter literature that pertains to the factors impacting teacher turnover is reviewed. The factors are categorized as teacher characteristics, school characteristics, working conditions and route to certification. The literature discusses teacher turnover as one of the major blocks to providing effective teachers in schools for all children. It discusses the factors that impact teacher turnover and addresses the causes of teacher turnover in order to find ways to retain experienced and effective teachers longer. Small Catholic schools have one of the highest rates of teacher turnover of all categories of schools (Ingersoll, 2001). The research reviewed here looks at the causes of teacher mobility in general. Little research has been done on teacher attrition in Catholic schools with a focus on the method of teacher certification. This dissertation study addresses the gap in the literature.

There are three sections to this chapter. The first section reviews the literature about the factors impacting teacher turnover such as the characteristics of the teacher, the characteristics of the school including the culture of the Catholic school, and the conditions under which teachers work. The second section reviews both the literature that supports and that which is critical of alternative teacher licensure. The third section reviews literature that compares certification status with attrition rates of teachers in both public and non-public schools.
Factors Impacting Teacher Turnover

The following section reviews literature on the various factors impacting teacher turnover. The focus is on each of the factors individually although there is considerable overlap between them.

Teacher Characteristics

This discussion reviews literature that focuses on the characteristics of those teachers who are most likely to move from one school to another or to leave the profession. This literature is interested in teacher characteristics such as level of teaching experience, age, gender, ethnicity, and subject taught. This review also cites literature specifically about the characteristics of teachers in Catholic schools.

Level of teaching experience and age. A study performed by the National Commission on Teaching and America’s Future (NCTAF) (Carroll, 2003), identifies teacher retention as a national crisis because attrition is undermining the efforts of schools to provide quality teaching for every student. Turnover erodes overall teaching quality and student achievement. Data indicate that newly prepared teachers and those with less than five years of experience are among those with the highest levels of attrition. These novice teachers are leaving before they can become good at teaching, or at the peak of their learning curve. Schools with high turnover spend money on recruitment efforts and professional support for new teachers. When teachers leave before they can benefit from their experience and professional development, students do not reap the benefits. The cost to schools of this turnover can be measured in organizational
terms. NCTAF research also identifies characteristics of strong schools such as a sense of community and continuity among school personnel. These characteristics are eroded by high rates of teacher turnover.

There is strong evidence that teacher attrition is most severe among beginning teachers (Allen, 2005). The majority of beginning teachers are in their 20s, female, and white. Teachers are more likely to leave teaching before the age of 30. High rates of attrition also occur when teachers are of retirement age. Ingersoll (2001) calls age “the most salient predictor of the likelihood” of teacher turnover. Younger teachers have a higher turnover rate than those who begin at a more mature age. White teachers have greater rates of attrition than either African American or Hispanic teachers.

Teachers with less experience – one to five years – tend to leave more frequently than those with more experience. First year teachers have about a 14% - 16% attrition rate. Teachers seeking their first teaching position may have fewer options or be less selective than veteran teachers and so leave the school, but not necessarily the profession, in their first few years. One study (Hanushek, Kain & Rivkin, 2003) indicates that teachers in the first two years of teaching are more than twice as likely to leave the profession as veteran teachers, and more than four times as likely to switch districts. Close to 50% of beginning teachers have left the profession after five years (Ingersoll, 2001, 2003). After the 12th year of teaching attrition has leveled off to between ½% and 1% per year (Allen, 2005). The rate of attrition increases again significantly after 25-30 years in the profession. Teachers who leave the profession after only a few years of
experience may return to the profession after some years. This may be because they have interrupted their career for family reasons.

This study compares the age and previous life experiences of the beginning teachers who leave the Archdiocese of Denver Catholic Schools. Alternative licensure teachers tend to be older and have other career and work experiences before becoming teachers, unlike recent college graduates. This study will determine whether or not age and previous experience are factors in teacher retention in Catholic schools.

**Subject area or grade level.** Allen (2005) found strong evidence to suggest that attrition is higher among middle and high school teachers than among elementary school teachers. The evidence also suggests that science and math teachers are more likely to leave than teachers of other subjects. Alternative licensure teachers are often recruited to teach high-need subjects, especially math and science. This dissertation study examines the data to determine whether or not this is a trend among new teachers in the Catholic schools in the Archdiocese of Denver and if there is a difference between alternative and traditionally licensed teachers in this area.

**Catholic school teacher characteristics.** The characteristics of teachers in Catholic schools have become much more similar to those of their counterparts in public schools. Convey (1992) traces the characteristics of Catholic school teachers from the time prior to 1965 when most of the teachers in Catholic schools were members of religious communities through the transition to a predominantly lay faculty. During the time when most teachers in Catholic schools were members of a religious community,
there was a much lower likelihood that a teacher in a Catholic elementary school would have a bachelor’s degree, compared with a teacher in a Catholic high school or a public school. The lay teachers who replaced these men and women religious were also not as likely to have a bachelor’s degree. Convey cites research by Neuwien in 1966 that “over two-thirds (68.4 percent) of the nearly 29,000 lay women teaching in Catholic elementary schools in 1962 had not completed college” (p. 116).

By 1986, however, this had changed and 97% of Catholic school teachers held at least a bachelor’s degree and 30% had a graduate degree.

The emphasis on teacher preparation and accountability, the availability of more college graduates who majored in education, more competition for teaching positions as the enrollment of all schools began to decline, the expectations of the profession, and the changes in the formation programs of religious communities contributed to the increased formal academic training of Catholic school teachers (p. 117).

Cochran-Smith (2006) indicates that this transition from less well-educated to more well-educated was true for public schools as well. “The previous generation became teachers at a time when there were few career opportunities for educated women and people of color except teaching, nursing, and other kinds of ‘women’s work’,” and that they came to teaching for “altruistic reasons” (p. 8). There is a changing profile of teachers new to the profession. They are older, 35-38 as compared 23-25 for traditionally trained new teachers; mid-career professionals looking to change careers, and have
considerable career experience; they have already established families and have children of their own. Although Cochran-Smith is not clear if these older career changers are alternative or traditionally trained teachers, these characteristics are very similar to the average alternative licensure teacher and many of the reasons why teachers leave the field in the first five years – change of career, to establish a family – are no longer relevant for them. Teachers who stay in teaching do so for relational issues, for the joy and love of the occupation, qualities that are not mentioned in NCLB’s definition of “highly qualified” (p. 11).

*High School and Beyond* (NCES, 1992) cited the levels of experience among Catholic school teachers. This research indicates that “on average Catholic high school teachers had fewer years of teaching experience than public high school teachers, but more years of teaching experience than teachers in other private high schools…” (p. 117). Other data indicate that Catholic elementary schools of that day had slightly more experience than did teachers in Catholic secondary schools.

Ingersoll (2001) discusses individual characteristics of teachers such as age, content area of teaching, gender, and ethnicity, but he does not discuss the method of teacher preparation, although this is a variable available in the data. This dissertation study focuses on the impact of the route to teacher certification and builds upon Ingersoll’s work.
School Characteristics

One of the extensive studies (Ingersoll, 2001) analyzing teacher turnover was based on data gathered in the SASS and the TFS to determine patterns of teacher migration and teacher attrition. Ingersoll’s study is somewhat unique in that it suggests that there are organizational factors, not just teacher characteristics, driving teacher turnover and therefore school staffing problems. He suggests that the seeming teacher shortage results from a “revolving door” of qualified teachers leaving the profession for other reasons than retirement. He examines teacher turnover from an organizational perspective and includes data based on individual teacher characteristics as well conditions in schools. His analysis is based on three premises: “(a) understanding employee turnover is important because of its link to the performance and effectiveness of organizations; (b) fully understanding turnover requires examining it at the level of the organization; and (c) fully understanding turnover requires examining the character and conditions of the organizations within which employees work” (p. 504). The SASS/TFS data provide the opportunity to compare staffing patterns between public schools and private schools, between large schools and small schools, and between rural, urban and suburban schools. One of the most interesting pieces of information in Ingersoll’s study related to Catholic schools is that teacher turnover is greatest in small private schools. “In rates of turnover, smaller private schools have the highest average levels – about 23%. The turnover rate in these schools is significantly higher, for instance, than the rate in high-poverty public schools, and is more than double the national average for other kinds
of employees” (p. 516). His conclusion has significant implications for the majority of Catholic elementary schools in the United States and is part of the catalyst for this dissertation study. Catholic schools are the majority of the private schools identified in Ingersoll’s analysis of the SASS data and this study focuses on a specific subset of Catholic schools.

Turnover in Catholic high schools was rather high according to *The Catholic High School: A National Portrait* (Yeager et al., 1985). In 1984, 73% of Catholic high school teachers had at least five years of teaching experience, 54% had taught in their particular school for five years or less and 28% had taught there for two years or less. Private school teachers were leaving the profession (8%) at twice the rate of public school teachers (4%), and 9% were teaching in a different school in 1987 from the one they had been teaching in the previous year. Ingersoll (2001) uses SASS data to find that private schools have a higher annual turnover rate (18.9%) than public schools (12.4%). The data indicate that “although high-poverty public schools have moderately higher rates, larger schools, public schools in large school districts, and urban public schools do not have especially high rates of teacher turnover. In contrast, small private schools stand out for their relatively high rates of turnover (p. 501). This dissertation study collected local data to compare with Ingersoll’s finding and allowed a further analysis of the data to determine whether or not these rates are the same when comparing traditionally prepared teachers and alternatively prepared teachers in AoDCS specifically.
Data suggest that private schools have higher turnover rates than public schools, and that smaller schools have higher rates of turnover than do larger schools (SASS, 1999). Larger schools are classified as those with 600 or more students and smaller schools are identified as those with fewer than 300 students. Larger private schools have an annual turnover rate of about 10%. Ingersoll (2001) identifies this as about the same general rate of employee turnover that can be found in other occupations. Smaller private schools have an employee turnover rate of about 23%, significantly higher than the larger schools. It is even higher than the turnover rate in high-poverty public schools (p. 515-516).

The very clear chart included in Ingersoll’s research (which has been cited and copied in a number of other studies and reports on this topic) further divides these results to show private school teacher turnover at an annual rate of 18.9% compared to annual employee turnover of 11% for all teachers in the study (see Figure 2). Catholic schools have a 17.7% annual employee turnover rate, and other religious private schools have an annual employee turnover rate of 21.5%. Non-sectarian private schools have a 16.1% annual employee turnover rate (p. 516). The age of a teacher and the subject taught are the largest determiners of teacher turnover, but next to that is school size.

In his analysis, Ingersoll does not separate Catholic schools from the other two categories of private schools, nor does he take into account the type of teacher certification. This dissertation study uses data gathered from teachers who have left the AoDCS with a specific focus on alternatively trained teachers. Ingersoll does make some
suggestions about why the turnover in private schools is so high. He finds that private schools “employ about 7.5% of the K-12 teaching force, but account for about 13% of all teacher turnover” (p. 526). These schools “lose, on average, one-fourth of their faculty each year” (p. 526). He suggests that

…high levels of teacher turnover in small private schools are of both theoretical and policy concern because these are the very schools that presumably are most
likely to have performance-enhancing, tight-knit community. … [P]rivate school teachers are far more likely to switch to public school jobs than public school teachers are to switch to private school jobs…. These findings stand out because teachers in private schools consistently report higher levels of job satisfaction and more positive school climates than do teachers in other kinds of schools” (p. 526).

This observation seems to support the need for additional analysis of these data with special focus on Catholic schools as separate from non-sectarian schools and other private religious schools. This study contributes to filling that gap by considering a specific group of Catholic schools.

Characteristics of the school as an organization seem to be an important variable in the retention of teachers. Some would argue that it is the organizational characteristics of schools and school systems that are, in fact, causing the shortage of teachers (Ingersoll, 2003). Alternative licensure of teachers may be considered one of several methods of teacher recruitment that could indicate a lowering of teaching standards and exacerbating the problem rather than solving it. Ingersoll agrees that from an organizational perspective, some teacher turnover is helpful, especially in the case of ineffective teachers. However, turnover may also cause other problems related to the school culture. Ingersoll says, “…high rates of teacher turnover are of concern not only because they may be an outcome indicating underlying problems in how well schools function, but also because they can be disruptive in and of themselves, for the quality of school community and performance” (p. 13). Large class sizes and low pay are not the major
reasons that beginning teachers give for leaving the profession. Pursuit of another job and dissatisfaction with a career in teaching are major causes of attrition. The culture of schools that include more administrative support for beginning teachers, and other improvements in working conditions would also contribute to teacher retention (Ingersoll & Smith, 2003). So, the solution to the shortage of teachers may not be finding more teachers, but in making changes to the culture of schools.

**Working Conditions**

Ingersoll (2001) gives a concise context for why employee turnover is an important consideration for any organization, and especially for schools that are seeking to provide qualified teachers and high quality instruction for students. Too little turnover tends to cause the organization to be stagnant, but “high levels of employee turnover are both cause and effect of ineffectiveness and low performance in organizations” (p. 505).

Among the organizational factors related to teacher attrition are “…inadequate support from school administration, student discipline problems, limited faculty input into school decision-making, and to a lesser extent, low salaries…” and this has “implications for school community and school effectiveness” (p. 501). Ingersoll suggests that, “[h]igh levels of teacher turnover in small private schools may, paradoxically, be caused by a coherent mission, clearly defined values, and a tight-knit community (p. 527)”, the very reason others find for high teacher satisfaction in Catholic schools (Convey, 1992, p. 124 ff). He suggests this may be true because there is very little opportunity for deviation from the values and mission of the community. He further
suggests “that small and religious private schools are less likely to have teacher unions, tenure provisions, formal mechanisms for collective opposition to school policies, or faculty grievance procedures and, as a result, have higher rates of teacher turnover” (p. 528). This might lend importance to the original hiring process – to ensure that teachers understand from the beginning the values and goals of the school community that they will enter. The work presented in this dissertation study seems to agree that Ingersoll’s findings are paradoxical and this study uses the survey and demographic data gathered from previous AoDCS teachers to confirm the evidence and determine whether or not there is reason to challenge his conclusions.

Based on research on Catholic schools organizational characteristics (Convey, 1992), administrative support and community atmosphere are strong indictors of teacher satisfaction. These organizational characteristics should therefore be reasons for retention of teachers. Studies have been done since 1987 examining the individual characteristics of teachers and their relation to attrition but Ingersoll (2001) points out that there has been little attention paid to the characteristics of the schools in which they work as the cause of attrition. This same data provided by the SASS and TFS is used to focus specifically on characteristics in the AoDCS and the response of teachers, especially alternatively licensed teachers.

Catholic school officials affirm that turnover seriously undermines the ability of a school to build and sustain professional teaching communities (USCCB, 2005). A sense of community is an important indicator and aspect of successful schools. Catholic schools
also list creating community among the teachers and students of a school as one of the most important aspects of the school (Miller, 2005). Catholic Church documents (USCC, 1973, USCCB, 2005, Miller, 2005) identify community as one of the qualities that make Catholic schools especially important in the formation of young people into the life of the church.

The community aspect in organizations is one of the major threads in Ingersoll’s analysis. He says,

… the presence of a positive sense of community among families, teachers, and students has long been held by education researchers to be one of the most important indicators and aspects of successful schools… [so, high turnover of teachers] may be an indicator of sites of potential staffing problems…because of its relationship to school cohesion and, in turn, performance (e.g., Durkheim, 1961; Waller, 1932; Parsons, 1959; Grant, 1988; Coleman & Hofer, 1987; Kirst, 1989; Rosenblatz, 1989) (p. 505).

The importance of community and the question of whether or not high turnover can be a symptom of problems in this area is considered in this dissertation study. It considers the various working conditions, particularly with regard to alternatively licensed teachers, and supports this statement. Modeling, building, and living community is one of the primary characteristics and organizational qualities of Catholic schools. This component should impact teacher turnover in a positive direction in Catholic schools.
Ingersoll (2001) discusses the fact that attrition has been identified in only the numbers of teachers leaving schools, and not addressing the migration of teachers from one school to another within districts or from one district to another. Data seem to indicate that private school teachers were more likely to leave teaching than to migrate. This will have some relevance for Catholic schools, since it seems at times that Catholic schools train teachers and give them their initial induction into the profession before they leave to continue to work in public schools.

Other organizational characteristics are mentioned by Ingersoll. He particularly studies: “… the compensation structure for employees; the level of administrative support, especially for new employees; the degree of conflict and strife within the organization; and the degree of employee input into and influence over organization policies” (Ingersoll, 2001. p. 507). To do this analysis he looks at school organization, in particular “school level, size, urbanicity, sector, the level of poverty of the student population, and the orientation or affiliation for private schools (Catholic, other religious, non-sectarian)” (p.509). He suggests that “turnover in private schools might not be due to school effects but to teacher-selection effects; i.e., those employed in private schools might tend to view teaching as a temporary job prior to embarking on a more permanent career” (p. 512). Questions in the TFS that ask teachers to predict how long they plan to remain in teaching provide data to support this claim by Ingersoll. This dissertation study furthers the research regarding this question with relation to Catholic school teachers.
Allen (2005) cites research that provides evidence that teacher turnover is higher in schools with higher levels of poverty, or minority students, and higher levels of academically low-performing students. Teacher turnover in low-poverty schools is 10.5% as compared to a turnover rate of 17.2% in high-poverty schools (SASS/TSF, 1990-91/1991-92).

Low support for new teachers is one of the factors Ingersoll (2001) examines. He reports, “…the rate of turnover in private schools may be ameliorated by their higher levels of administrative support, higher levels of faculty influence, and lower levels of student discipline problems and, hence, once these are controlled, the rate of turnover in these schools increases” (p. 519). When Smith and Ingersoll (2004) looked at Catholic school teachers as discrete from teachers in other non-public schools, the turnover rate was more comparable to public schools than to the other non-public schools. When studies examined the turnover of new teachers with mentors, age and school size were not determining factors. The culture of Catholic schools including the focus on community and the history of mentoring may provide beginning teachers a more satisfying experience and could reduce teacher turnover. This dissertation study analyzes the reasons beginning teachers give for moving away from Catholic schools to other schools or leaving the profession.

Ingersoll (2001) spotlights and compares urban high-poverty public schools and small private schools and finds that “teachers in small private schools leave the teaching occupation at a rate more than double that of teachers in urban, high-poverty public
schools (15% compared to 5.7%)” but they leave for different reasons (p. 521). He goes on to acknowledge that “some of this difference may be a result of private school administrators laying off low performing staff—a capability held to be less available to public school administrators (Chubb & Moe, 1990)” (p. 522). Eliminating teachers, if they are low performing, may not have a negative impact on student achievement, but rather be beneficial to the school community. Ingersoll finds that “although a larger portion of those departing from small private schools indicate they do so from job dissatisfaction, the major reasons for their dissatisfaction are fewer in number. Most prominent is salary” (p. 523).

Cochran-Smith (2006) agrees with Ingersoll and uses his research in an analysis of her own. She suggests that there are three things that are different about the current and previous understandings of a teacher shortage: (1) the legal requirement based on NCLB that all teachers be “highly qualified;” (2) that recruitment may not be the problem, but rather retention (Ingersoll, 2003); and (3) the problem of retention is greater in the highest poverty and hardest to staff schools (Darling-Hammond, 2004; Darling-Hammond and Sclan, 1996).

Convey (1992) identifies four aspects of the workplace that teachers see as rewarding and tend to motivate teacher retention: “(1) relationships with the school’s administrators; (2) self-determination of the conduct of their classes; (3) relationships with their fellow teachers; and (4) interactions with students…” (p. 121). He analyzes each of these and demonstrates that Catholic school teachers evaluate these attributes at a
higher level than teachers in public schools. He notes that teachers in Catholic schools experience a higher level of collegiality, feeling of community, and sense of responsibility for the organization than do public school teachers. Lack of support from administrators was seen by Ingersoll (2001) as a significant reason for teachers leaving the profession. This dissertation study addresses the relationships with administrators and fellow teachers, particularly those with alternative licensure, in the AoDCS to see whether or not these are reasons for teacher attrition in this subset of schools.

Bryk (1993) posits that the communal nature of the Catholic school provides a working culture where teachers feel a higher sense of intrinsic satisfaction and support for their work in the profession. Even so, low salaries in Catholic schools are identified as one reason for teacher turnover. This is particularly true in inner-city schools where resources are even more limited. In these situations funds for professional development are scarcer which could also contribute to teacher turnover (p. 309). Recent SASS/TFS data, and data collected from the AoDCS in the survey data from this study are used to see whether or not Bryk’s conclusions have held true in the intervening decades.

Other research (Yeager et al., 1985) found teacher turnover in Catholic high schools to be “quite high” (p. 42) when compared to public high schools, and suggests that more work is needed to assess the impact of teacher turnover. Yeager found that “staff turnover is closely related to economics” and that “turnover rates are not related to school climate” (p.43). This conclusion is based on the evaluation of the school climate and the impressions of principals rather than the expressed opinions of the teachers.
Ingersoll (2001) seems to think that the opposite is true. Personal professional experience leads to agreement in this dissertation study with Yeager. Data from SASS/TFS and from the study for this study are examined in light of these previous findings. An analysis in this study pays special attention to any differences between alternatively certified and traditionally certified teachers in AoDCS.

Gathering data about Catholic schools between 1990 and 2000, Hunt, Nuzzi and Joseph (2002) included the 1993-1994 SASS data showing that 96% of Catholic elementary school teachers hold a bachelor’s degree as compared to 99% of public elementary school teachers. Seventy-one percent of Catholic elementary school teachers were state certified compared to 94% of public elementary school teachers and 60% of other private school teachers. There are several more cycles of SASS data currently available for study. This dissertation study extends the research on this topic and focuses on types of certification, that is traditional or alternative certification, and examines the patterns of mobility of teachers in Archdiocese of Denver Catholic Schools.

**Route to Teacher Certification**

The next section will discuss the literature about the two types of beginning teacher licensure that are considered in the present study. Beginning teachers may earn a teaching license through an undergraduate degree program from a state-certified program. Beginning teachers may also earn a license through an alternative route. These two routes are explored below.
**Traditional route.** Teacher certification is a systematic way to identify qualified teachers. The ability to certify or license teachers is a function of state governments. Institutions of higher education in conjunction with states in which they operate offer courses of instruction that qualify graduates for state teacher certification. Organizations such as the National Council for Accreditation of Teacher Education (NCATE) that certify colleges and universities with teacher education degrees also oversee the undergraduate preparation of teacher candidates. In addition to an education degree, most states require that candidates pass a content area test. Teachers who meet these qualifications for certification and reach the classroom through college and university programs are considered to be traditionally prepared teachers.

Grissmer and Kirby (1997) note that the number of graduates from traditional education programs has not decreased, but that one-third of these graduates do not teach in the year after graduation. A significant number of new teachers have a major in something besides education. Some of these non-education major graduates are entering the teaching profession through alternative licensure programs. This dissertation study looks at these alternatively prepared teachers and attempts to determine if a pattern of attrition exists among them that differs from the patterns identified for the general population of teacher respondents. Analyzing data specific to teachers in AoDCS and looking at non-traditionally certified teachers extends this understanding about the conclusions presented. Some studies (Boe, Bobbitt, Cook, Whitner, and Weber, 1996) have focused on the certification status of teachers as reported by the SASS and TFS and
found, based on the 1987-88 SASS data and the 1988-89 TFS data, that the level of certification was a significant element in teachers’ decisions to stay in teaching. Teachers who are fully certified are more likely to remain in teaching as compared to those who are partially certified. Before the SASS/TFS data collection, it was rare to identify this relationship. This study extends this research and looks for a similar relationship for AoDCS teachers.

The research compiled by Convey (1992) is foundational for exploring staffing patterns in Catholic schools. His data indicate that teachers in Catholic schools may be certified by the diocese rather than the state. Teachers who qualify for state certification may not possess it because the school or the diocese does not require it. Based on the 2000 SASS, 71% of Catholic elementary teachers and 67% of Catholic school secondary teachers held state certification (Hunt et al., p. 61). This dissertation study adds depth in looking at the numbers of teachers in AoDCS who are state certified through an alternative route and determines whether or not that impacts the pattern of retention and attrition.

State certification of teachers is often a requirement for teachers in Catholic schools. However, research indicates that particular Catholic schools or dioceses often do not require that teachers hold state certification even if they qualify for it. Teachers of religion in Catholic schools are usually certified by the diocese, if at all. SASS and TFS data determine the percent of teachers in non-public schools who are certified, but the disaggregation of this data to Catholic school teachers nationally is not available for this
dissertation study. This dissertation study highlights a Catholic school teacher population that is required by the archdiocese to be state certified.

In addition to the goal of quality academics and student learning, Catholic schools have a church ministry component. Convey (1992) summarized the research dealing with Catholic schools from 1965 to 1990. In his treatment of the research around teachers in Catholic schools during this twenty-five year period, he places Catholic school teachers in the context of the evangelizing mission of the church. Church documents assert that teachers fulfill a special role in the church’s mission. Teachers in Catholic schools, like those in public schools must be capable educators who have a solid academic formation and who keep abreast of their disciplines. The research acknowledges that “[t]he classroom teacher is the key to a quality education. To a great extent, successful learning depends on good teaching” (p.111). But, Catholic school teachers must have other objectives as well. They have a three-fold purpose of teaching the Gospel, modeling community, and the teaching of social justice from the perspective of the church (USCC, 1973). They must understand that catechesis is of primary importance (Pope John Paul II, 1979), and that the church depends on teachers “almost entirely for the accomplishment of its goals and programs” (Pope Paul VI, 1965). This study examines the degree to which teaching at a Catholic school and understanding the primary importance of the teacher’s role in the catechetical mission of the school as a ministry of the Church is a barrier to retention of quality teachers.
**Alternative route.** In contrast to the traditional route, teachers may become alternatively licensed. The National Center for Education Information (NCEI) began collecting data regarding the movement toward alternative licensure in 1983 when New Jersey put together a task force to find an alternative way to attract liberal arts graduates into the teaching profession (Feistritzer, 2005). The movement spread from New Jersey to other states with teacher shortages, most notably California and Texas which were among the first and largest supporters of this movement. By 1990 some common characteristics of these programs had begun to emerge. These six characteristics are prominent:

- Specifically designed to recruit, prepare, and license talented individuals who already hold at least a bachelor’s degree—and often experience in other careers—in fields other than education.
- Rigorous screening processes, such as passing tests, interviews, and demonstrated mastery of content.
- Field-based programs.
- Coursework or equivalent experiences in professional education studies before and while teaching.
- Work with a mentor teacher and/or other support personnel.
- High performance standards for completion of programs (Feistritzer, 2005).

The Higher Education Act of 1998 put additional national focus on teacher preparation programs at institutions of higher education. The Act said that each state must
annually provide descriptions of alternative routes to teacher certification and the percentages of teachers who are certified through these routes. This provided a solid supply of data for analysis of alternative route teachers.

Many states have multiple alternative routes for teacher certification. By 1991 some 90 alternative route programs existed according to data gathered by NCEI (Feistritzer, 2005). The number of programs gradually increased until 2003 when some 142 programs were identified. At that time the number of programs began to decrease as states consolidated or reduced programs. The value of these programs can be seen in the shift away from emergency and other temporary routes to teacher certification to the new routes specifically designed for “non-traditional populations of post-baccalaureate candidates, many of whom come from other careers” (p. 9).

In 1985-86, 275 teachers were certified through alternative routes according to the NCEI and National Center for Alternative Certification (NCAC) data. By 2003-2004 that number had risen to 38,519 teachers (Feistritzer, 2005).

About two-thirds of those who enter an alternate route program actually complete it and obtain a certificate to teach. Nearly all of those who complete a program and receive a teaching certificate are teaching the following year – usually in the same school where they taught while in the program (p. 12).

The National Commission on Teaching and America’s Future (NCTAF) affirms “that high quality teacher preparation is a strong predictor of both teacher retention and good teaching practice” (Carroll et al., 2003, p. 17). Quality preparation and well-
designed mentored induction programs cut attrition rates for new teachers by 50% (p. 36). In defining quality teacher preparation, the report says, “It is time to abandon the futile debate over ‘traditional’ vs. ‘alternative’ teacher preparation” (p. 74). Rather, it suggests that there are dimensions of quality preparation that must be applied to any program that places teachers in classrooms, and these begin with careful recruitment and selection of candidates and the mentored support of new teachers in the first three to five years. The NCTAF (2003) report seems to support, if indirectly, alternative routes of teacher preparation as a viable method of providing teachers for classrooms. It addresses the support of all new teachers through the beginning years. The dissertation study uses the SASS and TFS data, and the data gathered from surveys and analysis of AoDCS teachers to compare the patterns of entry of new teachers locally and throughout the United States, both those in the alternative teacher licensure programs and those beginning teachers who are traditionally prepared.

**Teacher Turnover: Retention, Mobility, and Attrition**

This dissertation study uses the data gathered on patterns of teacher service by the NCES in the SASS. The first of these surveys was administered in 1987-88, followed by a second survey in 1990-1991, a third in 1993-1994, and others in 1999-2000, 2003-2004. The latest study was conducted in the 2007-2008 school year. Each of these SASS surveys was followed by the Teacher Follow-up Survey (TFS) in 1989, 1992, 1995, 2001, 2005 and 2008. Although teacher turnover has been a topic of discussion for decades, one of the most dramatic events in the study of teacher supply and demand is the
improvement brought about by the quality and amount of data being gathered by NCES. Grissmer and Kirby (1997), referencing the data gathered in the early cycles of the surveys said they could predict that six factors would change the timing and the magnitude of the demand for entry level teachers between the writing of their article in 1997 and 2013. The six factors are: (1) rising enrollments, (2) lower pupil/teacher ratios, (3) rising teacher attrition rates, (4) early retirement plans, (5) a decline in the size of the teacher “reserve pool,” and (6) the current queue of teacher entrants. Specifically addressing the third of these factors, teacher attrition rates, they estimate that increased retirements and increase in entry level teachers—the two largest groups for attrition—will significantly impact this number. Teacher attrition among alternatively licensed teachers may have different patterns than those who are traditionally certified. This dissertation study focuses on this group of teachers to confirm or refute Grissmer and Kirby’s theories.

Ingersoll’s (2001) results indicate that teacher turnover is a significant phenomenon. He mentions that the response to staffing problems has been to “increase the supply of available teachers through a wide range of recruitment initiatives” (p. 500), specifically mentioning alternative licensure programs designed to ease entry into the field as one of these initiatives. High turnover leads to demand for new teachers and to the difficulties encountered in staffing classrooms with qualified teachers.

Studies that have used SASS/TFS data to analyze and compare alternatively certified teachers and traditionally certified teachers admit that it is difficult to compare
these two groups of teachers for a number of reasons (Ballou, 1998; Legler, 2002; Shen, 1998). One of these concerns is that the comparison group, traditionally trained teachers, has been under scrutiny for problems of quality in the programs offered by institutions of higher education. “Most new teachers need a year or two to settle into their roles and ‘learn the ropes.’ In addition, it is impossible to compare attrition rates with research that is short in duration and looks at teachers in their first years on the job” (Legler, 2002, p. 7). However, the SASS data set allowed Legler to “estimate the number of teachers in each state in the Midwest Region who obtained their certification through alternate routes” (p. 7). Even though the states in Legler’s target region had just begun to produce alternatively licensed teachers, he suspects that those reporting that they had been alternatively licensed “must have done so in another state before moving to the NCREL [North Central Regional Educational Laboratory] region” (p. 7) thus addressing the discrepancy that others have found in teacher certification data. This means that although gross estimation is possible, caution is advised when drawing conclusions from the SASS data.

Legler’s study also surveyed principals of schools in the NCREL region. Principals report “that the alternatively certified teachers they had hired stayed as long as or longer than other newly hired teachers. These results imply that alternatively certified teachers can be helpful in addressing shortages and remain on the job at rates roughly similar to those of other newly hired teachers” (p. 11).
Legler’s study is important for the model it provides for using alternative licensure as a study variable. There are two SASS data sets with information newer than that used by Legler which are included in the comparison of data from this study. This dissertation study includes local data with a specific focus on the attrition and retention rates of alternatively licensed teachers in the AoDCS.

_Catholic Schools and the Common Good_ (Bryk, Lee, & Holland, 1993), suggests that Catholic school principals have “fewer obstacles in dismissing a teacher for poor performance” (p. 130) than their counterparts in public schools. This “involuntary” method of attrition might contribute to lower levels of retention in Catholic schools. Bryk, Lee and Holland also attribute some of the lower retention rate to salary levels and tenure policies. Data from the _High School and Beyond_ study cited by Bryk, Lee and Holland indicate “an annual turnover rate of 12% in the Catholic sector, compared with 9% for public schools. Over 15% of Catholic secondary schools have annual turnover rates in excess of 20%” (p. 130) at the time of this report. Stability in Catholic schools—18% have taught at their current school for ten years—is lower than that in public schools where 36% have been at their current school for ten years. Bryk and others identify three groups of teachers that impact this statistic. The first are the highly committed career professionals; the second are young lay people who choose to teach for a few years after college before moving on to raise a family or another occupation; and the third group are those, mostly women, who come to teaching after their own children are in school or
grown. This seems to correspond to Ingersoll’s division of teachers into young (below 30 years of age), old (those 50 years and older), and middle aged (Ingersoll, 2001).

New teachers are also looking for career opportunities. They want a variety of job opportunities and many do not intend to remain in teaching for a lifetime. One of the strategies to decrease the attrition of teachers might be to find ways to differentiate the roles and responsibilities of teachers over time. Cochran-Smith (2006) makes some suggestions on this topic. She suggests that one way to decrease the demand for new teachers is to increase retention. Another study analyzed the mobility and attrition of teachers in schools in North Carolina (Goldhaber, Gross, & Player, 2007). Using test scores to determine value-added measures of student achievement, they found that more effective teachers tended not only to stay longer in teaching, but at the same school. The teachers’ experience of success with the students was a strong element of stability. This reinforces Cochran-Smith’s idea that teachers who have the heart for the profession, and those who have success are more likely to remain in the profession. It supports the idea that teacher quality and teacher success are related. There would seem to be value, then, in exploring the retention of teachers in Catholic schools based on their method of training and/or prior experiences. This dissertation study tests the supposition that alternatively licensed teachers often come to the profession with experience in other careers and a higher degree of stability in their personal lives, and that because they are given strong support through the first year of on-the-job training they achieve a higher
degree of student success and thus personal satisfaction and so stay longer in the profession.

A similar study was done of teachers in New York City schools (Boyd, Grossman, Lankford, Loeb, & Wycoff, 2007) that found that “nearly 44% of elementary teachers in low-performing schools left their initial school within two years; that figure is 11 percentage points higher for middle schools” (p. 21). Their study also had a rich source of data that could lead to value-added assessments and it concluded that less effective teachers are more likely to leave the profession in the first two years. This leads Boyd, et al., to the belief that eliminating teacher attrition in the first years could actually be detrimental to student achievement. This is similar to a conclusion from another study (Ingersoll & Kralik, 2004) and one of the advantages that may be found in Catholic schools where principals have fewer contractual constraints for dismissing ineffective teachers in the first several years in the profession.

Alternatively licensed teachers have usually sampled various occupations or had successful careers before coming to teaching and may be more willing to focus on teaching as a long-term enterprise. This stability in the work force may be a positive aspect of the alternative route teacher.

One of the components of alternative licensure that impacts school climate is a focus on non-administrative support, in other words, peer mentoring. Induction programs that involve master teachers as peer mentors are beginning to be seen as very helpful in the retention of new teachers. Mentoring is often an important element in alternative
licensure programs. Ingersoll and Kralik (2004) discussed 10 studies around mentoring and induction and the impact of these programs on the retention of new teachers. Mentoring has been an important component in the induction of new teachers into Catholic school faculties from the time when teachers were almost exclusively members of religious communities (Keating & Traviss, 2001). My study will look at alternative licensing in AoDCS understanding the importance of induction programs.

One study (Allen, 2003) posed eight questions about recruitment and retention of teachers. One of the questions addressed the method of preparation of teachers. Allen found “evidence that, in the short-term, the retention of alternative route teachers is higher or comparable with traditional route teachers. There is less evidence about long-term retention and so the research is inconclusive” (p. 64). Some researchers measure the success of alternative teacher preparation programs by “whether teachers they prepare are effective and whether, if they are, they remain in the profession” (p. 63). The data gathered in this dissertation study is used to focus on alternative route teachers in Catholic schools to see whether or not Allen’s conclusions carry over to this more select group.

Since the passage of the reauthorization of the Elementary and Secondary Education Act (ESEA/NCLB) in 2002, the Secretary of Education has been required to publish an annual report on teacher quality. In the first of the reports from the Secretary, evidence was cited that “retention rates for teachers certified through alternate routes are higher than for teachers who enter the classroom through traditional routes, …and that
about 85 percent of teachers certified through alternate routes remain in the classroom five years later” (Education, 2002). The U. S. Department of Education’s endorsement for alternative licensure drew criticism from some (Darling-Hammond & Youngs, 2002) who claim that there is no data to justify this support from the Department of Education and they review several studies that would refute these favorable statistics (McKibben, 1990; Stoddart, 1992). Darling-Hammond and Youngs (2002) specifically challenge the government conclusion that student teaching is not a necessary component for successful classroom teaching. This challenge by Darling-Hammond is typical of her concern for non-traditional routes to teacher certification. This dissertation study presents data concerning a group of alternatively licensed teachers and provides additional evidence to support or refute this concern particularly in Catholic schools. Programs that offer more extensive supervision and support have more successful participants who tend to remain longer in the profession (Darling-Hammond and Youngs, 2002). Supervision and support, as have already been mentioned, may be part of the Catholic school organizational characteristics that allow alternatively licensed teachers to remain in the profession longer.

Other researchers, (Wise et al., 1987) focus on the value of recruitment, selection, hiring and induction of teacher candidates and beginning teachers as a way to mitigate the attrition of teachers. They point to this as the “key juncture at which school systems can upgrade the quality of the teaching force” (p. xii). Objective measures of teacher candidates are imperfect, and individual schools should be free to hire candidates that are
the “kind of teacher the district values rather than the kind of teacher who merely
happens by and stays” (p. iii). “Teachers must meet the needs of particular schools” (p.
viii) (Education, 2002). Catholic schools often recruit and hire teachers at the local level,
and data gathered from the AoDCS are used in this dissertation study to explore this
premise. Principals in Catholic schools may select candidates who will add to the culture
of the individual school community. This dissertation study provides data to inform the
hiring decisions of teachers by Catholic school principals.

**Summary**

Research (Darling-Hammond, 1997) indicates that the investment in the quality of
teachers is of utmost importance. “No other intervention can make the difference that a
knowledgeable, skillful teacher can make in the learning process” (p. 8). Darling-
Hammond’s study done for the NCTAF agrees with the previously stated reasons for the
teacher shortage. The need for teachers will increase as more classrooms are opened to
accommodate smaller class sizes, and as large numbers of vacancies are created by
teacher attrition and retirement. Teacher expertise is one of the most important factors in
student achievement and so, the loss of experienced, qualified teachers is costly to the
educational system and to student achievement. Colleges and universities graduate more
than enough new teachers to fill these openings. However, the openings and the graduates
are not always a geographical match and districts tend to prefer to hire experienced
teachers to fill those vacancies. Retention of teachers is a worthy goal given the
investment that districts and schools have made in teachers already on their faculties. The
NCTAF research includes valuable compilations of data from various sources comparing state-by-state characteristics of the current teaching force, reasons teachers leave teaching, support for them in professional development, mentoring and induction, and other school characteristics. Data regarding the factors that impact teacher mobility such as age and years of experience, the characteristics about the schools in which they teach, the characteristics of the students in those schools, the working conditions in the schools and the route to certification, are compared to the data gathered by the SASS and TFS, and those gathered in this dissertation study, to inform the conclusions drawn about the retention of teachers in AoDCS.

The National Center for Education Statistics (NCES) has developed a longitudinal data resource beginning in 1984 which tracks the demographics and the trends of teacher retention, attrition and mobility. The factors in this dissertation study are drawn from these data and from the research reviewed in this chapter. Researchers have examined the trends demonstrated by these data. Catholic school teachers are represented but the analysis has been limited. There is data available for those teachers who come to the profession through a non-traditional route. The present study combines these two under analyzed areas and examines the similarities and differences in this population with the total population.
Chapter Three

Methodology

In this chapter, the methodology of the study is presented. The participants are identified and described. The instruments are introduced and explained. The general method of analysis is outlined. The variables are identified and explained.

Participants

The target participants in this study are all teachers initially hired in the AoDCS between the 2001-02 school year and the 2006-07 school year. A survey modeled on the NCES Schools and Staffing Survey (SASS) and Teacher Follow-up Survey (TFS) was sent to each teacher in this group who could be located.

A list of newly hired teachers for the six target years of the study was collected from the annual demographic reports provided to the AoDCS by member elementary and high schools. The list of teachers was sorted to eliminate duplicate names, personnel incorrectly identified as teachers, teachers who were members of religious communities, and names of teachers who taught in two schools at once, that is teachers who were part-time teachers in more than one school. Teachers of “specials” or subjects such as visual arts, music, foreign language, computers and physical education sometimes teach part-time in a subject in two or more schools providing them with a full-time job in the district. This allows them to qualify for health insurance and other benefits but also causes them to be listed on the faculty roles of more than one school.
The resulting list numbered 752 names with a distribution ranging from 107 to 150 names per hiring year cohort. Some of the teachers in the target group are participants in the CDE Alternative Licensure Program offered through the AoDCS in partnership with Regis Jesuit University of Denver. They are part of the beginning teachers of interest in this study. The other teachers of special interest is the group of beginning teachers hired by the Archdiocese of Denver Catholic Schools for the first time between 2001 and 2007 and who qualified for an Initial/Provisional Colorado Teacher License by earning a degree in education from a college or university program of studies, a traditional route to licensure.

**Instrumentation and Procedure**

The survey used to gather the data from the participants is called the Archdiocese of Denver Catholic Schools Teacher Survey. The 55-item questionnaire (see Appendix A) collected demographic data about gender, age, number of years teaching in the AoDCS, current teaching status, commitment to Catholic mission, route to certification and licensure information, and if appropriate, the reason(s) for leaving the school or the profession. The questionnaire collected data about teacher characteristics such as the grade and/or subject taught by each teacher; school characteristics such as size, location, ethnicity of the students, and Catholic identity of the school. The analysis in this study evaluates the data about each factor and determines if factors are predictive of whether teachers will remain in the profession or leave teaching. The survey was sent by mail or, in a few cases, e-mailed to each of the 623 teachers whose addresses were available. One
hundred two (16 %) of the surveys were returned by the post office as being undeliverable. Two hundred eighty-four (46 %) of the surveys were answered and returned.

Analysis

Major Variables

The major variables in the study are teacher demographics, four categories of factors that may impact teacher turnover, and current teaching status in the AoDCS. Teacher demographics such as gender, age, and grade or subject area taught are used for comparing the sample in this study to national samples of teachers in other studies. In this study, the factors that impact teacher turnover are divided into four categories: route to certification, teacher characteristics, school characteristics, and working conditions. They are the predictor variables.

The dependent variable is whether or not the teacher is currently teaching in AoDCS.

Route to certification. The survey asks teachers to identify the type of teacher license they held during their first year of teaching in the AoDCS. The choices include (1) Initial/Provisional Teacher License, (2) Professional Teacher License, (3) a license from a state other than Colorado, (4) an Alternative Teacher License, or (5) no license. In Colorado, the Initial Teacher License (called Provisional License until 2005) is granted to all beginning teachers. It is a three-year license and requires that the teacher complete an approved induction program to qualify for a Professional License. An important
component of approved induction programs is the assistance to the beginning teacher from a trained peer mentor. The Initial/Provisional license is issued to applicants who have completed a state-approved teacher education program from an institution of higher education and have passed a content area test.

Teachers who hold an Alternative License have a bachelor’s degree, usually in a field other than education, have the appropriate college credits as required by CDE to participate in the program, and have passed a content area test. They are the teacher of record in a classroom their first year and participate in an on-the-job training program. This intensive program includes participation in monthly workshops, creation of a unit work sample, production of a professional portfolio, work with a trained peer mentor, and supervision and guidance by a university faculty supervisor. Upon successful completion of this program, Alternative License teachers qualify for an Initial/Provisional license. Alternative License teachers are beginning teachers and are compared in this study to those who have an Initial/Provisional License in their first year.

Teachers who hold a Professional License, by definition, have completed an induction program and thus have some teaching experience. These are not beginning teachers and since they hold a Professional License during their first year with AoDCS, they would be considered either “movers” or returners to the profession. AoDCS accepts teachers that have a teaching license from a state other than Colorado. Catholic schools are not government agencies, so they are not required to comply with state licensing laws. This allows the Catholic schools some flexibility in the hiring of teachers.
AoDSC principals are required by the archdiocese to hire licensed teachers, but in some circumstances they want or need to hire a person without a license and may request a waiver. To obtain a waiver the school and the teacher submit a plan to the Office of Catholic Schools, including a timeline, for the teacher to become licensed.

Those who teach religion exclusively, especially in the middle school grades and high school, are not certified by the state. Their credentials are examined by the Superintendent and the St. John Vianney Seminary staff and approved for teaching religion or theology within the AoDSC. Montessori teachers are certified through the international Montessori organization and do not hold a state teacher license. Religion teachers and Montessori teachers would identify as having no license their first year.

**Teacher characteristics.** The teacher characteristics collected from the survey and which may impact teacher turnover are age, gender, years of teaching experience in AoDSC, grade level of students, and subject taught (see Table 1). Those AoDSC teachers who taught for only one year will be compared to the TFS teacher leavers. The six-or-more year category will be used to compare teacher stayers among the AoDSC six cohorts. A question on the survey asks if responders are currently teaching at the time of the survey. A positive response to this question could mean that the teacher hired in 2001-02 had taught in the AoDSC for as long as 11 years. A negative response would place the teacher in the category of not currently teaching in AoDSC. They may have taught for as few as 2 years (if they were hired in 2006-07) or 6 years or more.
Table 1

Predictor and Dependent Variables for Regression Analysis, Chi-square Tests & ANOVA

<table>
<thead>
<tr>
<th>Variables</th>
<th>Predictor Variables</th>
<th>Operational Definitions</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Characteristics</td>
<td>Gender</td>
<td>1. Male</td>
<td>Number of Years in AoDCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Female</td>
<td>Currently Teaching in AoDCS</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>1. 20 to 30</td>
<td>Number of Years in AoDCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. 31 to 40</td>
<td>Currently Teaching in AoDCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. 41 to 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. over 50</td>
<td></td>
</tr>
<tr>
<td>Teaching Field or Grade Level</td>
<td>25 Choice Survey Item</td>
<td></td>
<td>Number of Years in AoDCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Currently Teaching in AoDCS</td>
</tr>
<tr>
<td>School Characteristics</td>
<td>Size</td>
<td>1. Very small</td>
<td>Currently Teaching in AoDCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Small</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Large</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Very large</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Location</td>
<td>1. Rural</td>
<td>Currently Teaching in AoDCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Urban</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Suburban</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student Ethnicity</td>
<td>1. Primarily Caucasian</td>
<td>Currently Teaching in AoDCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Caucasian &amp; Hispanic</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Caucasian, Hispanic, &amp;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Asian</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Primarily Hispanic</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Primarily African American</td>
<td></td>
</tr>
<tr>
<td>Variables</td>
<td>Predictor Variables</td>
<td>Operational Definitions</td>
<td>Dependent Variables</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Catholic School Identity Factors</td>
<td>6 Item Survey Response for Evidence</td>
<td>6 Item Survey Response for Importance</td>
<td>Currently Teaching in AoDCS Not Currently Teaching in AoDCS</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>Reasons for Leaving AoDCS</td>
<td>11 Item Survey Score</td>
<td>Not Currently Teaching in AoDCS Teachers Currently Teaching in AoDCS</td>
</tr>
<tr>
<td>Teacher Turnover</td>
<td>1. Yes</td>
<td>Teachers teaching in AoDCS for only one year</td>
<td>Teachers teaching in AoDCS 6 years or more</td>
</tr>
<tr>
<td></td>
<td>2. No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Response to Survey of 1 Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Response to Survey of 6 or More Years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Grade level and subject area choices provided in the survey are those offered by the CDE for certification endorsements. The results of the survey are grouped together as (1) elementary grades (PreK-5), (2) K-8 Specials, (3) Middle School, and (4) High School. “Specials” are those subjects such as visual arts, music, physical education, health, library, and computer science which are common to all grades, and whose teachers do not usually have a self-contained class of students. The subjects selected by teachers of the middle school and high school grades were varied and the sample size of particular subjects was too small to justify separate categories for comparison.
School characteristics. School characteristics include size, location, student ethnicity and Catholic identity. This survey considered school size as (1) very small (having one class of each grade with 15 or fewer students per class), (2) small (having one class of each grade with 16 or more students per class), (3) large (having two classes per grade), or (4) very large (having three classes per grade). Location was defined as rural (on the eastern plains of Colorado, the western slope of the Rocky Mountains, or northern Colorado), urban (inner-city of Denver or in older parts of the metro-Denver area), or suburban (newer areas in the metro-Denver area). Student ethnicity was considered as primarily Caucasian; Caucasian and Hispanic; Caucasian, Hispanic and Asian; primarily Hispanic; or primarily African-American. These categories were transformed into discrete variables for statistical analysis.

The Catholic identity of the school is considered a school characteristic, but considered separately from the other school characteristics. The survey measured 6 characteristics of Catholic identity: (a) a sense of community among the teachers and staff, (b) a sense of community among students, (c) a commitment by the school to the mission of forming students in the Catholic faith, (d) providing an opportunity for regular attendance at Mass, (e) participation in seasonal liturgical celebrations, and (f) opportunities for students to participate in service associated with Catholic social justice teachings. Teachers were asked to first indicate how evident each of these characteristics was in their school, and then to indicate the importance to them of each of the
characteristics. The responses of teachers currently teaching in the AoDCS are compared to the responses of those teachers not currently teaching in the AoDCS.

**Working conditions.** Teachers who no longer teach in the AoDCS were asked to indicate how important were any of 11 working condition items on the survey to their decision to leave teaching. Responders chose “Very Important,” “Important,” “Somewhat Important,” or “Not at all Important” for each condition. These survey item conditions for leaving teaching include (a) moving away from the Archdiocese of Denver; (b) being dissatisfied with the workplace conditions; (c) family circumstances including relocation of spouse, marriage, starting a family, or caring for an aging parent; (d) dissatisfaction with support from the school administration; (e) not being offered a contract for the next year; (f) dissatisfaction with the number of students; (g) not having enough autonomy in the classroom; (h) dissatisfaction with opportunities for professional development; (i) dissatisfaction with teaching for other reasons; (j) needing greater job security; and (k) needing better health insurance and other benefits. These reasons for leaving the profession are compared to similar categories in the TFS.

**Teacher turnover.** Teacher turnover considers teachers leaving the AoDCS compared to those continuing to teach in these schools. Each teacher responded to the question “Are you currently a teacher in the Archdiocese of Denver Catholic Schools?” with either “yes” or “no.” Each one also selected how many years they taught in AoDCS as “one year” “two or three years” “four or five years” or “six or more years.” Those teachers who taught for only one year are compared to the leavers in the national sample.
Those who stayed longer than one year are compared to the stayers in the national sample. The NCES First Look (NCES, 2007) analysis of the teachers identified in the TFS is organized into three categories. One is those teachers who leave the teaching profession and are identified as Leavers. Another is teachers who change schools but stay in the teaching profession and are identified as Movers. A third is those who remain at the same school from the base year to the next and are identified as Stayers.

A second comparison of teacher turnover in AoDCS is determined using the data from teachers who are not currently teaching in the AoDCS after the first year of teaching compared to those in the same cohort year who stayed for 6 or more years. The retention rates for beginning teachers is compared within cohort years to determine whether or not there is a difference in turnover between Initial/Provisional license teachers and Alternative license teachers after their first year and after 6 or more years. These beginning teachers’ retention patterns are also compared with experienced teachers’ retention patterns after the first year of service and after six or more years.

A third comparison of teacher turnover identifies the difference between those who are currently teaching in AoDCS at the time of the survey and those not currently teaching regarding their perception of the importance and the evidence of Catholic identity factors regardless of their cohort year. Those not currently teaching identified the importance of each working condition variable in their decision to leave AoDCS.
Procedure of Analysis

To analyze whether or not route to licensure is related to teacher turnover, a 2 x 2 Chi-square contingency analysis is used. The null hypothesis is: The answer to the question of interest about stayers and leavers is independent of route to certification. The alternative hypothesis is: The answer to the question of interest about stayers and leavers is related to the route to certification. Survey responders chose only one type of licensure for their first year of service in AoDCS. The two types of licensure considered in this test are Initial/Provisional and Alternative. Responders chose only one selection for how long they taught in the AoDCS from the 4 possible choices. The number of responses in the 1-year category was so small in this sample (5 teachers) that the categories 1 year and 2 to 3 years were condensed into a single category of 1 to 3 years making three categories.

A 2 x 2 Chi-square contingency analysis is also used to determine whether or not teacher turnover is related to each of the teacher characteristic variables (age, gender, grade or subject taught). Responders had a single response in the survey to each of these characteristics. For each the null hypothesis is: The answer to the question of interest about teacher turnover is independent of age (or gender, or grade/subject). The alternative hypothesis is: The answer to the question of interest about teacher turnover is related to age (or gender, or grade/subject).

Descriptive statistics of means and correlations were computed for each variable. Pearson correlation coefficients were used to determine if patterns among the variables occurred. This statistic measured how the amount of variance on one of the variables
coincided with the variance on another variable and also provided some information about the relationship between the variables. Multiple regression analyses were used to examine the relationship between those predictor variables that indicated a possible relationship with the dependent variable of teacher turnover as defined by “currently teaching in AoDCS.”

This study compares the percentage of teachers in the AoDCS who stay in teaching after their first year with the percentage of those who stay in the teaching profession after the first year nationally. The number and percentage distribution of responses to each of the survey items related to teacher characteristics, school characteristics, and working conditions were computed and these data were compared to data gathered through the TFS about similar responses of the national teacher sample.

A Pearson correlation matrix was run to determine any correlation between the dependent variable of Currently Teaching in AoDCS and the three school characteristics. A Pearson correlation was run between the evidence and importance of the factors of Catholic identity to both the Currently Teaching in AoDCS variable and the Not Currently Teaching in AoDCS variable to determine possible predictor variables.

A regression analysis was performed using the teacher characteristics, school characteristics, and Catholic identity factors to determine whether or not they are predictive of teacher turnover. In order to analyze these data using a regression analysis, variables were coded in SPSS by transforming each category to a discrete variable comparing each of the variables to one of the elements in the group. In the school size
category, each of the other three variables is compared to the variable labeled Very Large. In the location category, each of the other two variables is compared to the variable labeled Suburban. In the student ethnicity category, each of the other four variables is compared to the variable labeled Caucasian.

A list is provided of the selections for possible reasons teachers left AoDCS. These are ordered by the percentage of teachers not currently teaching who selected each condition as an important or very important reason for leaving the profession.

**Summary**

Retention of teachers is an important component in providing excellent instruction for students and ameliorating the negative impact of teacher attrition on a school’s human and financial resources and sense of community. The data gathered in this dissertation study provides support for continuing to use alternative teacher licensure programs in Catholic schools. It extends previous research about the conditions that may predict teacher retention, and the conclusions may provide guidance for diocesan leaders and institutions of higher education about conditions likely to predict which teachers will remain in Catholic schools.
Chapter Four

Effective teachers provide the most important in-school impact on student success. Teachers grow in effectiveness with years of experience, so teacher retention is beneficial for student success. The hiring and induction process for new teachers is costly and time-consuming for the school organization so teacher retention is good for the organization. This study looks at factors that impact teacher turnover in Catholic schools in the Archdiocese of Denver with particular attention to route to teacher licensure. In addition to route to licensure, factors that may impact teacher turnover include characteristics of the teacher, characteristics of the school, and working conditions. Two questions of this study are: (1) What factors are important predictors whether or not Archdiocese of Denver Catholic Schools teachers will remain in teaching or leave the teaching profession? (2) How do these factors differ for teachers who stay and teachers who leave?

Results

This chapter will discuss the results of a survey mailed to teachers who have taught or currently teach in the Archdiocese of Denver Catholic Schools (AoDCS). The list of targeted participants numbered 752 names with a distribution ranging from 107 to 150 names per hiring year cohort (see Table 2). In a total annual teacher population for AoDCS of about 865 teachers, this represents a turnover rate of 12% to 17% per year. Ingersoll (2001) identifies the turnover rate for employees in occupations other than teaching as 11% per year and for Catholic school teachers nationally as 17.7% per year.
This national turnover rate for Catholic school teachers is slightly higher than the range of annual teacher turnover in the AoDCS.

**Length of Stay by Cohort Year**

The data for this study show how long teachers from each cohort year stayed in the AoDCS. The next section will compare this retention level with retention levels from national samples of teachers. Sixteen (5.6%) AoDCS responders stayed in teaching for only 1 year. Teachers who leave teaching after 1 year are identified as leavers in the NCES studies. Other teachers are termed stayers. Retention of teachers past the first year, providing additional professional experience, is one measure of student success.

Therefore, stayers with additional years of experience are also of interest in this study. One research question for this study is: How does the national rate of attrition for all
teachers hired between the 2001-02 school year and the 2006-07 school year compare to the attrition rate for teachers in the AoDCS during this same time period? The SASS and the TFS conducted by the NCES provide the frequency and percent of stayer teachers. Stayers are defined by the TFS as those teachers still teaching in the same school as the base year data gathered by the SASS the previous year (NCES, 2010). The percent of public school teacher stayers as reported by the 6 TFS samples ranges from 83.5% to 87.6%. According to TFS, teachers in private schools turn over at a higher rate than do teachers in public schools. Private school teacher stayers range from 77.8% to 82.3% according to the TFS. The percent of AoDCS teacher stayers in the 6 sample cohort years ranges from 85.7% to 97.7% (see Table 3). The percent of teachers serving for more than 1 year in the AoDCS is higher than both public school teacher stayers and private school teacher stayers in the national sample. The next section will examine teacher licensure and route to licensure to determine if this factor impacts teacher retention or attrition in the AoDCS.

**Teacher Licensure**

Teacher licensure is one way for states to ensure that teachers meet a threshold of knowledge and skill level to qualify for the profession. Among teacher responders in this study, 72 (25.5%) held an Initial/Provisional License their first year, 82 (29.0%) had a Professional License, 23 (8.2%) had an out-of-state license, 42 (14.9%) had an Alternative License, and 63 (22.3%) had no license (see Table 4).
Of the 63 AoDCS teachers who taught with no license during their first year, 7 (11%) left teaching after that first year, 12 (19%) left before becoming licensed, 25 (40%) had a license by the next year and 20 (32%) had a license within three years. These unlicensed teachers taught computer (9), Religion (7), foreign language (5), visual arts (5), music (4), PE (4), preschool or kindergarten (6), library (1), and Montessori (1) as well as self-contained elementary grades (9), middle school (8), and high school (4).

### Turnover Related to Route to Licensure

A research question for this study is: How does the attrition rate of traditionally certified teachers in the AoDCS compare to the attrition rate of alternatively certified teachers in the Archdiocese of Denver Catholic Schools? The next section will consider...
Table 4

Responders by Age Group, Type of License in the First Year, and Number of Years Teaching

<table>
<thead>
<tr>
<th>Type of License</th>
<th>N</th>
<th>Age Group</th>
<th>1</th>
<th>2-3</th>
<th>4-5</th>
<th>6 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial/Provisional</td>
<td>72</td>
<td>20-30</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31-40</td>
<td>3</td>
<td>9</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Over 50</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Professional</td>
<td>82</td>
<td>20-30</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31-40</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Over 50</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>38</td>
</tr>
<tr>
<td>Other State</td>
<td>23</td>
<td>20-30</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31-40</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Over 50</td>
<td>1</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Alternative</td>
<td>42</td>
<td>20-30</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31-40</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50</td>
<td>3</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Over 50</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>None</td>
<td>63</td>
<td>20-30</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31-40</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41-50</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Over 50</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>282</td>
<td>16</td>
<td>39</td>
<td>54</td>
<td>173</td>
<td></td>
</tr>
</tbody>
</table>

Note: 2 surveys had incomplete responses as to age group and are not included in this data.
the difference in licensure between teachers who left after the first year, and those who stayed longer than one year and how the licensure data and cohort data gathered through the survey applies to each group (see Table 5). The Professional License category has the largest total number of responders (82). The largest age group in the Professional License category is those over 50 years old. Since these teachers were newly hired in 2001 or later, this may indicate that these veteran teachers are movers from another school system or returners to the profession.

An Initial/Provisional License is held by the second highest number (72) of teachers. These teachers are considered beginning teachers and are a group of particular interest for this study. An Alternative License was held by 42 teachers in their first year. These are beginning teachers and also a group of interest for this study. They will be compared to teachers in the Initial/Provisional license group. Beginning teachers are not yet as effective as they will become after some years of experience. It is important to this study to track the turnover rate of these beginning teachers to determine if one route to certification indicates a higher retention rate than the other.

Table 6 disaggregates the data for the beginning teachers, those with an Initial/Provisional License or those with an Alternative License, and all other teachers by cohort year. It shows the percent of teachers in each cohort who remained in teaching for only 1 year of service and those who served for 6 or more years of service in the AoDCS. Comparing the two categories of beginning teachers by cohort year, it is evident that the
Table 5
Responders Sorted by Cohort Year and Type of License in the First Year

<table>
<thead>
<tr>
<th>Cohort Year</th>
<th>N</th>
<th>Initial/Provisional</th>
<th>Professional</th>
<th>Other State</th>
<th>Alternate</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>81</td>
<td>23</td>
<td>19</td>
<td>5</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>2002</td>
<td>43</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>2003</td>
<td>33</td>
<td>5</td>
<td>13</td>
<td>2</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>2004</td>
<td>40</td>
<td>13</td>
<td>13</td>
<td>1</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>2005</td>
<td>42</td>
<td>10</td>
<td>16</td>
<td>1</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>2006</td>
<td>26</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>284</td>
<td>72</td>
<td>82</td>
<td>23</td>
<td>43</td>
<td>64</td>
</tr>
</tbody>
</table>

The percentage of Alternative License teachers still serving after 1 year (100%) is greater than the percent of Initial/Provisional License teachers still serving after 1 year in each of the cohort years. Alternative License teachers still serving after 1 year have the higher composite percentage for all cohort years (97.7%) compared to the composite percentage of Initial/Provisional teachers still serving after 1 year (94.4%). The percentage of those teachers still serving after 1 year in the national sample (2004-05 TFS) for teachers with a regular or standard license is 84.5% and for a certificate that includes the alternative licensure type of certificate is 77.2%. This shows that AoDCS teachers have a lower turnover rate than teachers in the national sample. After 6 years, the composite percent of teachers still serving in the AoDCS is higher for the Alternative License teachers (60.5%) than for the Initial/Provisional Licensed teachers (50.0%).
Table 6

Percent of Beginning AoDCS Teachers Remaining After 1 Year and After 6 Years

<table>
<thead>
<tr>
<th>Cohort Year</th>
<th>Initial/Provisional</th>
<th>Alternative License</th>
<th>All Other Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I/P N After 1 Year 6+ Years</td>
<td>Alt N After 1 Year 6+ Years</td>
<td>Other N After 1 Year 6+ Years</td>
</tr>
<tr>
<td>2001</td>
<td>23 95.7% 60.9%</td>
<td>15 100% 66.7%</td>
<td>43 95.3% 69.8%</td>
</tr>
<tr>
<td>2002</td>
<td>9 88.9% 33.3%</td>
<td>3 100% 66.7%</td>
<td>31 100% 77.4%</td>
</tr>
<tr>
<td>2003</td>
<td>5 80.0% 80.0%</td>
<td>9 100% 44.4%</td>
<td>19 94.7% 89.5%</td>
</tr>
<tr>
<td>2004</td>
<td>13 100% 53.8%</td>
<td>7 100% 57.1%</td>
<td>20 95.0% 65.0%</td>
</tr>
<tr>
<td>2005</td>
<td>10 90.0% 60.0%</td>
<td>4 100% 75.0%</td>
<td>28 82.1% 57.1%</td>
</tr>
<tr>
<td>2006</td>
<td>10 100% 10.0%</td>
<td>2 100% 50.0%</td>
<td>14 92.9% 0%</td>
</tr>
<tr>
<td>Other</td>
<td>2 100% 50.0%</td>
<td>3 66.7% 66.7%</td>
<td>14 92.9% 71.4%</td>
</tr>
<tr>
<td>Total</td>
<td>72 94.4% 50.0%</td>
<td>43 97.7% 60.5%</td>
<td>169 93.5% 65.1%</td>
</tr>
</tbody>
</table>

The total percentage of Alternative license teachers remaining after 1 year (97.7%) is higher than the percentage of All Other Teachers remaining after 1 year (93.5%). After 6 or more years, the percentage of All Other Teachers still serving in AoDCS (65.1%) is higher than the percentage of retention for both the Initial/Provisional Licensure teachers (50%) and the Alternative Licensure teachers (60.5%) still serving after 6 years. This data seem to show that teachers who had some experience teaching when they started teaching in AoDCS stayed longer than beginning teachers hired in those same years.

Teacher Movers

National data track teachers who move between schools but stay in the teaching profession. The teachers in this study not currently teaching in AoDCS were asked if they stayed in the field of education after their last year in AoDCS or not. Seventy-two (54%)
of these teachers say they did stay in the education field. These teachers would be considered Movers. Sixty-one (46%) did not continue in teaching. The Mover teachers said that they were currently (a) teaching in a public school in Denver (39); (b) teaching in a public school outside the Denver area (16); (c) teaching in a Catholic school in another diocese (11); or (d) “other” (6). Nearly half the movers (46%) identified availability of a better teaching assignment as a very important or important reason for leaving AoDCS.

Of the teachers not currently teaching in AoDCS who said they left the teaching profession after leaving the AoDCS, 8 teachers said they left teaching for another profession, 28 said they left teaching because of a change in family circumstances, and 23 selected “other” as their reason for leaving teaching.

**Hypothesis I and II**

Researchers who are able to access raw data from TFS samples (Ingersoll, 2001) can isolate Catholic school teacher turnover rate from the turnover rate for teachers in the other private school categories. Based on the 1991-92 TFS, Catholic schools had a 17.7% turnover rate, teachers in other religious schools had a 21.5% turnover rate, and non-sectarian private schools had a 16.1% turnover rate (see Figure 2). The rate of AoDCS teachers still serving after 1 year is higher than the national samples for Catholic schools, private schools, and public schools.
The hypotheses for this study are:

1. A lower percentage of alternatively licensed teachers hired in the Archdiocese of Denver Catholic Schools between 2001-02 and 2006-07 left teaching than the percentage of traditionally licensed teachers hired in the Archdiocese of Denver Catholic Schools during same period.

2. A lower percentage of alternatively licensed teachers hired in the Archdiocese of Denver Catholic Schools between 2001-02 and 2006-07 left teaching after one year than the percentage of all teachers in nation-wide samples that left after one year.

The data from this study support the hypotheses.

Teacher Characteristics

This section will address the data gathered by the survey about teacher characteristics including gender, age, Catholic affiliation, teaching grade or subject field, and years of service in the AoDCS system.

Gender. Data indicate that 229 (81%) of the AoDCS respondents are female and 54 (19%) are male. The 2008-09 TFS sample showed 77.5% of respondents as female and 22.5% as male. The AoDCS sample has a slightly higher percentage of females and lower percentage of males than the national sample. A higher percentage of Alternative License teachers (23%) are men compared to Initial/Provisional License teachers (12%). This is comparable to national data that indicate alternative program participants have a higher percentage of men than traditional beginning teachers.
**Age.** AoDCS teachers responding to the survey fall into the following age groups: 20-30 years of age – 28 teachers (10%), 31-40 years of age – 73 teachers (26%), 41-50 years of age – 65 teachers (23%), and over 50 years of age – 117 teachers (41%). The 2008-09 TSF survey showed 17% of respondents under 30, 26% from 30 to 39 years of age, 24% from 40 to 49 years of age, and 33% over 50 years of age. The AoDCS sample has a lower percentage of teachers under 30 years of age and a higher percentage over 50 years of age than the national survey, but the same percentage in the two middle groups. Women in the AoDCS sample outnumber men in every age group. In the over 50 age group a much higher percentage (41%) of teachers are men compared to other age groups. Among Alternative license teachers, 5% are in the 20-30 age group and 40% are in the over 50 age group. Among Initial/Professional License teachers, 22% are in the 20-30 age group and 25% are in the over 50 age group. National data indicates that alternative licensure candidates tend to be older than traditional beginning teachers.

**Catholic affiliation.** There are 230 (81%) Catholics in the AoDCS sample. Catholics are about evenly represented among the types of teacher licensure except that 100% of those holding an out-of-state license are Catholic. A higher percentage of Initial/Provisional License teachers are Catholics than the total sample at 83.3%. Alternative licensure teachers have the lowest percentage of Catholics at 72.1%.

**Years of experience.** The responders include 16 teachers who left teaching in AoDCS after 1 year, 39 who left after 2 or 3 years, 54 who left after 4 or 5 years, and 173
who had taught in AoDCS for 6 or more years (see Table 4). One hundred fifty-two teachers were still serving in AoDCS at the time of the survey.

**Grade level or content area.** During the target years of 2001 through 2006 teachers were hired to teach a variety of subjects and grade levels. The largest group hired is those teaching in the primary grades of preschool through 5th grade (see Table 7). Middle school teachers, those who teach students in grades 6 – 8, are the next largest group. The third largest group is teachers of “specials” subjects in Kindergarten through 8th grade. Specials teachers have a 52% retention rate for 6 or more years which is the lowest retention rate among the subject/grade level groups of teachers. High school teachers account for 29 of the teachers hired (10%) during the target years. They have a 69% retention rate for 6 or more years which is the highest rate among the subject/grade level groups of teachers. High school teachers account for 29 of the teachers hired (10%) during the target years. They have a 69% retention rate for 6 or more years which is the highest rate among the groups. Subject taught or grade level is one of the teacher characteristics that is examined later in this chapter as a factor that may be predictive of teacher turnover. The 2004 TFS shows that when teachers are grouped by teaching field, the retention rate is very similar to the retention rates of AoDCS teachers in this study across subject and grade level.
Table 7

Teachers Serving for 6 or More Years by Subject or Grade

<table>
<thead>
<tr>
<th>Subject Area or Grade Level</th>
<th>Number and % Hired between 2001 and 2006</th>
<th>% Serving for 6 or More Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (PreK – Grade 5)</td>
<td>131 (46%)</td>
<td>60%</td>
</tr>
<tr>
<td>Middle School (Grades 6 – 8)</td>
<td>67 (24%)</td>
<td>66%</td>
</tr>
<tr>
<td>K-8 Specials (Art, music, PE, library, computer)</td>
<td>48 (17%)</td>
<td>52%</td>
</tr>
<tr>
<td>High School</td>
<td>29 (10%)</td>
<td>69%</td>
</tr>
<tr>
<td>Other*</td>
<td>9 (3%)</td>
<td>56%</td>
</tr>
<tr>
<td>Total</td>
<td>284</td>
<td></td>
</tr>
</tbody>
</table>

*Teachers identifying specializations that did not fit easily in any category such as reading coach or special education, or did not define a subject area or grade level.

School Characteristics

The next section presents survey results about the characteristics of schools that were measured by the survey: the size of the school, the ethnic make-up of the students, the location of the school, and the Catholic identity characteristics.

Size. The percent of teachers who stayed after the first year was about the same for the four sizes of schools – above 93% (see Table 8). The percentage of teachers who stayed for 6 years or more was highest for the very large schools (73.1%) and lowest for the very small schools (48.3%). This corresponds to data gathered from the TFS which shows that smaller schools saw higher teacher turnover than larger schools (see Figure 2). However, compared to national percents, AoDCS had more teachers than national groups serving after 1 year in all categories.
### Table 8

Percent of Archdiocese of Denver Catholic School Teachers Serving After 1st Year and 6 or More Years by Size of School, Location, and Student Ethnicity

<table>
<thead>
<tr>
<th>Size of school</th>
<th>N</th>
<th>% Serving After 1st Year</th>
<th>% Serving 6 or More Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very small</td>
<td>29</td>
<td>93.1%</td>
<td>48.3%</td>
</tr>
<tr>
<td>Small</td>
<td>101</td>
<td>93.9%</td>
<td>59.2%</td>
</tr>
<tr>
<td>Large</td>
<td>128</td>
<td>93.7%</td>
<td>62.2%</td>
</tr>
<tr>
<td>Very Large</td>
<td>26</td>
<td>100%</td>
<td>73.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>% Serving After 1st Year</th>
<th>% Serving 6 or More Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>35</td>
<td>94.1%</td>
<td>58.8%</td>
</tr>
<tr>
<td>Urban</td>
<td>122</td>
<td>95.8%</td>
<td>60.8%</td>
</tr>
<tr>
<td>Suburban</td>
<td>127</td>
<td>91.3%</td>
<td>61.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Ethnicity</th>
<th>N</th>
<th>% Serving After 1st Year</th>
<th>% Serving 6 or More Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>163</td>
<td>93.3%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>25</td>
<td>91.7%</td>
<td>66.7%</td>
</tr>
<tr>
<td>African American</td>
<td>2</td>
<td>100%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Caucasian/Hispanic</td>
<td>46</td>
<td>95.6%</td>
<td>55.6%</td>
</tr>
<tr>
<td>Caucasian/Hispanic/Asian</td>
<td>48</td>
<td>97.9%</td>
<td>77.1%</td>
</tr>
</tbody>
</table>

**Location.** The percentage of teachers serving after their first year in the three location choices exceeded 91% for all categories and was higher than the percentage of teachers serving for more than 1 year in each of those locations based on national data. After six years, the percentage of teachers still serving in AoDCS is very close for the three location choices, between 59% and 61%.
Student ethnicity. The national sample measured level of minority student population or poverty level rather than ethnicity. This study uses ethnicity to arrive at comparable data. More than 90% of AoDCS teachers still remained in schools with each of the various student ethnicity samples after the first year. After 6 years, retention was highest (77.1%) in the schools with the most diverse ethnic mix and lowest (50.0%) in the schools with primarily African American students. This school characteristic will be examined to determine if it is predictive of teacher turnover.

Evidence and importance of Catholic identity indicators. One of the school characteristics is Catholic identity. The survey for this study asked teachers to rank the evidence of each of the 6 factors of Catholic identity at the school where they taught most recently. It asked them to rank the importance to themselves of these same factors. When the teacher ranks the evidence and the importance of the factor at the same level, this is considered a match. When teachers considered that a characteristic was more important to them than it was evident in the school or found that a characteristic was more evident in the culture of the school than it was important to them personally, it was indicated on the chart as such. For teachers who were no longer serving in AoDCS at the time of the study, there was a 57% match between the importance and the evidence of “participation in liturgical seasonal celebrations” (see Table 9). This was the highest level of matching for this group. The second highest level of match was for “opportunity for regular attendance at Mass” (53%). These are also the characteristics with the highest percentage of match between evidence and importance for teachers currently teaching in AoDCS.
Table 9

Percent of Match for Teachers No Longer Serving in AoDCS Between the Importance and the Evidence of Indicators of Catholic Identity

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Match</th>
<th>More Important than Evident</th>
<th>More Evident than Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students participating in Catholic Social Justice teachings</td>
<td>38%</td>
<td>43%</td>
<td>20%</td>
</tr>
<tr>
<td>A sense of community among teachers and staff at the school</td>
<td>43%</td>
<td>49%</td>
<td>5%</td>
</tr>
<tr>
<td>A sense of community among students</td>
<td>43%</td>
<td>49%</td>
<td>5%</td>
</tr>
<tr>
<td>Commitment to the mission of forming students in the Catholic faith</td>
<td>47%</td>
<td>29%</td>
<td>20%</td>
</tr>
<tr>
<td>Opportunity for regular attendance at Mass</td>
<td>53%</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>Participation in seasonal liturgical celebrations</td>
<td>57%</td>
<td>14%</td>
<td>29%</td>
</tr>
</tbody>
</table>

N=136 teachers no longer serving in AoDCS; 104 (76%) are Catholic.

These teachers had a match of 68% between the importance and the evidence of “participation in liturgical seasonal celebrations” and a match of 70% for “opportunity for regular attendance at Mass.” Although both groups of teachers had the highest percentage of matches for these two characteristics, those still serving in AoDCS indicate a higher
percentage of matching for all categories than those not currently teaching in AoDCS (see Table 10).

For teachers not currently teaching in AoDCS, the percentage of match between level of evidence and level of importance for the other 4 characteristics ranged from 38% to 47%. For teachers currently teaching in AoDCS, the percentage of match for the other 4 characteristics ranged from 48% to 68%. For the teachers not currently teaching in AoDCS, in each case where there was not a match between evidence and importance, the characteristic was more important to the teacher than it was evident in the school. Almost half the teachers not currently teaching in AoDCS (49%) felt that a sense of community among teachers and staff was less evident in the school than it was important to them. They also felt that a sense of community among students was less evident in the school than it was important to them.

Over half of the teachers who currently teach in AoDCS (54%) found the importance to them of community among teachers and staff matched the evidence of this characteristic. Even more (56%) indicated a match between the evidence and importance of community among students. This evidence of a sense of community is one of the characteristics tested later in the chapter to determine if it is a predictive factor of teachers staying in Catholic schools.

Teachers currently teaching in AoDCS indicated a higher match (68%) between the importance and the evidence of a “commitment to the mission of forming students in the Catholic faith” than teachers no longer with the AoDCS (47%). Forming students in
Table 10

Percent of Match Among Teachers Currently Serving Between the Importance and the Evidence of Indicators of Catholic Identity

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Match</th>
<th>More Important than Evident</th>
<th>More Evident than Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students participating in Catholic Social Justice teachings</td>
<td>48%</td>
<td>36%</td>
<td>13%</td>
</tr>
<tr>
<td>A sense of community among teachers and staff at the school</td>
<td>54%</td>
<td>39%</td>
<td>7%</td>
</tr>
<tr>
<td>A sense of community among students</td>
<td>56%</td>
<td>35%</td>
<td>6%</td>
</tr>
<tr>
<td>Commitment to the mission of forming students in the Catholic faith</td>
<td>68%</td>
<td>20%</td>
<td>11%</td>
</tr>
<tr>
<td>Participation in seasonal liturgical celebrations</td>
<td>68%</td>
<td>10%</td>
<td>21%</td>
</tr>
<tr>
<td>Opportunity for regular attendance at Mass</td>
<td>70%</td>
<td>9%</td>
<td>21%</td>
</tr>
</tbody>
</table>

N=146 still teaching in AoDCS; 126 (84%) are Catholic

the Catholic faith is a paramount mission for Catholic schools. This indicates that teachers who see a level of evidence of this characteristic that matches the importance that it has for them are more likely to remain in a Catholic school. This characteristic will also be tested to determine if it is predictive of teacher attrition. In both groups, the
lowest percent of match was for student participation in the Catholic Social Justice teachings.

**Working Conditions**

The next section will present the data from the survey pertaining to the category of organizational factors in the school called working conditions. The percent of teachers who identified each of these factors as an important or very important reason for leaving AoDCS is listed in Table 11. The greatest percentage of teachers not currently teaching in AoDCS (14.4%) identify “family circumstances” as an important or highly important reason for leaving AoDCS. This factor had the highest percentage of the reasons to leave teaching available on the TFS of both public and private school teachers. The next highest working condition factor in importance for teachers leaving AoDCS was “dissatisfaction with administrative support” (8.5%) followed by “dissatisfaction with workplace conditions” (7.4%). “Dissatisfaction with teaching for other reasons” was selected by the second highest percent of teachers in the national samples. Overall, the reasons identified for leaving teaching in the national sample are very similar in importance to the reasons selected by the AoDCS teachers. These factors will be considered later in the chapter as possibly being predictive of teacher turnover.

**Route to Licensure**

The route to teacher licensure for beginning teachers (alternative and traditional) is one of the factors whose impact on teacher attrition is tested in this study. Two routes
Table 11
Teachers Rating Reasons for Leaving Teaching as Important or Very Important

<table>
<thead>
<tr>
<th>Reasons for Leaving or Moving</th>
<th>N of Responders</th>
<th>% of Responders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family circumstances</td>
<td>41</td>
<td>14.4%</td>
</tr>
<tr>
<td>Dissatisfaction with administrative support</td>
<td>24</td>
<td>8.5%</td>
</tr>
<tr>
<td>Needed higher salary</td>
<td>21</td>
<td>7.4%</td>
</tr>
<tr>
<td>Dissatisfaction with workplace conditions</td>
<td>19</td>
<td>6.7%</td>
</tr>
<tr>
<td>Dissatisfaction with professional development</td>
<td>15</td>
<td>5.3%</td>
</tr>
<tr>
<td>Greater job security</td>
<td>13</td>
<td>4.6%</td>
</tr>
<tr>
<td>Dissatisfaction with teaching - other reasons</td>
<td>12</td>
<td>4.3%</td>
</tr>
<tr>
<td>Needed better benefits/insurance</td>
<td>12</td>
<td>4.2%</td>
</tr>
<tr>
<td>Moved away from the area</td>
<td>10</td>
<td>3.2%</td>
</tr>
<tr>
<td>No contract offered</td>
<td>6</td>
<td>2.2%</td>
</tr>
<tr>
<td>Not enough autonomy</td>
<td>6</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

Sample size = 78

for beginning teacher licensure or certification—the traditional Initial/Provisional route following a college or university undergraduate degree, and the Alternative route—will be compared using a 2 x 2 Chi-square analysis to test if route to licensure is dependent or independent of teacher retention. Survey responders chose only one type of licensure for their first year in the AoDCS. The two types of license considered in this test are
Initial/Provisional and Alternative. There are 115 teachers from the survey in those two categories. Responders chose only one selection for how long they taught in the school system. There are four possible answers: 1 year, 2 – 3 years, 4 – 5 years, or 6 or more years. The number of responses in the 1 year category was so small in this sample (5) that the categories 1 year and 2-3 years have been condensed into a single category of 1 to 3 years (see Table 3).

The null hypothesis for this test is that teacher turnover is independent of route to certification (see Table 12). The alternative hypothesis is that teacher attrition is dependent on route to certification. In the computation, $\chi^2_{\text{observed}} = 4.56$ and $\chi^2_{\text{critical}} = 5.99$. Since $\chi^2_{\text{observed}}$ does not exceed $\chi^2_{\text{critical}}$, the null hypothesis is not rejected and it is judged that teacher turnover is independent of route to certification.

**Important Predictors of Teacher Retention or Attrition**

A research question for this study asks: What factors are important predictors that Archdiocese of Denver Catholic Schools teachers will remain in teaching or leave the teaching profession? The dependent variable for this study is whether or not a teacher is currently teaching in AoDCS. This variable is impacted by the number of years a person taught in the system. For the 3 Chi-square tests the relationship tested is between the number of years of teaching in AoDCS (1-3 years, 4-5 years, or 6 or more years) and the predictor variables of teacher characteristics of age, gender, and grade or subject taught.
## Table 12

Chi-square Test for Years of Teaching and Type of License (Initial/Provisional & Alternative)

<table>
<thead>
<tr>
<th># Years Teaching</th>
<th>Type of License</th>
<th>Initial/Provisional</th>
<th>Alternative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Observed Count</td>
<td>22</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>1 to 3</td>
<td>Percent</td>
<td>30.6%</td>
<td>14.0%</td>
<td>24.4%</td>
</tr>
<tr>
<td></td>
<td>Observed Count</td>
<td>13</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>4 or 5</td>
<td>Percent</td>
<td>18.1%</td>
<td>27.9%</td>
<td>21.7%</td>
</tr>
<tr>
<td></td>
<td>Observed Count</td>
<td>37</td>
<td>25</td>
<td>62</td>
</tr>
<tr>
<td>6 or more</td>
<td>Percent</td>
<td>51.4%</td>
<td>58.1%</td>
<td>53.9%</td>
</tr>
<tr>
<td></td>
<td>Observed Count</td>
<td>72</td>
<td>43</td>
<td>115</td>
</tr>
<tr>
<td>Total</td>
<td>Percent</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Chi-square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>4.565a</td>
<td>2</td>
<td>.102</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum number is 9.43

## Teacher Characteristics

A 2 x 2 Chi-square analysis using each of the three teacher characteristics: gender, age, and grade or subject taught, is used to show the relationship between these variables and the number of years of teaching. The null hypothesis in each case is that the characteristic is independent of the number of years of teaching.
Table 13 shows the results for the Chi-square test to determine the relationship of the teacher characteristic of gender with the number of years of teaching. It may be seen that \( \chi^2_{\text{observed}} = 0.483 \) and \( \chi^2_{\text{critical}} = 5.99 \). Since \( \chi^2_{\text{observed}} \) does not exceed \( \chi^2_{\text{critical}} \), the null hypothesis is not rejected and it is judged that gender is independent of the number of years of teaching.

### Table 13

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>1 to 3</th>
<th>4 or 5</th>
<th>6 or More</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Observed Count</td>
<td>9</td>
<td>11</td>
<td>34</td>
<td>54</td>
</tr>
<tr>
<td>Male Percent within # of Years</td>
<td>16.7%</td>
<td>20.4%</td>
<td>63.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Female Observed Count</td>
<td>48</td>
<td>44</td>
<td>138</td>
<td>230</td>
</tr>
<tr>
<td>Female Percent within # of Years</td>
<td>20.9%</td>
<td>19.1%</td>
<td>60.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Total Observed Count</td>
<td>57</td>
<td>55</td>
<td>172</td>
<td>284</td>
</tr>
<tr>
<td>Total Percent within # of Years</td>
<td>20.1%</td>
<td>19.4%</td>
<td>60.6%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Chi-square Tests**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.483</td>
<td>2</td>
<td>.785</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.46.

The results of the Chi-square analysis for the relationship between the teacher characteristic of age with the dependent variable of the number of years of teaching is shown in Table 14. The results show that \( \chi^2_{\text{observed}} = 32.61 \) and \( \chi^2_{\text{critical}} = 12.59 \). Since
Table 14

Chi-square Tests for Years of Teaching and Teacher Characteristics (Age)

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>1 to 3</th>
<th>4 or 5</th>
<th>6 or More</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30</td>
<td>Observed Count</td>
<td>9</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Percent within Age</td>
<td>32.1%</td>
<td>39.3%</td>
<td>28.6%</td>
</tr>
<tr>
<td>31-40</td>
<td>Observed Count</td>
<td>25</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Percent within Age</td>
<td>34.2%</td>
<td>19.2%</td>
<td>46.6%</td>
</tr>
<tr>
<td>41-50</td>
<td>Observed Count</td>
<td>9</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Percent within Age</td>
<td>13.8%</td>
<td>20.0%</td>
<td>66.2%</td>
</tr>
<tr>
<td>Over 50</td>
<td>Observed Count</td>
<td>14</td>
<td>17</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Percent within Age</td>
<td>11.9%</td>
<td>14.4%</td>
<td>73.7%</td>
</tr>
</tbody>
</table>

Chi-square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>32.609</td>
<td>6</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.42.

\( \chi^2_{observed} \) exceeds \( \chi^2_{critical} \), the null hypothesis is rejected and it is judged that age and years of teaching are dependent on each other. Age is identified as a significant predictor of teacher turnover in national research, with a higher rate of teachers in the 20-30 age group leaving the profession than any other age group until retirement age (Ingersoll, 2001).

The results of the Chi-square analysis for the relationship between the teacher
characteristic of Grade/Subject taught and the dependent variable of the number of years is represented in Table 15. This table shows that \( \chi^2_{\text{observed}} = 4.26 \) and \( \chi^2_{\text{critical}} = 12.59 \). Since \( \chi^2_{\text{observed}} \) does not exceed \( \chi^2_{\text{critical}} \), the null hypothesis is not rejected and it is judged that grade or subject taught is independent of years of teaching.

**School Characteristics**

The results of the Pearson correlation (2-tailed) calculated between and among the dependent variable of current teaching status and the predictor variables for school characteristics of school size, location, and student ethnicity are presented below. Data indicate that the very small school size (\( r = .129 \)) is a significant variable (see Table 16). This shows that the difference in teacher turnover in very small schools is significant when compared to the turnover in very large schools which is the comparison variable in the coding. This could be anticipated based on the wide difference between the percentage of teachers still teaching after 6 years in very small and very large schools in the descriptive data in Table 8.

Another one of the school variables is student ethnicity. Having a mixture of Caucasian, Hispanic and Asian students has a significant correlation (\( r = -.194 \)) with the dependent variable. This indicates that the difference between this variable is significant when compared to the variable labeled primarily African American, which was the comparison variable in the coding. This could be predicted from the data provided in Table 8 where the descriptive data shows the percent of teachers serving for 6 or more
Table 15

Chi-square Tests for Years of Teaching and Teacher Characteristics (Grade/Subject)

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>Grade/Subject</th>
<th>Observed Count</th>
<th>1 to 3</th>
<th>4 or 5</th>
<th>6 or More</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PreK-5</td>
<td></td>
<td>26</td>
<td>27</td>
<td>78</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Percent within Grade/Subject</td>
<td>19.8%</td>
<td>20.6%</td>
<td>59.5%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>K-8 Specials</td>
<td>Observed Count</td>
<td>12</td>
<td>11</td>
<td>25</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Percent within Grade/Subject</td>
<td>25.0%</td>
<td>22.9%</td>
<td>52.1%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle School</td>
<td>Observed Count</td>
<td>14</td>
<td>9</td>
<td>44</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Percent within Grade/Subject</td>
<td>20.9%</td>
<td>13.4%</td>
<td>65.7%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High School/Other*</td>
<td>Observed Count</td>
<td>5</td>
<td>8</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Percent within Grade/Subject</td>
<td>13.2%</td>
<td>21.1%</td>
<td>65.8%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Chi-square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>4.255a</td>
<td>6</td>
<td>.642</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.36.
* “Other” teachers identifying specializations that did not fit easily in any category such as reading coach or special education, or did not define a subject area or grade level.

years is the highest for schools with a mixture of Caucasian, Hispanic, and Asian students.

The location of the school does not have a significant correlation and will not be tested as a predictor of teacher turnover. This is anticipated when comparing this test with
Table 16

Correlation Matrix of Predictor Variables for School Characteristics

<table>
<thead>
<tr>
<th>Currently Teaching in AoDCS</th>
<th>Size of School</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Small</td>
<td>Small</td>
<td>Large</td>
<td></td>
</tr>
<tr>
<td>Currently Teaching</td>
<td>1.000</td>
<td>0.129*</td>
<td>0.058</td>
<td>0.036</td>
</tr>
<tr>
<td>Size of School</td>
<td></td>
<td>1.000</td>
<td>-0.251**</td>
<td>-0.305**</td>
</tr>
<tr>
<td>Very small</td>
<td>0.129*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>-0.058</td>
<td>-0.251**</td>
<td>1.000</td>
<td>-0.673**</td>
</tr>
<tr>
<td>Large</td>
<td>0.036</td>
<td>-0.305**</td>
<td>-0.673**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

| Currently Teaching          |          |          |          |          |
| Student Ethnicity           | Caucasian | Caucasian/Hispanic | Caucasian/Hispanic/Asian | Hispanic |
| Currently Teaching          | 1.000    | 0.061     | 0.031     | -0.194** | 0.084   |
| Student Ethnicity           |          | 1.000     | -0.510**  | -0.523** | -0.361** |
| Caucasian                   | 0.061    | 1.000     | -0.510**  | -0.523** | -0.361** |
| Caucasian/Hispanic          | 0.031    | -0.510**  | 1.000     | -0.198** | -0.137*  |
| Caucasian/Hispanic/Asian    | -0.194** | -0.523**  | -0.198**  | 1.000    | -0.140*  |
| Hispanic                    | 0.084    | -0.361**  | -0.137*   | -0.140*  | 1.000    |

| Currently Teaching          |          |          |          |          |
| School Location             | Rural    | Urban    |          |          |
| Currently Teaching          | 1.000    | 0.016     | 0.018     |          |
| School Location             |          | 0.016     | 1.000     | -0.325** |
| Rural                       | 0.016    | 1.000     |          | -0.325** |
| Urban                       | 0.018    | -0.325**  | 1.000     |          |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
the descriptive statistics in Table 8. The teacher turnover as measured by the percentage of teachers who served for 6 or more years in these descriptive statistics is very similar in the coding.

**Evidence and Importance of Catholic Identity Characteristics**

A Pearson correlation (2-tailed) was calculated using currently teaching in AoDCS as the dependent variable and using as the predictor variables the 12 characteristics of Catholic identity: 6 measuring the evidence of the factors, and 6 measuring the importance of the factors. There is significant correlation between the dependent variable and the *evidence* of each of the 6 Catholic identity factors at the 0.01 level (see Table 17). There is significant correlation between the dependent variable and only 4 out of 6 of the *importance* factors of the Catholic identity. The 2 factors for which there is no significant correlation between the dependent variable and the importance factors are the importance of community among the faculty variable (p = -.001) and the importance of community among students variable (p = -.045) (see Table 18).

In the correlation matrix for the evidence of the factors, three of the variables are very highly correlated with each other: faith formation, regular Mass attendance, and seasonal liturgical celebrations. These factors are excluded from the multiple regression analysis because their high degree of mutual correlation (p > .600) could influence the results so as to obscure information about the other factors. The 3 remaining factors are used as elements in the regression analysis: evidence of community among faculty, evidence of community among students, and evidence of opportunities for service related
Table 17

Correlation Matrix of Predictor Variables for Evidence of Catholic Identity Factors

<table>
<thead>
<tr>
<th>Currently Teaching in AoDCS</th>
<th>Community Among Faculty</th>
<th>Community Among Students</th>
<th>Faith Formation</th>
<th>Regular Mass Attendance</th>
<th>Seasonal Liturgical Celebration</th>
<th>Catholic Social Justice Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently Teaching in AoDCS</td>
<td>1.000</td>
<td>.187**</td>
<td>.160**</td>
<td>.255**</td>
<td>.195**</td>
<td>.192**</td>
</tr>
<tr>
<td>Community Among Faculty</td>
<td>.187**</td>
<td>1.000</td>
<td>.477**</td>
<td>.454**</td>
<td>.312**</td>
<td>.375**</td>
</tr>
<tr>
<td>Community Among Students</td>
<td>.160**</td>
<td>.477**</td>
<td>1.000</td>
<td>.569**</td>
<td>.374**</td>
<td>.432**</td>
</tr>
<tr>
<td>Faith Formation</td>
<td>.255**</td>
<td>.454**</td>
<td>.569**</td>
<td>1.000</td>
<td>.543**</td>
<td>.619**</td>
</tr>
<tr>
<td>Regular Mass Attendance</td>
<td>.195**</td>
<td>.312**</td>
<td>.374**</td>
<td>.543**</td>
<td>1.000</td>
<td>.692**</td>
</tr>
<tr>
<td>Seasonal Liturgical Celebration</td>
<td>.192**</td>
<td>.375**</td>
<td>.432**</td>
<td>.619**</td>
<td>.692**</td>
<td>1.000</td>
</tr>
<tr>
<td>Catholic Social Justice Service</td>
<td>.249**</td>
<td>.426**</td>
<td>.504**</td>
<td>.528**</td>
<td>.393**</td>
<td>.463**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Table 18
Correlation Matrix of Predictor Variables for Importance of Catholic Identity Factors

<table>
<thead>
<tr>
<th>Currently Teaching in AoDCS Community Among Faculty</th>
<th>Community Among Students</th>
<th>Faith Formation</th>
<th>Regular Mass Attendance</th>
<th>Seasonal Liturgical Celebration</th>
<th>Catholic Social Justice Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td>-.001</td>
<td>-.045</td>
<td>.189**</td>
<td>.190**</td>
<td>.158**</td>
</tr>
<tr>
<td>-.001</td>
<td>1.000</td>
<td>.573**</td>
<td>.287**</td>
<td>.220**</td>
<td>.202**</td>
</tr>
<tr>
<td>-.045</td>
<td>.573**</td>
<td>1.000</td>
<td>.331**</td>
<td>.289**</td>
<td>.254**</td>
</tr>
<tr>
<td>.189**</td>
<td>.287**</td>
<td>.331**</td>
<td>1.000</td>
<td>.851**</td>
<td>.777**</td>
</tr>
<tr>
<td>.190**</td>
<td>.220**</td>
<td>.289**</td>
<td>.851**</td>
<td>1.000</td>
<td>.842**</td>
</tr>
<tr>
<td>.158**</td>
<td>.202**</td>
<td>.254**</td>
<td>.777**</td>
<td>.842**</td>
<td>1.000</td>
</tr>
<tr>
<td>.193**</td>
<td>.363**</td>
<td>.393**</td>
<td>.635**</td>
<td>.663**</td>
<td>.651**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
to Catholic social justice teachings. Data were entered as a block, and then in four different steps to determine any difference in the significance for each variable. Model 4 resulting from all the variables being entered together is presented in Table 19. The variables had similar significance in all the models.

When the variables identified by the correlations as possible predictors of teacher turnover are entered into the regression analysis, the school characteristic variables of very small size (p = .046) and student ethnicity of a mix of Caucasian/Hispanic/Asian (p = .009) are identified as significant predictors of teacher turnover. The teacher characteristic of age (p = .057), and the Catholic identity factor of evidence of Catholic social justice teaching (p = .057), are on the border of being significant predictors of teacher turnover.
### Table 19

Summary Regression Results for Factors Predicting Teacher Retention

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.204</td>
<td>.041</td>
<td>.038</td>
<td>.490</td>
<td>.041</td>
<td>4.118</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.249</td>
<td>.062</td>
<td>.048</td>
<td>.487</td>
<td>.021</td>
<td>2.006</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.316</td>
<td>.100</td>
<td>.073</td>
<td>.481</td>
<td>.038</td>
<td>2.865</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.380</td>
<td>.145</td>
<td>.109</td>
<td>.471</td>
<td>.045</td>
<td>4.655</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- a. Predictors: (Constant), Age
- b. Predictors: (Constant), Age, Small, Very small, Large
- c. Predictors: (Constant), Age, Small, Very small, Large, African American, Caucasian & Hispanic, Caucasian/Hispanic/Asian, Hispanic
- d. Predictors: (Constant), Age, Small, Very small, Large, African American, Caucasian & Hispanic, Caucasian/Hispanic/Asian, Hispanic, E. Community among Students, E. Community among Faculty, E. CSJ service

### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Regression</td>
<td>10.059</td>
<td>11</td>
<td>.914</td>
<td>4.118</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>59.509</td>
<td>268</td>
<td>.222</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>69.568</td>
<td>279</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 19 (cont.)

d. Predictors: (Constant), Age, Small, Very small, Large, African American, Caucasian & Hispanic, Caucasian, Hispanic, Asian, Hispanic, E. Community among Students, E. Community among Faculty, E. CSJ service
e. Dependent Variable: Currently teaching in AoDCS

<table>
<thead>
<tr>
<th>Coefficients&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>4 (Constant)</td>
<td>1.196</td>
<td>.164</td>
</tr>
<tr>
<td>Age</td>
<td>-.055</td>
<td>.029</td>
</tr>
<tr>
<td>Very small</td>
<td>.261</td>
<td>.130</td>
</tr>
<tr>
<td>Small</td>
<td>.101</td>
<td>.106</td>
</tr>
<tr>
<td>Large</td>
<td>.191</td>
<td>.105</td>
</tr>
<tr>
<td>Caucasian &amp; Hispanic</td>
<td>-.004</td>
<td>.082</td>
</tr>
<tr>
<td>Caucasian, Hispanic, Asian</td>
<td>-.211</td>
<td>.080</td>
</tr>
<tr>
<td>Hispanic</td>
<td>.104</td>
<td>.109</td>
</tr>
<tr>
<td>African American</td>
<td>.403</td>
<td>.343</td>
</tr>
<tr>
<td>E. Community among Faculty</td>
<td>.069</td>
<td>.045</td>
</tr>
<tr>
<td>E. Community among Students</td>
<td>.024</td>
<td>.058</td>
</tr>
<tr>
<td>E. CSJ service</td>
<td>.081</td>
<td>.043</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Currently teaching in AoDCS
Summary

The results of the survey of teachers hired between 2001 and 2006 by the Archdiocese of Denver Catholic Schools determine that they are primarily female and have slightly lower percent of males than the national sample. The sample shows a somewhat smaller percent of teachers in the lowest age group (20 – 30 years) compared to the national sample, and a larger percentage of teachers in the over 50 category than the national sample. In their first year in AoDCS, the largest group of teachers had a Professional License which indicates some prior teaching experience and that they were not beginning teachers. Nearly half of the teachers in the sample are beginners holding either an Initial/Provisional License or an Alternative License. Over 80% of the teachers are Catholic.

Each type of license is represented in each cohort year, but the beginning teachers, those with an Initial/Provisional License and those with an Alternative License were nearly always in a majority. Considering the total sample of teachers, more than half remained in AoDCS for 6 or more years. Although the TFS survey years and the AoDCS cohort years do not match exactly, there are samples from six years in each group. AoDCS teachers have a higher percentage of teachers still teaching after the first year than either public school teachers or private school teachers in the national sample. By the end of 6 years, 50% to 60% of beginning teachers are continuing to serve, and when considering the entire sample, over 60% of teachers are continuing to teach in AoDCS.
Hypothesis I of the study is: A lower percentage of teachers of alternatively licensed teachers hired in the AoDCS between 2001 and 2006 left teaching than the percentage of traditionally licensed teachers hired in AoDCS that left teaching in that same period. This study affirms this hypothesis: after 1 year, only 2.4% of Alternatively Licensed teachers had left AoDCS, while 7% of Initial/Provisional AoDCS teachers had left. Alternatively licensed teachers do have less turnover in the first years. However, the route to certification is independent of number of years of teaching as demonstrated in the Chi-square test.

Hypothesis II is: A lower percentage of alternatively licensed teachers hired in AoDCS between 2001 and 2006 left teaching than the percentage of all teachers nationwide that left teaching during those year. This hypothesis is also affirmed since between 12.4% and 16.5% of public school teachers and between 17.7% and 22.2% of private school teachers leave teaching after the first year according to the Teacher Follow-up Survey. The data also show that teachers who had some previous teaching experience when they began teaching in AoDCS continued to teach longer than beginning teachers.

Question 1 asked what factors are important predictors of teacher turnover. Among the teacher characteristics, years of experience was dependent on age. Age is on the border of significant correlation (p = .057) meaning that younger teachers are more likely to leave teaching than older ones. Gender and Grade/Subject taught are both independent of the years of service. They are not predictive of teacher turnover.
Among school characteristics, the size of the school is predictive of teacher turnover with very small schools having the highest teacher turnover and very large schools having the least. The location of the school does not have an impact on teacher retention in this study. The match between evidence and importance of Catholic identity indicators to the teacher was higher for those currently teaching in AoDCS than for those not currently teaching in AoDCS. The evidence for students who participate in service around Catholic social justice teaching was also on the border of being predictive of teacher turnover. Diversity of student population was a predictor factor of teacher retention. The implication of these findings will be discussed further in the next chapter.
Chapter Five

Discussion and Conclusions

This study investigates factors that impact teacher turnover in the Archdiocese of Denver Catholic Schools (AoDCS) with special attention to route to licensure. Teacher turnover is seen to have a negative impact on student achievement and increase the cost of operating effective schools (Carroll, 2003; Ingersoll, 2001). This dissertation adds to the body of research on teacher turnover. The factors addressed in this study fall into four categories: teacher characteristics, school characteristics, working conditions, and route to licensure. These categories are based on data gathered by the National Center for Educational Statistics (NCES) in the Schools and Staffing Survey (SASS) and the Teacher Follow-up Survey (TFS). This dissertation extends research done on teacher turnover (Allen, 2003, 2005; Bryk, Lee and Holland, 1993; Carroll et al., 2003; Cochran-Smith, 2006; Convey, 1992; Darling-Hammond & Youngs, 2002, Feistritzer, 2005; Goldhaber, Gross, & Player, 2007; Grissmer and Kirby, 1997; Ingersoll, 2001, 2003; Ingersoll & Karlk, 2004; Ingersoll & Smith, 2003; Legler, 2002; Wise et al., 1987; Yeager et al., 1985) and the perceived shortage of highly qualified teachers. It also provides a focus on teachers in Catholic schools, particularly in the Archdiocese of Denver.

The hypotheses and related research questions for this study are:
**Hypothesis I**

A lower percentage of alternatively licensed teachers hired in the Archdiocese of Denver Catholic Schools between 2001 and 2006 left teaching than the percentage of traditionally licensed teachers hired in the Archdiocese of Denver Catholic Schools during that same period.

**Research Question 3**

This question is related to Hypothesis I. How does the attrition rate of traditionally certified teachers in the Archdiocese of Denver Catholic Schools compare to the attrition rate of the alternatively certified teachers in the Archdiocese of Denver Catholic Schools?

**Hypothesis II**

A lower percentage of alternatively licensed teachers hired in the Archdiocese of Denver Catholic Schools between 2001 and 2006 left teaching than the percentage of all teachers nation-wide who left teaching during that period.

**Research Question 4**

This question is related to the second hypothesis. How does the national rate of attrition for all teachers between the 2001-02 school year and the 2006-07 school year compare to the attrition rate of teachers in the Archdiocese of Denver Catholic Schools for the same period?
Research Questions 1 and 2

These questions investigate the predictive relationship between the factors in the study and teacher turnover in AoDCS.

Pearson correlations were used to explore the relationships among the variables. Regression analyses were used to explore the relationship of the predictive variables on the dependent variable of the current teaching status of teachers in AoDCS. Chi-square analyses were used to investigate the dependence or independence between the predictor variables and the length of stay of teachers.

Discussion of Findings

Data were obtained from 284 teachers initially hired by Catholic schools in the Archdiocese of Denver beginning with the 2001-02 school year through the 2006-07 school year. A 55-item survey was used to gather the data. Route to licensure or certification for beginning teachers is one independent variable. Beginning teachers are divided between traditional route to licensure and alternative route to licensure. Teacher characteristics is a second category of factors including the independent variables of gender, age, Catholic affiliation, teaching grade or content area, and years of experience in AoDCS. School characteristics, a third category, include the variables of the size of the school, ethnic make-up of the students, location of the school, and Catholic identity indicators. Working conditions, the fourth category, are 11 variables that could cause teachers to leave AoDCS and/or the teaching profession including (a) moving away from the area, (b) family circumstances, (c) dissatisfaction with administrative support, (d)
dissatisfaction with workplace conditions, (e) dissatisfaction with the opportunities available for professional development, (f) dissatisfaction with teaching for other reasons, (g) not enough classroom autonomy, (h) not being offered a contract, (i) need for greater job security, (j) need for a higher salary, and (k) need for better benefits/insurance. The survey items closely followed the survey items on the TFS so that data could be compared between the current study and national samples. Catholic identity items are the same as those used in an AoDCS satisfaction survey.

Summary of Findings

Using the hypotheses and research questions of this study, I will summarize and discuss the analysis and findings reported in Chapter 4.

Hypothesis I and Question 3

This dissertation study compares the percentage of alternatively licensed beginning teachers no longer teaching in AoDCS to the percentage of traditionally licensed beginning teachers no longer teaching in AoDCS. Nearly half the teachers in the sample, 115 out of 284, were beginning teachers having either an Alternative License or an Initial/Provisional License their first year in the AoDCS. A Chi-square analysis determined that route to licensure of beginning teachers is independent of teacher turnover. However, the data demonstrate that a lower percentage of Alternative License teachers left AoDCS (40%) during the years of this study than those beginning teachers with an Initial/Provisional License (50%). This data supports Hypothesis I.
Initial/Provisional License teachers had a higher percentage of attrition after the 1st year than Alternative License teachers. After the 1st year of teaching, 100% of the Alternative License teachers were still teaching in AoDCS while 96% of Initial/Provisional teachers were still teaching in AoDCS. This supports the data provided by Feistritzer (2005) that nearly all alternatively licensed teachers continue to teach the year after they complete their program. However, after 6+ years of service the Initial/Provisional License teachers group had lost 50% of their original number, and the Alternative License group had lost only 40%. This confirms Hypothesis I of this study that a lower percentage of Alternative License teachers left AoDCS during the time of the study than Initial/Provisional License teachers.

One of the measures of success in the alternative licensure program in AoDCS is whether or not the teacher is offered a contract for a second year. When a principal, in consultation with the peer mentor and the university supervisor, finds that a teacher is not effective in the classroom or does not fit the needs of the school community, the Alternative License teacher will not be offered a contract for the following year. Since 100% of the Alternative License teachers in this study taught for more than one year, it can be assumed that they were deemed to be successful in their program and effective beginning teachers.

After six years a higher percentage of the Alternative License teachers remained teaching in AoDCS than the Initial/Provisional teachers in 6 out of 7 of the cohort years. Alternative License teachers had a higher total percentage of teachers still teaching in
AoDCS after 6 years than Initial/Provisional teachers. This supports Legler’s (2002) finding that alternative route teachers stayed in teaching as long as or longer than traditional route teachers. These findings indicate that the alternative route to teacher licensure is a viable way for effective teachers to enter the field as determined by the percentage of teachers who continue to teach in AoDCS.

Research (Cochran-Smith, 2006; Feistritzer, 2005) shows that Alternative License teachers tend to be older than Initial/Provisional License teachers. Age is one of the significant predictors of teacher attrition according to national studies (Ingersoll, 2001). Forty percent of Alternative License teachers in AoDCS are in the over 50 age group compared to the Initial/Provisional Licensure teachers of whom 25% are in the over 50 age group. The older age among Alternative Licensure teachers could be one of the reasons for a higher retention rate in this group. This supports Cochran-Smith’s (2006) reference to the changing profile of beginning teachers, especially those who come to the teaching profession from another career.

Family circumstances is the working condition factor that teachers in this study identified most frequently for leaving teaching in AoDCS. This supports Ingersoll’s (2001) research about reasons for teacher attrition. Age may also be an impact here. Younger teachers are more likely to have life changing events such as marriage, beginning a family, or relocating to another area with a spouse for employment or career purposes.
Thus, although there is not a dependent relationship between route to licensure and teacher turnover as determined by the Chi-square test, and route to licensure is not a predictive variable for teacher turnover, age differences and differences in family circumstances can be identified as characteristics of these two groups of teachers. This could be a fertile area for further research.

**Hypothesis II and Question 4**

Ingersoll’s (2001) data interpolated from several sets of the Teacher Follow-up Surveys (TFS) show that there is annual attrition of 13.2% among all teachers nationally. He indicates that annual attrition among Catholic school teachers is 17.7%. Data from this dissertation study show attrition among AoDCS Alternative License teachers as 5.6% after the 1st year. Using additional years of TFS data, retention ranges from 83.5% to 87.6% per year making attrition rates range from 16.5% to 12.4% in the national sample. AoDCS Alternative License teachers had a retention rate of 100% in 6 out of 7 cohort years. This data affirms Hypothesis II that a greater percentage of AoDCS Alternative License teachers stayed in teaching than the percentage of retention of all teachers nationwide.

Question 4 addresses the retention of all AoDCS teachers in comparison to teachers nationally. The percentage of retention after the first year for the combined sample of all AoDCS teachers in the current study ranges from 85.7% to 97.7% in the various cohort years. Retention among the TFS samples range from 83.5% to 87.6%. Comparing samples of teachers after the first year, the AoDCS sample has a higher
percentage of teacher retention than among teachers in the national sample. Research (Hanushek, Kain, & Rivkin, 2003) indicates that teachers in their first two years of teaching are more than twice as likely to leave teaching as veterans with more experience. Research (Allen, 2005; Ingersol, 2001, 2003) shows that nearly 50% of teachers have left the profession after the first 5 years. Data from this dissertation study indicate that 50% of Initial/Provisional License teachers have left AoDCS after 6 years. This finding supports Ingersoll’s data.

For the Alternative License teachers, over 60% are still teaching in AoDCS after 6 years. This seems to challenge the national data and shows a stronger percentage of retention among this group of teachers. Teachers with some experience before being hired in AoDCS had overall retention after 6 years of over 65%. In the 2003 cohort, the retention rate was 89.5%. This seems to indicate retention of teachers in AoDCS is stronger than is found in the national samples. According to research (Ingersoll, 2001; TFS), Catholic schools nation-wide have a higher rate of teacher turnover than public school teachers, but the AoDCS retention numbers are stronger than the public school numbers.

Questions 1 and 2

Research Question 1 asks what factors are important predictors that AoDCS teachers will remain in teaching or leave teaching. The factors in the current study that may impact teacher turnover are divided into 4 categories: route to licensure, teacher characteristics, school characteristics and working conditions. Each of these categories
has several factors. The next section will discuss which of these are important predictors of teacher retention. Question 2 asks how these factors differ for the teachers who currently teach in AoDCS and those who do not currently teach in AoDCS.

**Route to Licensure as a Factor Impacting Teacher Turnover**

Route to licensure considers ways beginning teachers become licensed professionals. A more traditional route to licensure is by earning an undergraduate degree in education from an accredited college or university. A recent college graduate with a traditional license is very likely to be white, female and in her early 20s. An alternative route to licensure is a route for a candidate with a degree in a field other than education to participate in a state certified program of professional development with input from an institution of higher education and on-the-job training in a school operated by a designated agency. Archdiocese of Denver Catholic Schools is a designated agent of the Colorado Department of Education to conduct an alternative route program in its schools in partnership with Regis Jesuit University School of Professional Studies. The alternative licensure candidates in this study have a higher representation of males and are somewhat older than recent college graduates.

A Chi-square test was conducted to determine the relationship between route to licensure and teacher retention. These two factors were shown to be independent of each other. However, the comparison of simple percentages of beginning teachers in this dissertation shows that the Alternative License teachers continued teaching in AoDCS longer than Initial/Provisional teachers. The difference is descriptive rather than
statistically proven. Hypothesis I of this study refers to percentages and this data confirms, in those terms, that a lower percentage of Alternative License teachers left AoDCS than did Initial/Provisional License teachers.

**Teacher Characteristics as Factors Impacting Teacher Turnover**

Most studies define teacher characteristics to include teacher demographic factors such as age, gender, years of teaching experience, and grade level or subject taught (Allen, 2005; Cochran-Smith, 2006; Ingersoll, 2001; TFS). School characteristics include the size of the school, its location, the ethnicity of the student population, and the indicators of Catholic identity. Working conditions that might cause a teacher to leave the school or the teaching profession include (a) moving away from the Archdiocese of Denver, (b) dissatisfaction with the workplace conditions, (c) family circumstances including relocation of spouse, marriage, starting a family, or caring for an aging parent, (d) dissatisfaction with support from the school administration, (e) not being offered a contract for the next year, (f) dissatisfaction with the number of students, (g) limited autonomy in the classroom, (h) dissatisfaction with opportunities for professional development, (i) dissatisfaction with teaching for other reasons, (j) needing greater job security, (k) needing better health insurance and other benefits, and (l) needing a higher salary. Teachers no longer teaching in AoDCS responded to survey items about each of these characteristics.
Teacher Characteristics: Age and Experience

Age is one of the predictors of teacher retention in this study. The National Commission on Teaching and America’s Future (Carroll, 2003) identifies newly prepared teachers and those with fewer than 5 years of experience as having the highest levels of attrition. Other research data supports this (Allen, 2005; Ingersoll, 2001). A Chi-square analysis in this dissertation study finds that age and years of teaching are dependent on each other (see Table 14). A majority of teachers in the 20 – 30 age group left AoDCS by the end of 5 years. The majority of teachers in the over 50 age group continued to teach in AoDCS for more than 6 years. In the regression analysis of the factors, age has a significant impact on teacher turnover when it was the only predictive variable in the Chi-square test (see Model 1 in Table 19). When other factors were included in the model, age became less clearly significant, although it was still on the edge of statistical significance. This indicates that AoDCS teachers parallel national data about teacher turnover in regard to age.

The largest group of teachers (82) in the sample for this study held Professional Licenses during their first year of service as teachers in AoDCS. They are not beginning teachers as identified by their level of certification. Typically they would have had to have taught in other schools and had some experience before coming to AoDCS. Experience is another marker in the literature for retention of teachers. Among the teachers in the sample for this study, over half (46) with Professional Licenses were in the over 50 age group which further reinforces the stability of older teachers. Also,
among the teachers with licenses from other states, almost half were in the over 50 age group. As older, experienced teachers during their first year in the AoDCS, it is likely that they were transferring from teaching positions in other states or districts. The second highest number of teachers (26) with Professional Licenses is in the 41-50 age group.

**Teacher Characteristic: Gender**

In the sample for this dissertation study the overall percentage of women was higher than in the national data set. Women are a majority among teachers throughout the profession. For beginning teachers, the percent of men was higher in the Alternative License group than in the Initial/Provisional License group. This supports other research (Feistritzer, 2005) indicating that alternative teacher preparation programs have a higher percent of men than traditional beginning teacher groups. In this study 41% of teachers in the over 50 age group are men. Gender tested as independent of teacher retention in the Chi-square test, and did not test as predictive of teacher retention in the regression analysis, but it is interesting to consider this population.

**Teacher Characteristic: Grade Level or Content Area**

Grade level or content area taught was found to be independent of teacher retention in this study. Teaching field was not determined to be predictive of teacher retention in the regression analysis. Research (Allen, 2005) indicates that the greatest area of teacher need and the highest level of turnover are around the math and science fields, particularly in the middle school and high school grades. Allen suggests that many alternative licensure candidates are recruited from the ranks of professionals to teach in
these fields. This dissertation does not support Allen’s research. The lowest percentage of turnover in my study is among the high school teachers. They have a small representative sample in the study, but as measured by percentage, 69% of them continued to teach in AoDCS for 6 years or more. Teachers hired the high school level (29) taught in 13 different subject areas. Five of them were hired to teach math or science. This indicates that the level of need for teachers of math and science in AoDCS at the high school level was no greater than the need for teachers of other subjects. One of these 5 teachers was an Alternative License teacher and identified both math and science as his/her subject. Because of the small sample size and the wide range of subjects taught, high school teachers were grouped together by grade level rather than by subject area in this dissertation.

Middle school teachers had next highest percentage of retention with 66% continuing to teach in AoDCS for 6 years or more. Middle school teachers had a larger sample size (67) than high school, and they also taught a wide variety of subjects. Some taught only one subject: (a) science, (b) language arts, (c) math, (d) religion, (e) social studies, or (f) world languages. The rest taught a combination of 2, 3 or 4 of these subjects. Finding someone at the middle school level who can teach the combination of subjects needed at a small school is a greater challenge than finding someone who is certified and willing to teach only math or science in a larger school. Those teaching only math (8), only science (12), only a math and science combination (4) or some other combination including either of these two subjects (10) totaled 50% of the middle school
teachers in the sample. This data would support Allen’s claim that teachers of math and science are areas of higher need. However, Language Arts (11 teachers) was also an area of high need. Half of the Alternative License teachers at the middle school level taught math, science, or some combination of these with other subjects, further supporting Allen’s findings.

Each cell in a Chi-square analysis should contain at least “n” of 5. When sorted into categories by licensure or by years of teaching in AoDCS, most cells would have had numbers less than 5 and prevented a valid test. Therefore, middle school teachers were also considered as a grade group instead of by the subject taught.

The subject area that sees the most turnover in AoDCS according to this research is the “specials” teachers. Only 52% of them taught in AoDCS for 6 or more years. Twenty-seven of the 48 specials teachers began teaching without any license. There is some indication in the research (Boe, Bobbitt, Cook, Whitner, & Weber, 1996) that unlicensed teachers leave the profession at a higher rate than those who are fully certified. Principals may hire these unlicensed teachers because of their professional skills and look for ways to get them the support they need to become licensed and to grow in classroom teaching skills through the alternative licensure program. Classroom management for a range of students from age 5 through Grade 8 is a daunting task, especially for beginning teachers. Being well versed in the subject does not necessarily mean that a person can deliver the curriculum objectives to a class of students. For teachers to become certified through the alternative licensure program in AoDCS, they
must be employed full-time. So, unlicensed specials teachers hired only part-time do not even get the professional support and guidance offered by this program.

**School Characteristics as Factors Impacting Teacher Turnover**

**School Characteristic: Size**

Very small schools, those identified in this study as schools with one class of 15 or fewer students in each grade, lose more teachers than small schools (those with one class of 15 or more students per class), large schools (those with 2 classes per grade) or very large schools (those with 3 classes per grade). This is consistent with Ingersoll’s (2001) research which indicates that small schools turn over a higher percent of teachers annually than larger schools. Fewer than half (48.3%) of newly hired teachers who indicated that they taught in a very small school stayed in AoDCS for more than 6 years. This is compared to 73.1% of newly hired teachers who remained in teaching at very large schools (those schools with three classes per grade). By conducting a Pearson correlation matrix, the correlation between the attrition of teachers in the very small schools and very large schools is significant (see Table 16). In national studies (TFS) it is true in both public and private schools that smaller schools have higher turnover than larger schools. Research indicates that very small Catholic schools have the highest teacher attrition (Ingersoll, 2001). Over 6 years, very small schools in this study lost 52% of their teachers. Ingersoll suggested that this might be because smaller schools, especially schools with a clear mission like Catholic schools, are less welcoming to teachers who do not ascribe to that school’s mission. This researcher disagrees with
Ingersoll on this point. Other literature (Bryk, 1993; Yeager, 1985) offers theories that disagree with Ingersoll and more closely align with my experience. Some elaboration on these conflicting theories follows.

Bryk (1993) identified lower salaries available at small schools, especially inner-city schools where resources are more limited as a reason for more attrition among teachers in small schools. Yeager (1985) seems to agree and considers teacher attrition to be more related to economics than to school climate. Experience in the AoDCS suggests very small schools struggle with sustainability on many levels. However, teachers in the AoDCS are paid from the same salary scale, so salary is not different based on the size of the school. Catholic schools are enrollment driven, and where there are fewer students, there is less income. Smaller schools have fewer resources for “specials” teachers so regular classroom teachers have fewer opportunities during the school day and week for planning time. Fewer teachers provide fewer grade-level peers which decrease the opportunity to confer about such student issues as discipline, lesson planning, differentiation, and other curriculum topics. It means fewer opportunities for planning and peer interaction on other topics. Teachers who lack this peer support may find less satisfaction or more isolation in teaching and so leave the school or the profession.

Very small schools that face relatively high teacher turnover will have more trouble creating the kind of community that supports teacher effectiveness and student learning. Young, inexperienced teachers, and teachers new to a school culture, need to be mentored and inducted into a school community to become effective. When a school
frequently has new faculty members, this process of community building and culture reinforcement must begin again each year and may stay at a surface level rather than deepen. Therefore, turnover is costly to school culture and to student learning. Larger schools can absorb new teachers more easily than can very small ones. The data from this study seems to support the economic argument, even though salary is constant, of Bryk and Yeager rather than the mission alignment suggestion of Ingersoll.

School Characteristic: Student Ethnicity

Research (Ingersoll, 2001; TFS) reveals that teacher turnover is greater in high poverty areas. This dissertation study did not consider poverty as a variable, but rather student ethnicity. Schools with the most diverse ethnic mix were less likely to lose teachers, and the schools with the primarily African American student population were more likely to have high teacher turnover.

Student ethnicity may be related to school size. There is one school in the Archdiocese of Denver which had primarily African American students. This school also had a very low student population. That school was so fragile on many measures of sustainability that is has closed since teachers in this study were surveyed. Larger AoDCS schools tend to have a more diverse ethnic population and have a lower percent of teacher turnover.

School Characteristic: Location

Based on the data collected in this study, location does not seem to impact teacher turnover. Among the three possible locations on the survey (urban, suburban and rural),
the teacher retention for each category seems to be similar. The data from the Pearson correlation matrix indicates that the difference in teacher retention among the locations is not significant. The regression analysis did not find it to be a predictive factor. Research (Ingersoll, 2001) indicates that urban schools have a higher rate of teacher turnover than rural or suburban schools. AoDCS schools hired about the same number of teachers in urban schools and suburban schools during the time of the current study. The percent remaining after the first year was about the same for both – more than 90%. By the 6th year, both had about 60% of teachers remaining. Safety and parent involvement are often considered problems in urban public schools. Differences in location do not seem to be an area where Catholic school teachers find comparable situations to their public school counterparts based on their levels of retention.

Location can have an economic effect. Urban schools often have fewer resources because of the economic level of the both the neighborhood and the parish community. AoDCS schools have a uniform salary scale which ensures that teachers will not be paid less if they serve in an urban school. While some of the urban schools in the AoDCS are situated in areas of economic poverty, there are also schools in middle class and even affluent neighborhoods in urban areas. The data for the sample population unique to this study do not support the findings from Ingersoll’s research or TFS data that show teacher turnover is greater in urban schools than in suburban schools.
School Characteristic: Catholic Identity

This dissertation study identified 6 characteristics of Catholic identity and asked teachers to identify the level of evidence of each of the characteristics in their school and then to identify the level of importance of that characteristic to themselves. The 6 characteristics are (a) a sense of community among faculty and staff, (b) a sense of community among students, (c) a commitment by the school to the mission of forming students in the Catholic faith, (d) the opportunity for regular attendance at Mass, (e) participation in seasonal liturgical celebrations, and (f) student participation in Catholic social justice teaching through service projects. When the level of importance (very important, important, somewhat important, and not at all important) matched the level of evidence (very evident, evident, somewhat evident, not at all evident), a match was recorded. The data indicate that teachers who currently teach in the AoDCS recorded a higher degree of matching on these 6 characteristics than teachers not currently teaching in the AoDCS.

For both the teachers currently in the AoDCS and those not currently in the AoDCS, the match was highest in the two Catholic identity indicators of availability of Mass, and seasonal liturgical celebrations. These two characteristics are the most obvious measures of Catholic identity in the survey and the easiest for teachers to identify and quantify.

The level of importance for teachers not currently in the AoDCS of the characteristics regarding the student community and faculty community was higher than
the level of evidence of student or faculty community. If teachers come to Catholic schools expecting to be a part of a community and they leave the school because of dissatisfaction with workplace conditions and administrative support, it is understandable that they might not have found a sense of community in the school either. The AoDCS mentoring and induction process requires that schools provide new teachers with a peer mentor. This includes beginning teachers as well as experienced teachers new to the local school. In a very small school, a peer mentor may be another full-time teacher who takes on this mentoring role as an additional assignment. The mentoring relationship may not be strong enough in this circumstance to help the new teacher integrate into the community. Community is one of the animating marks of a Catholic school (Bryk, 1993; Convey, 1992; Ingersoll, 2002, 2003; Miller 2005; USCCB, 2005) and the data of this dissertation study seems to indicate that if teachers do not find the quality of community in the Catholic school that is important to them, they are more likely to leave the school.

For both the teachers currently teaching in AoDCS and those not currently teaching in AoDCS the lowest match between evidence and importance was in the service in the school related to Catholic social justice teaching. This indicator of Catholic identity was identified in the regression analysis as a predictor of teacher retention. Nearly half (48%) of the teachers who stayed in the AoDCS indicated that there was a match between the importance and the evidence of this characteristic compared to only 38% of teachers not currently teaching in AoDCS who found a match. For teachers currently teaching in AoDCS 36% found it to be more important than evident while
nearly half (43%) of those not currently teaching in AoDCS indicated that the service related to Catholic social justice teaching was more important to them than it was evident in the school. The theory and practice of Catholic social justice teaching are important indicators of Catholic identity. Teachers suggest in the survey that this indicator is important to them. When teachers find evidence of service focused on Catholic social justice teachings, they are significantly more likely to be currently teaching in AoDCS.

**Working Conditions as Factors Impacting Teacher Turnover**

Another category of factors impacting teacher turnover is working conditions in the school. Ingersoll (2001) investigates the organizational structure of the school as part of the reason teachers may leave teaching. Others (Convey, 1992) have identified some of these same characteristics of teacher satisfaction as reasons teachers continue to teach particularly in Catholic schools. The items for this survey echo similar items from the TFS about reasons a teacher might identify for leaving a school or the teaching profession.

**Working Conditions: Family Circumstances**

The highest percent of teachers (14.4%) not currently teaching in AoDCS selected family circumstances as an important or very important reason for leaving AoDCS. National data also show teachers frequently selecting this factor. Researchers (Ingersoll, 2001) suggest that since so many of the beginning teachers hired each year are young and women, selection of this factor may indicate that they have married, started a family, or
moved to a new location with a spouse. Ingersoll suggests that many of these teachers may return to the profession after a number of years.

**Working Conditions: Dissatisfaction with Administrative Support, Workplace Conditions, or Professional Development Opportunities**

The next item most frequently identified as important or very important reason for leaving the AoDCS includes dissatisfaction with administrative support (see Table 11). Dissatisfaction with workplace conditions and dissatisfaction with professional development opportunities could be grouped with dissatisfaction with administrative support. These reasons seem to resonate with the mismatch teachers not currently teaching in the AoDCS felt between the importance for them of a community atmosphere and the evidence of community. They may also be linked to being in a very small school where there are fewer resources for classroom teachers for professional development opportunities. In the Pearson correlation matrix conducted on Working Conditions, the correlation among these three characteristics - dissatisfaction with workplace conditions, with professional development opportunities, and with administrative support, were very strong.

**Workplace Conditions: Need for Higher Salary**

The need for higher salary (7.4%) ranks very close to dissatisfaction with administrative support (8.5%), dissatisfaction with workplace conditions (6.7%), and dissatisfaction with professional development opportunities (5.3%), but it is not the highest factor on the list. Just over half of the survey responders who do not currently
teach in the AoDCS stayed in the teaching profession and went to other schools. Of these “movers” about half moved to a teaching position in the local public schools. The others left the profession or moved to another Catholic school. This study seems to indicate that, although there is some migration from Catholic schools to public schools because of financial concerns, there are other important areas which could be addressed for teacher retention. Ingersoll (2001) indicates that private school teachers more often leave the profession than migrate to public schools. This dissertation study seems to support that data. Leaving the AoDCS because of need for greater salary resulted in the teacher changing professions in some cases. Some teachers indicated moving to other Catholic schools. There are some private Catholic schools in the Denver area where salary is not limited by the AoDCS salary scale.

Fewer than 5% of the teachers in the survey who are not currently teaching in AoDCS chose each of the other 6 working conditions: (a) need for greater job security, (b) dissatisfaction with teaching for other reasons, (c) need for better benefits/insurance, (d) moving away from the area, (e) no contract offered for the next year, (f) limited autonomy, as an important or very important reason for leaving. Only teachers who are not currently teaching in AoDCS responded to these conditions so it was not possible to do a regression analysis to determine if any of these factors is predictive of teacher turnover.
Implications for Practice

Teachers generally increase in effectiveness with experience, so retention of teachers has implications for both student achievement and operational cost of the organization. This dissertation has extended the research on teacher turnover and looked at some of the data around teacher turnover in the Archdiocese of Denver Catholic Schools. Some suggestions and recommendations follow about retention of effective teachers for this system, other dioceses, and possibly for other private school systems.

Before teachers ever enter a classroom, they have encountered many teachers themselves. Someone has inspired each of these individuals to think of becoming a teacher. People prepare them, recruit them, and interview them to create the right match between the teacher and the classroom. Once a teacher is hired, there are those who work to support those teachers as they begin their classroom practice. There are those who mentor and advise as beginning teachers become more effective with experience. This dissertation study has implications for some of those individuals who work to ensure that there are effective teachers in classrooms. These implications could provide insight for hiring agents, who are the local principals in the AoDCS schools. There are also implications for institutions of higher education, and for dioceses with Catholic schools.

Implications for Principals as Hiring Agents

If principals have a choice to make between or among candidates for an open position, they might want to know that a more experienced candidate is more likely to
Lyndy believe that the importance to the teacher and the evidence in the school of the Catholic identity factors are a match, teachers are more likely to continue teaching at the school. Discussing these topics in a clear and intentional way may be a way to ensure that the newly hired teacher is a good “fit” for the school. It would be important for the principal to spend a significant amount of time with the candidate during the interview process to discover the expectations of the candidate around the Catholic identity factors, especially expectations about community among faculty and community among students. The interview should also introduce the expectations the school has of a newly hired teacher. If mission alignment is a reason for high turnover among very small Catholic schools as is suggested in some studies (Ingersoll, 2001), this is an area where the principal as hiring agent would do well to pay attention to such qualities as a candidate’s relationship to the Church and the parish and his/her belief in the mission of the school when interviewing prospective teachers. This dissertation study’s findings indicate that when the importance to the teacher and the evidence in the school of the Catholic identity factors are a match, teachers are more likely to continue teaching at the school.
principal to share the school’s expectations and realities about the mission and vision of the school as part of this discussion. These conversations would help a principal to hire a teacher that is more likely to stay at the school for some years.

Community among and between teachers and students is seen as a strength of Catholic schools. A school leader would do well to examine the school culture related to community to ensure that it provides a welcoming and nurturing atmosphere for new teachers. Those who find the community atmosphere for which they are looking are more likely to become a long-term member of that school community.

Schools may need to do a better job of articulating to their internal and external communities the connection between the service done by the students and the social justice teachings of the Church. Teachers in this study indicate that projects done in service of the Catholic social justice teachings are important to them. Many of those who left did not find a match between the importance of this area to them and the evidence in the school. Schools may need to examine their service projects. Most students in the AoDCS are engaged in service within the school and outside the school community. This study shows that this indicator is important to teachers and implementation of service projects, integration of the projects within the curriculum, and teaching about the purpose of these as rooted in the ministry of Jesus and the teachings of the Church may need to become a stronger part of the induction of new teachers.

Principals of smaller schools could learn from the findings in this dissertation and national data that smaller schools have higher turnover than larger schools. Principals of
smaller schools might look for ways to address or modify the working condition factors such as administrative support, opportunities for professional development, and other workplace conditions. Principals should seek other ways to provide both administrative and peer support. Where possible, smaller schools might partner with each other to provide some grade-level peer interaction opportunities. Principals can be intentional about providing trained mentors for new teachers who will provide support and guidance for new teachers. Principals and trained mentors can assist beginning teachers to integrate into the school community with a given specific schedule of activities and goals. The archdiocesan schools office can also help direct the system to assist smaller schools to form networks that create a larger entity for support and sustainability which may help strengthen the qualities that retain teachers.

This dissertation study seems to indicate that principals would do well to find trained teachers in the specials areas rather than relying on hiring someone with a skill and assuming that this is a viable, long-term teacher candidate. Catholic schools generally value the education of the whole child and so protect fine arts classes as an important component of the school day for students. “Specials” teachers in this study were the most at risk of leaving a school after a year or two. These teachers were often unlicensed and did not even have the support of the alternative licensure program at the beginning of their teaching career because of their part-time status.

Although a teacher might leave a school for a higher salary, schools could learn from this dissertation study that it is more important that the new teacher find a sense of
support from the administration. Schools could learn that a “fit” between what is important to a teacher about the indicators of Catholic identity and the evidence of those indicators in the school community could be more important than salary.

**Implications for Institutions of Higher Education**

Catholic institutions of higher education might use the information from this study as encouragement to form partnerships with local Catholic elementary and secondary schools in alternative licensure programs for career changers and other adult learners. This on-the-job training model seems to be a way to encourage people who are interested in teaching but prefer not to or are unable to spend the time or money earning another degree. This clinical model seems to be a way to encourage more men to enter the teaching profession. Schools benefit from the presence of male role models for students, and male teachers are often in short supply.

**Implications for the Archdiocese of Denver Catholic Schools**

The findings of this dissertation study could assure the AoDCS that teacher turnover in the archdiocese is lower as a percent of the total teacher population than teacher turnover among schools nationally and Catholic schools in particular. It could affirm that the alternative licensure program for the archdiocese trains teachers that continue to teach as long as or longer than other beginning teachers. As far as this is a measure of teacher effectiveness, it provides effective teachers for the archdiocese. This study might also encourage the AoDCS to find ways (and strengthen current programs) to
better support newly hired teachers as they enter into the Catholic school community in the Denver area.

In the AoDCS, there is a movement to unite the parish schools as independent actors into a stronger archdiocesan system through a branding and advertising campaign. This movement to unify schools seems able to provide some of the smallest schools with resources they need to give support to teachers. The system can provide staff development and marketing resources that would balance the difficulties of being on the faculty of a very small school and mitigate the high attrition among teachers in the smallest schools. This dissertation study’s findings support and encourage this partnership among schools within the archdiocese.

**Limitations of the Study**

This study has several limitations. First, alternative licensure programs vary widely and are difficult to clearly define (Feistritzer, 2005). Feistritzer seems to indicate, however, that the criteria between programs nationally are more comparable than the criteria within individual state programs. Results from this study may be difficult to generalize because of the specific definition of alternative licensure programs.

Another limitation with comparing these results to national data relates to a problem with the SASS and TFS data regarding teacher certification. There is some evidence that teachers do not know in which category to place their certification status, so the accuracy of self-reporting about their certification status may be in question (Ballou, 1998; Legler, 2002; Shen, 1998). The same problem may be true of the data gathered in
this dissertation study. Teachers may not report their correct certification status in their first year of service out of confusion or misunderstanding. It is my experience that the licensure process can be confusing and frustrating to new teachers. SASS and TFS gathered data about teachers in Catholic schools. These data were not readily available for my research. The lack of this comparison data is another limitation of this study.

This study is also limited in that the hiring practices of Catholic schools generally reflect the requirements of the state in which they reside. The target population for this study is teachers the Archdiocese of Denver Catholic Schools, a medium sized Catholic archdiocesan system in Colorado. The archdiocese requires that its teachers hold a state teacher license. The results may not translate to larger or smaller (arch)dioceses, or those who certify teachers in some other way or who do not require state licensure. The alternative licensure program referenced in this study is similar in some ways to many other programs but has unique qualities that may not be duplicated in other alternative licensure programs. For these reasons it is inaccurate or inappropriate to generalize from the Archdiocese of Denver Catholic Schools to other Catholic schools or (arch)dioceses.

Age is an important characteristic for teachers in this study. The survey asked responders to indicate their age. It did not specify that they give their age the first year they taught so most probably gave their age when they answered the survey. It would have been clearer to ask at what age they were first hired by AoDCS. That item could have been asked differently or a companion question could have been asked that would
help to more clearly understand this variable. This could be considered a limitation for the data in this study.

**Recommendations for Further Research**

One topic frequently implied in this study was mentoring. The literature about successful beginning teachers has much to offer on this topic (Keating & Travis, 2001; Cochran-Smith, 2006). The alternative licensure program in Colorado requires a trained mentor for beginning teachers. AoDCS requires (and trains) mentors for all teachers new to a local school. The state requires that a mentor be a part of the induction program in which teachers with a Provisional/Initial license must participate to qualify for a Professional license. There were no questions on the survey for this study about the influence or impact of the mentoring relationship on teacher turnover. Mentoring as a factor impacting teacher turnover would be an important topic for further study.

This study assumes, as does some other research (Cochran-Smith, 2006; Goldhaber, 2007) that Alternative License teachers have had previous career experience based on the age of many of the candidates. However, none of the survey questions in this study asked for that data. The previous experience of alternative route teacher candidates could provide useful data. In some cases known to this researcher, members of the alternative licensure cohort had almost completed a degree in education, having only the student teaching component to complete, when they ended their college career. These participants had much more training in the education field than some others and used alternative licensure program to re-enter the field after taking time away. This is a
different situation than a geologist or CPA who wants to change careers and teach math or science. Further study of the motivation, backgrounds, and previous careers of these alternative candidates would increase the understanding of the teacher retention topic.

For some alternative licensure programs such as Teach for America, the candidates are recruited specifically for a short-term commitment to teaching. Some beginning teachers consider teaching as a “starter” occupation while they become settled and move into their “real” careers. It would be an interesting topic for further research to ask teachers how long they intend to stay in teaching, or how long they intended to stay in teaching at the beginning of their careers. Some of those who left in the first five years of teaching might never have intended to make teaching a lifetime occupation. Some may have considered teaching, especially in an underserved area, a service to be performed only for a given period of time.

Part of the effectiveness of the AoDCS alternative licensure program is the on-the-job aspect of the process. The Alternative License teachers are the teachers of record in the classroom for their training year and what happens with their students is their sole responsibility. The learning these teachers experience seems more urgent and authentic because they have real situations that will benefit from their learning. They have a supportive professional team and are eager for the help that is provided by them. In a student teaching situation, the student teacher is not really the responsible person for the total experience of their students. A first-year teacher from a traditional preparation program may be less receptive to mentoring. Teacher training institutions are beginning
to incorporate many more field experiences into their curriculum for teacher education programs. The urgency of the on-the-job training situation and need to seek and accept help from mentors and supervisors seems more important when one is the teacher of record than when one is an intern working within a master teacher’s classroom. Institutions of higher education should continue to look for ways to foster this authentic experience in labs schools or partnerships with local schools. In addition, induction programs seek to provide the professional support that a new graduate would have in the first year in a classroom. This study’s findings indicate that these programs should be strengthened.

**Conclusion**

The loss of teachers already in the system may be a greater cause of a shortage of teachers than the lack of preparation of a sufficient number of new teachers. This dissertation study examined some of the factors that cause teacher attrition and support retention. The study finds that the factors for teacher turnover on the national scene are similar to those in this much smaller Catholic school population. The results from this study also affirm that alternative licensure is a viable way for teachers to enter the profession.

Some of the factors that impact teacher turnover such as age and family circumstances are hard to manage when hiring new teachers. There are some possible ways that Catholic schools can attend to operational factors to mitigate some loss of
teachers including managing the effect that teaching in a very small school has on
teachers and doing a better job of helping new teachers become a part of the Catholic
school community.

Teachers continue to be the most important in-school determinant of student
success. It is worth the effort to train them well, match them with compatible learning
communities, and assist them to grow in their profession as an investment in preparing
children for a future we cannot predict.
Appendix A

Archdiocese of Denver Catholic Schools Teacher Survey

You have been selected to complete this survey because you were initially hired in the Archdiocese of Denver Catholic Schools between 2001 and 2006. Data is being gathered about the reasons teachers stay in teaching or leave the profession. This data will be used in a doctoral research project, in evaluation of the Alternative Teacher Licensure Program delivered by the Archdiocese of Denver Catholic Schools and Regis University, and to aid in the district goal of continuous improvement. Your responses will be completely confidential and anonymous so please be candid. Thank you for taking the time to complete the survey.

1. Are you male or female?
   □ Male  □ Female

2. Into what age group do you fall currently?
   □ 20 - 30  □ 31 – 40  □ 41 - 50  □ over 50

3. When did you begin teaching in the Archdiocese of Denver Catholic Schools?
   □ 2001-02 school year  □ 2002-03 school year  □ 2003-04 school year

4. For how many years were you employed as a full-time or part-time teacher in a Catholic school in the Archdiocese of Denver?
   □ one year  □ two or three years  □ four or five years  □ six or more years

5. Are you a Catholic?
   □ Yes  □ No

Following are some characteristics of Catholic identity. Indicate how evident each of these characteristics is in the Archdiocese of Denver Catholic School where you currently teach or in which you taught most recently.

6. A sense of community among teachers and staff in the school
   □ Very Evident  □ Evident  □ Only Slightly Evident  □ Not Evident at All

7. A sense of community among the students
   □ Very Evident  □ Evident  □ Only Slightly Evident  □ Not Evident at All

8. Commitment to the mission of forming students in the Catholic faith
   □ Very Evident  □ Evident  □ Only Slightly Evident  □ Not Evident at All
The following are characteristics that may be found in Catholic schools. Rate the following characteristics of Catholic Identity based on how important it is to you as a teacher that these characteristics are evident in the school where you teach.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Very Important</th>
<th>Important</th>
<th>Somewhat Important</th>
<th>Not at All Important</th>
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<td>9. The opportunity for regular attendance at Mass</td>
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<tr>
<td>10. Participation in prayer and liturgical celebrations during special seasons of the Church year such as Advent, Lent, and Easter</td>
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<tr>
<td>11. Assisting students to participate in service related to Catholic Social Justice teachings within the school community</td>
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<td>12. A sense of community among teachers and staff in the school</td>
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<td>13. A sense of community among the students</td>
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<td>14. Commitment to the mission of forming students in the Catholic faith</td>
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<td>15. The opportunity for regular attendance at Mass</td>
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<tr>
<td>16. Participation in prayer and liturgical celebrations during special seasons of the Church year such as Advent, Lent, and Easter</td>
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<td>17. Assisting students to participate in service related to Catholic Social Justice teachings within the school community</td>
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</table>
The following questions are concerned with your Teacher License.

- **A Colorado Initial Teacher License** is issued to all first time teachers and is good for 3 years. (It was called a Provisional License from 2001 to 2005.)
- Completion of an Induction Program is required before a teacher qualifies for a **Colorado Professional Teacher License**. The Professional License must be renewed every five years.
- An **Alternative Teacher License** is issued for one year while a teacher is participating in the on-the-job training program and Alternative Licensure workshops.
- Teachers who have a teacher license from another state also qualify to teach in Archdiocese of Denver Catholic Schools.

18. What kind of teacher license did you have in your first year of teaching in the Archdiocese of Denver Catholic Schools?

- [ ] Colorado Initial or Provisional (3-year) License (Go to Question 23)
- [ ] Colorado Professional (5-year) License (Go to Question 24)
- [ ] License from a state other than Colorado (Go to Question 20)
- [ ] Alternative Teacher License issued by the Colorado Department of Education to those participating in the Alternative Teacher Licensure Program with the Archdiocese of Denver and Regis University (Go to Question 21)
- [ ] I did not yet have a license (Go to Question 19)

19. For how many years did you teach in the Archdiocese of Denver Catholic Schools before you qualified for a teacher license?

- [ ] One year
- [ ] Two to five years
- [ ] More than five years

(Go to Question 24)

20. If, in your first year of teaching in the Archdiocese of Denver Catholic Schools, your teacher license was from a state other than Colorado, from what state was it? Write the name of the state in the box below. (Go to Question 24)


21. Did you receive a Colorado Initial License / Provisional License at the end of the Alternative Licensure year?

- [ ] Yes. (Go to Question 23)
- [ ] No. (Go to Question 28)

22. How many years did you teach in the Archdiocese of Denver Catholic Schools after you received your Colorado Initial / Provisional (3 year) Teacher License?

- [ ] One year
- [ ] Two years
- [ ] Three Years
- [ ] Four years
- [ ] Five Years
- [ ] Six to ten years
23. After receiving a Colorado Initial / Provisional (3 year) Teaching License, did you receive a Colorado Professional (5 year) License? To qualify for a Professional License you must have an Initial License and complete an induction program.

☐ Yes  ☐ No

24. Are you currently a teacher in the Archdiocese of Denver Catholic Schools?

☐ Yes  ☐ No

25. Do you currently hold an active teaching license from Colorado or another state?

☐ Yes (Go to Question 27)  ☐ No (Go to Question 26)

26. If you no longer hold an active state teaching license, indicate which of the following reasons best accounts for letting your license expire.

☐ I am no longer teaching and do not need a license.
☐ My current school does not require a state license or certificate.
☐ I hold a license or certificate issued by a non-state or independent licensing agency.
☐ I have temporarily left the field of teaching and intend to renew it when I return.

27. Did you teach in more than one Archdiocese of Denver Catholic School?

☐ Yes. (Go to Question 28)  ☐ No (Go to Question 38)

28. In how many Archdiocese of Denver Catholic Schools did you teach?

☐ Two different schools  ☐ Three different schools  ☐ More than three schools

Consider each of the following items and determine if it was a factor in your decision to move to another Archdiocese of Denver Catholic School. If yes, rate the importance of the factor. If no, select "Not at all important".

29. The new school was closer to my home and more convenient.

☐ Very Important  ☐ Important  ☐ Slightly Important  ☐ Not at All Important

30. There was an opportunity for a better teaching assignment.

☐ Very Important  ☐ Important  ☐ Slightly Important  ☐ Not at All Important

31. I was dissatisfied with the workplace conditions at my previous school.

☐ Very Important  ☐ Important  ☐ Slightly Important  ☐ Not at All Important

32. I was dissatisfied with the number of students I had to teach.

☐ Very Important  ☐ Important  ☐ Slightly Important  ☐ Not at All Important

33. I was dissatisfied with the support I got from the administration.

☐ Very Important  ☐ Important  ☐ Slightly Important  ☐ Not at All Important
34. I was not offered a contract for the next year at my previous school.  
35. I did not have enough autonomy over my own classroom at the previous school. (Rules, procedures and guidelines were too restrictive.)  
36. I was dissatisfied with the opportunities for professional development at my previous school.  
37. I was dissatisfied with teaching at my previous school for other reasons.  

38. What grade(s) or subject(s) do you teach currently or did you teach during your last year at the Archdiocese of Denver Catholic Schools?  

<table>
<thead>
<tr>
<th>Grade/Subject</th>
<th>Pre-school or PreKindergarten</th>
<th>Middle School Social Studies (Grades 6, 7, and 8)</th>
<th>Elementary Computers (K-8)</th>
<th>High School Social Studies</th>
<th>High School Foreign Language</th>
<th>High School Math</th>
<th>High School Science</th>
<th>High School Religion</th>
<th>High School English</th>
<th>High School Music</th>
<th>High School Art</th>
<th>High School Science</th>
<th>High School Technology/Computers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other (please specify)</td>
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</table>

If you are currently teaching in the Archdiocese of Denver Catholic Schools, go to Question 53.
39. Did you stay in the field of education following your last year in Archdiocese of Denver Catholic Schools?

- Yes (Go to Question 40)
- No (Go to Question 41)

40. If yes, which of the following best describes what you did next?

- I began teaching in a public school system in the Denver Metro area.
- I began teaching in a public school system outside the Denver Metro area.
- I began teaching in a Catholic school in another diocese or state.
- I began teaching in a non-Catholic private school in the Denver Metro area.
- I began teaching in a non-Catholic private school outside the Denver Metro area.

(Go to Question 53)

41. If no, which of the following options best describes your next choice?

- I left teaching to pursue another profession.
- I left teaching because of a change in family circumstances or responsibilities. This might include getting married, starting a family, relocation of a spouse, caring for a family member, etc.
- Other (please specify ________________________________)

Consider each of the following factors. Did it influence you to leave the teaching profession? If so, rate how much it influenced your decision. If it did not influence you to leave teaching, select "Not at all important."

<table>
<thead>
<tr>
<th>Factor</th>
<th>Very Important</th>
<th>Important</th>
<th>Slightly Important</th>
<th>Not at All Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>I moved away from the Archdiocese of Denver.</td>
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<td>I was dissatisfied with the workplace conditions in the Catholic Schools.</td>
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<tr>
<td>My family circumstances changed (marriage, started a family, cared for an aging parent, etc.)</td>
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<tr>
<td>I was dissatisfied with the support I got from the administration (Principal, Asst. Principal, Dept. Chair, etc.)</td>
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<tr>
<td>I was not offered a contract for the next year.</td>
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</tbody>
</table>
47. I did not have enough autonomy over my own classroom. (Rules, procedures and guidelines were too restrictive.)

48. I was dissatisfied with the opportunities for professional development.

49. I was dissatisfied with teaching for other reasons.

50. I needed greater job security.

51. My new profession had better health insurance and other benefits.

52. My new profession offered a higher salary.

53. Which of the terms below best describes the size of the Archdiocese of Denver Catholic School where you currently teach or where you last taught?

   - Very small (One class of each grade; 15 or fewer students per class.)
   - Small (One class of each grade; 16 - 25+ students per class.)
   - Large (Two classes per grade.)
   - Very large (Three classes per grade.)

54. Which of the terms below best describes the ethnicity of the student population of the Archdiocese of Denver Catholic School where you last taught or where you currently teach?

   - Primarily Caucasian
   - Caucasian and Hispanic
   - Caucasian, Hispanic, and Asian
   - Primarily Hispanic
   - Primarily African American

55. Which of the terms below best describes the location of the Archdiocese of Denver Catholic School where you last taught or where you currently teach?

   - Rural (i.e., Eastern plains, Western slope, northern Colorado)
   - Urban (i.e., inner city of Denver, rim schools)
   - Suburban (i.e., newer areas surrounding Metro Denver)
Thank you for responding to this survey. Your responses will be used to improve Catholic school education in the Archdiocese of Denver, and to advance the understanding of the patterns of teacher turnover throughout Catholic schools.

Please return the completed survey to:

Teacher Turnover Study
3301 W. 42nd Avenue
Denver CO 80211
March 23, 2011

Dear Teacher,

I am a doctoral candidate in the Catholic Education Leadership Program at The Catholic University of America and would appreciate your help in a study about the factors impacting Catholic School teacher turnover including alternative teacher certification. I have received approval to conduct this study from my committee, consisting of Dr. Mimi Schutloffel, Dr. John Convey, and Dr. Len DeFiore, other members of the education department as well as from the university.

Research demonstrates that teachers are a key determinate in the success of students, and that teachers improve with experience. My study will examine a variety of demographic factors, school and teacher characteristics, and route to licensure to determine if there are common trends among teachers who stay in the profession for many years, those who leave teaching, and those who move from school to school but remain in teaching. I will compare these results to similar studies done nationally by the National Center for Educational Statistics (NCES) on the Schools and Staffing Surveys and the Teacher Follow-up Surveys. My study will be unique because it will focus exclusively on teachers in Catholic schools in the Archdiocese of Denver, and will have as a special focus a comparison between traditionally licensed and alternatively licensed teachers. The results of this study may also provide information on how Catholic schools can improve teacher retention as part of their efforts at continuous improvement.

Your name has been selected for this survey because records show that you were hired for the first time in a Catholic school in Denver between 2001 and 2006. The sample group is relatively small – fewer than 800 teachers, so your responses will be very important. Please complete the enclosed survey. When you have finished it, please return it in the enclosed return envelope. If the envelope gets lost, the address where survey may be returned is printed on the last page.
Even though I am aware of how many demands are made on the time of Catholic educators, I ask for your assistance with this important research project that will benefit Catholic elementary schools nationally.

Thank you for completing and returning the survey within 5 days of receipt. I appreciate your valuable cooperation with this study.

Sincerely,

Sister Elizabeth Youngs
REFERENCES


*Educational Leadership, 60*(8), 30-33.


USCCB. (2005). Renewing our commitment to catholic elementary and secondary schools in the third millennium. In Education (Ed.):USCCB.
