

**EFFECTS OF THE TEACHER INCENTIVE PAY PROGRAM IN THE CENTER
SCHOOL DISTRICT**

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Abstract

The purpose of this study was to determine if the implementation of the Teacher Incentive Pay program had an effect on the attendance of certificated staff and substitute cost in Center School district for the 2008 - 2009 and 2009 - 2010 school year. The attendance and financial data from the 2008 - 2009 and 2009 - 2010 school year was compared to baseline attendance and financial pre-implementation data from the 2007 - 2008 school year to establish whether or not there was improvement made as it related to increased teacher attendance and substitute cost reduction.

A quasi-experimental methodology was used to evaluate the effect of the Teacher Incentive Pay program. The population and sample included eligible teachers, librarians and counselors in Center School District. The sampling procedure was purposive. The sample included eligible staff employed in Center School District during the baseline year and two years of the plan.

The results of this study yielded evidence that the Teacher Incentive Plan program did have an impact on staff attendance and finances. Teacher absence demonstrated a significant decline during the first year of the implementation of the program; however, absenteeism increased back to almost the same number of days as the baseline during the final year of the program. Financial cost was affected by the Teacher Incentive Pay program. Substitute cost demonstrated an increase during both years of the program. There was no significant difference in attendance between elementary and secondary staff due to the Teacher Incentive Pay program.

Dedication

“There are no secrets to success. It is the result of preparation, hard work, and learning from failure.” General Colin Powell

I dedicate this work to every person who was ever told they would never amount to anything or were given lemons in life but turned them into lemonade. This work is a testament that all things are possible if you believe and are willing to do the work.

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“I can do all things through Christ which strengtheneth me” Philippians 4:13.
(King James Version).

I give honor, reverence and praise to God for giving me the strength, patience and wherewithal to complete my program. I know without a shadow of a doubt that with God, I can do anything.

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CHAPTER ONE

INTRODUCTION

Teaching is one of few professions that require a replacement when absence occurs in order for the job to still be accomplished. As with any other profession, teachers too have a need to be absent from time to time. Because teacher absences can be costly to school districts, a trend is evolving to implement attendance incentives to increase staff attendance (Black, 2009; Clotfelter, Ladd, & Vidgor 2009; Freeman & Grant, 1987; Gendler, 1977; Onofry, 1994; Rogers & Vegas, 2009; Smith, n.d.). According to the District Management Council (2004), in 1999 - 2000, teachers averaged approximately two weeks out of the classroom per year due to sick days, personal days, and other excused absences and districts pay for substitute salaries, recruiting, administrative tasks, and absent teacher salaries. Sawchuck (2008) stated that data from the National Center for Education Statistics placed 2008 expenditures on substitute teachers at about 4 billion annually; costs typically borne by individual schools' discretionary budgets.

Background

Center School District is a small urban school district located in south Kansas City. There is one high school, one middle school, one alternative school, four elementary schools and an early childhood center. Enrollment for the alternative school was included in the middle and high school numbers. The student enrollment was 2475 for the 2007 - 2008 school year. There were 242 certificated staff members: 123 (elementary), 57 (middle) and 62 (high school). The student enrollment was 2,491 for the 2008 - 2009 school year. There were 245 certificated staff members: 123

(elementary), 59 (middle), and 63 (high school). The student enrollment was 2,420 for the 2009 - 2010 school year. There were 287 certificated staff members: 144 (elementary), 66 (middle) and 77 (high school). Table 1 displays the school level, number of schools, certificated staff totals, and student enrollment in Center School District for the 2007 - 2008, 2008 - 2009 and 2009 - 2010 school years.

Table 1

Center School District Enrollment

		Schools	Enrollment	Certified Staff
Elementary	07 - 08	5	1177	123-50%
	08 - 09	5	1216	123-49%
	09 - 10	5	1218	144-60%
Middle	07 - 08	1	526	57-23%
	08 - 09	1	505	59-24%
	09 - 10	1	498	66-27%
High	07 - 08	1	772	62-25%
	08 - 09	1	770	63-25%
	09 - 10	1	704	77-32%
Totals	07 - 08	7	2475	242-98%
	08 - 09	7	2491	245-98%
	09 - 10	7	2420	287-118%

Note. Adapted from *Center School District Staff and Student Enrollment*, by Missouri Department of Elementary and Secondary Education, 2010. Retrieved from <http://dese.mo.gov/directory/048080.html>

Table 2 displays enrollment by ethnicity in the state of Missouri and Center School District for the 2007 – 2008, 2008 – 2009 and 2009 - 2010 school years. In 2007 - 2008, Missouri total enrollment was 900,781. The percentage by ethnic group was Asian 1.7%, Black 18.1%, Hispanic 3.4%, Indian 0.4%, and White 76.5%. In 2008 -

2009, Missouri total enrollment by ethnicity was 895,826. The percentage by ethnic group was Asian 1.8%, Black 17.9%, Hispanic 3.6, Indian 0.4%, and White 76.3%.

Table 2

Enrollment by Ethnicity

	2007 - 2008	2008 - 2009	2009 - 2010
Missouri	(n = 900,781)	(n = 895,826)	(n = 892,147)
Asian	1.7%	1.8%	1.9%
Black	18.1%	17.9%	17.8%
Hispanic	3.4%	3.6%	3.8%
Indian	0.4%	0.4%	0.4%
White	76.5%	76.3%	76.1%
Center 58	(n = 2349)	(n = 2346)	(n = 2291)
Asian	1.7%	1.3%	1.7%
Black	64.5%	64.7%	67.5%
Hispanic	6.6%	6.9%	6.7%
Indian	0.1%	0.1%	0.1%
White	27.1%	26.9%	24.0%

Note. Adapted from “*Enrollment by Ethnicity*,” by Missouri Department of Elementary and Secondary Education, 2010. Retrieved from <http://dese.mo.gov/planning/profile/building/arsd0480804070.html>

In the state of Missouri, the enrollment of Black students fluctuated with a 2% decrease between 2007 -2008. Asian and Hispanic students showed a steady growth each year.

White student enrollment declined each year. In Center School District, enrollment mirrored the state enrollment for White students. Black student enrollment increased each year while Asian and Hispanic enrollments fluctuated back and forth between years.

Table 3 displays the free and reduced percentages as defined by the state of Missouri and the Center School District for the 2007 – 2008, 2008 – 2009 and 2009 -

2010 school years. In the state of Missouri, the free and reduced percentage showed an increase each year. In 2007 - 2008, the free and reduced percentage in Missouri was 41.8%. In 2008 - 2009, the free and reduced percentage in the state of Missouri was 42%. In 2009 - 2010, the free and reduced percentage in the state of Missouri was 44%. In Center School District, the free and reduced percentage fluctuated between 2007 – 2008 and 2008 - 2009. The year 2009 - 2010 showed a significant increase of 10%.

Table 3

Free and Reduced Frequencies and Percentages

	2007 - 2008		2008 - 2009		2009 - 2010	
	Number	Percent	Number	Percent	Number	Percent
Missouri	366,547	41.8	367,727	42.1	379,422	43.7
Center 58	1418	62.4	1418	59.9	1562	67.5

Note. From “*Free and Reduced Frequencies and Percentages*,” by Missouri Department of Elementary and Secondary Education, 2010. Retrieved from <http://dese.mo.gov/planning/profile/building/arsd0480804070.html>

In 2007 - 2008, the free and reduced percentage for Center School District was 62.4%. In 2008 - 2009, the free and reduced percentage for Center School District was 60%. In 2009 - 2010, the free and reduced percentage for Center School District was 70%.

Table 4 displays the breakdown of the free and reduced percentages by building in Center School District for the 2007 - 2008, 2008 - 2009 and 2009 - 2010 school years. The socio-economic status of a child’s parent/guardian determines whether or not a student receives meals for free or at a reduced rate. Each school in Center School District has shown a steady increase with students receiving free or reduced meals with the exception of Boone Elementary, Indian Creek Elementary and the Early Childhood Center. Boone, Indian Creek and the Early Childhood Center’s free and reduced

enrollments have fluctuated back and forth between 2007 - 2008, 2008 - 2009 and 2009 - 2010.

Table 4

Free and Reduced Percentages in Center School District by Schools for the Fall 2007 through Spring 2010 School Year.

Building	2007 - 2008	2008 - 2009	2009 - 2010
Center Alternative	69.86%	74.39%	74.23%
Center High School	44.25%	36.16%	54.81%
Center Middle	56.88%	64.22%	68.70%
Boone Elementary	73.89%	69.38%	71.43%
Center Elementary	88.68%	93.49%	94.35%
Indian Creek Elementary	67.66%	73.8%	63.37%
Red Bridge Elementary	31.88%	34.32%	38.08%
Early Childhood Center	87.22%	92.18%	72.00%
Total	59.84%	61.35%	65.22%

Note. From “Center School District Free and Reduced Percentages,” by Missouri Department of Elementary and Secondary Education, 2010. Retrieved from <http://dese.mo.gov/planning/profile/building/arsd0480804070.html>

Table 5 displays the adequate yearly progress rate for Center School district in the areas of communication arts, mathematics, attendance rate and graduation rate for the 2007, 2008 and 2009 school years. The Center School District AYP goals were not met in Communications Arts or Math in the year 2007, 2008 and 2009. The attendance rate for students was met all three years. The graduation rate was not met in 2007 or 2008 but was met in 2009.

Table 5

Center School District 58 Adequate Yearly Progress

Overall Status	2007 - 2008	2008 - 2009	2009 - 2010
Communication Arts Status	Not Met	Not Met	Not Met
Mathematics Status	Not Met	Not Met	Not Met
Attendance Rate	Met	Met	Met
Graduation Rate	Not Met	Not Met	Met

Note. From “Center School District Adequate Yearly Progress,” by Missouri Department of Elementary and Secondary Education, 2010. Retrieved from <http://www.dese.mo.gov/divimprove/sia/dar/UnderstandingYourAYP.pdf>

The Center School District Teacher Incentive Pay (TIP) program was initiated and became policy because the superintendent of the district, Dr. Robert Bartman, had concerns about the number of teacher absences and the effect on student performance as measured by the state and district state assessments. The board of education, district administrators, and members of the Teachers Administrators Board (TAB) committee designed the features of this program. On August 18, 2008, the Center Board of Education approved the implementation of the pilot for the Teacher Incentive Pay plan. The plan was designed to curb teacher absenteeism. At the end of the contracted school year, eligible staff received a stipend in the amount of \$1020.00 if they did not utilize any sick or personal days (Bartman, 2008). The stipend amount decreased as the number of days absent increased. In order to provide consistency in procedures across the district, all staff were informed that if they were calling in an unscheduled absence, they were to contact the building administrator along with leaving a message on the district substitute phone line (Bartman, 2008).

To add motivation intended to increase attendance and therefore success of the TIP, the assistant superintendent stated in an email message to all staff, “This plan was

designed to encourage stellar attendance among staff in hopes of having the best person in the classroom at all times, you” (D. Leone, personal communication, August 19, 2008) (Appendix D). The following statement from the superintendent was issued to all certificated staff in a memo (Bartman, personal communication, July 28, 2008) (Appendix C):

Students learn more efficiently when the regular classroom teacher is healthy and regularly leading the instruction each day school is in session. Therefore in order to encourage instructional staff to better attend to their own health needs so that they can maximize their instruction time with students the following program shall be implemented on a trial basis for the 2008-2009 school year. Each full time building level certificated classroom teacher, librarian, and guidance counselor shall receive as part of a pilot teacher incentive pay (TIP) program a stipend of \$1,020 in addition to their contracted salary amount. The TIP for each eligible teacher, librarian, or guidance counselor shall be reduced by \$85.00 for each day of sick leave or personal leave taken during the contracted year. The net amount of each earned TIP shall be paid to the individual in a lump sum payment after the end of the school year. (p.V-C)

Statement of Problem

In a statewide study of school personnel directors, Norton (1998) reported that 71% of those surveyed stated teacher absenteeism as one of the leading problems facing them. Previous and current studies show teachers in lower income areas with high enrollment of minority students with increased teacher absenteeism (Clotfelter, Ladd, & Vidgor, 2009; Elizabeth, 2001; Little & Dellangela, 2006; Martinez, 2010). In lieu of the

demands of the 2001 No Child Left Behind mandates, analyzing the effects of teacher attendance in areas with high socioeconomic challenges and significant minority enrollment is worth further exploration.

Some studies have shown teachers to have more absences in comparison with other professions (Clotfelter, Ladd, & Vidgor, 2009; Rosenblatt & Shirom, 2005). In 2000 – 2001, Podgursky (2003) found the annual rate of absence in New York City schools reached 11.3 days per teacher which was higher than that for executive or professional employment. The 2009 United States Bureau of Labor Statistics report indicated the lost work time rate at 1.8% in education, training, and library occupations in comparison to 1.6% in the private sector.

In England, Bowers and McIver (2000) found teacher absence rates to be lower than those of comparable social services staff including administrative and managerial positions. Teacher absence due to sickness was fifteen percent lower than other non-manual government employees. In addition they also found that midwives took an increased thirty-seven percent more time off work and central government workers lost thirty percent more time off work due to sickness than teachers. In agreement with Bowers and McIver, Lepkowska (2004) stated in a 2004 study in England, public-sector workers had higher levels of absenteeism at 4.6 percent while teachers had an average of 4.2 days off a year.

A gift card “use it or lose it” mentality can be a culprit of unnecessary leave time taken by employees instead of taking days off from work only when necessary. To this point, Bruno (2002) found that teachers at some school sites viewed their absence as an entitlement that comes along with the job. Conversations with principals revealed

agreement with this thought in Miller, Murnane and Willet's (2007) working paper (2007). The 2007 Commerce Clearing House (CCH) Unscheduled Absence Survey, which covered 317 various human resource executives in U.S. companies and organizations, found that personal illness accounts for only 34% of unscheduled absences, while 66% percent of absences are due to other reasons, including family issues (22%), personal needs (18%), entitlement mentality (13%) and stress (13%) (CCH, 2007). This research suggests that being ill isn't seemingly the reason that employees are absent. An earlier report on educators in U.S. Pacific regions found that workplace stress and burnout could lead to teacher absenteeism and attrition (Brown & Uehara, 1999). Stress can also lead to problems in the workplace, such as poor morale, lack of job satisfaction, absenteeism, lowered productivity, and high medical care cost (Kedjidjian, 1995). The study of teacher absenteeism is mostly historical. As early as 1984, Pellicer and later in 1991, Scott & Wimbush reported that job satisfaction is negatively related to teacher absenteeism. Gazieli (1993) stated that a growing average of annual days of teacher absence and increase in the number of early retirements is reflective of the amount of stress found in schools today. More recently a report found that ten percent of absenteeism calls from teachers were stress and illness related (Lepkowska, 2004). Additional costs such as work-related stress accounts for many workers' compensation and disability claims. Teachers in particular, represent a large proportion of work-related stress claims (as cited in Brown & Uehara, 1999). These claims charge school systems billions of dollars in medical costs, substitute teachers, and disability payments (District Management Council, 2004; Miller, 2008; Lepkowska, 2004).

As previously stated, it is sometimes necessary for teachers to be absent from school; however, researchers continue to uncover the negative impact of excessive absence on students. In the article “A Substitute for Education: When the Teacher’s Away” (2001), Elizabeth stated the following about students in classrooms across the nation:

Each day, about 5 million children walk into 274,000 classrooms nationwide and find a substitute. Students today will spend at least one full year with a substitute by the time they graduate from high school -- a figure that's higher in poor schools and destined to increase. (p.1)

Some states require school districts to employ substitutes having a minimum of sixty hours of college credit which does not guarantee preparation to teach in a classroom (NEA Affiliates, 2012; O’Neil, 2012). In contrast, some states require no college credits to secure a substitution job (Elizabeth, 2001). Because some classrooms are placed with substitute teachers with little or no training, students are left to complete busy work and receive ineffective instruction for the school day (Glatfelter, 2006). Teachers also reported an increase in absenteeism and stress due to having the responsibility of overseeing more students when called on to cover classes when substitutes were not available (Jasmin, 2009).

The data and research on teacher attendance reported here is somewhat dated but due to growing concerns, the topic of teacher attendance is experiencing a resurgence of interest and so is being studied further. The revival of interest in teacher attendance (Botwinik, 2007; Boyer-Baker, 1994; Delisio, 2009; Patusky, 2007; Rogers & Vegas, 2009; Shelley, 2007) has prompted some school districts to construct plans targeting the

promotion and sustainability of attendance. Some studies also have shown promise causing researchers to believe these types of plans have a positive effect on students overall well-being and outcomes (Bayard, 2003; Duflo & Hanna, 2005; Finlayson, 2009).

Purpose of Study

The purpose of this study was to determine if the implementation of the Teacher Incentive Pay program had an effect on the attendance of certificated staff and substitute cost in Center School district for the 2008 - 2009 and 2009 - 2010 school year. The attendance and financial data from the 2008 - 2009 and 2009 - 2010 school year was compared to baseline attendance and financial pre-implementation data from the 2007 - 2008 school year to establish whether or not there was improvement made as it related to increased teacher attendance and substitute cost reduction.

Significance of Study

This study has significance because teacher absence is an understudied topic (Shapira-Lishchinsky & Rosenblatt, 2009). Center School District's TIP focused on reducing teacher absence and district finances. Results of the study will add to the literature regarding teacher absenteeism and incentive plans. District leaders and policy makers can refer to this study to glean insights to help guide their decision making and plans that could positively impact teacher attendance and finances in their areas. School districts and policy makers can glean useful information from the findings of this study to help them better design and implement incentive programs and policies that may help reduce teacher absenteeism and increase district revenue. Teacher absence is a concern not only in the United States but worldwide. Kay (2006) reported that teacher absenteeism is a growing threat to global security especially in the underdeveloped

world; Illiteracy intensifies levels of poverty, crime and decreases in job productivity. Studies have also shown that schools in high poverty areas suffer the greatest with teacher absenteeism (Speas, 2010; Miller, 2008). Student academics can be hindered by teacher absence. The educational experience and mastery level of students can be greatly impacted when instruction is minimal and ineffective therefore producing under-educated students and marginal or unqualified employees.

Delimitations

Lunenburg and Irby (2008) defined delimitations as self-imposed boundaries set by the researcher on the purpose and scope of the study (p. 134). In order to gain a clear understanding of basic absences in Center School District, the researcher did not include long term absences past twenty days due to events such as maternity and medical leave.

The second delimitation used by the researcher was the number of years. The Teacher Incentive Pay program was in place for the 2008 - 2009 and 2009 - 2010 school years. The 2007 - 2008 school year was the base line by which the study was measured.

The third delimitation was that this study only took place in one urban school district in Kansas City, Missouri. The researcher wanted to study the effectiveness of the plan regarding the district's attendance behaviors. The researcher did not find evidence of other incentive plans like Center School District's Teacher Incentive Pay program in the state of Missouri.

Assumptions

Lunenburg and Irby (2008, p. 135) defined assumptions as postulates, premises and propositions that are accepted as operational for purposes of the research. This study was based on the following assumptions: (a) the data collected for teacher absenteeism

was accurate; (b) all certificated staff understood the Teacher Incentive Pay program; (c) all certificated staff followed the new district calling in procedures; (d) all certificated staff understood district policies and procedures for personal leave and sick leave;

Research Questions

Roberts (2004, p. 126) stated research questions guide the study and provide the structure for presenting the results of the research. The researcher asked the following questions to determine the effect of the Teacher Incentive Pay program based on the findings from the data.

1. Did the implementation of the Teacher Incentive Pay program affect teacher attendance?
2. Did the implementation of the Teacher Incentive Pay program affect financial cost associated with teacher absenteeism?
3. Was there a difference between elementary, middle or high school staff attendance due to the Teacher Incentive Pay program?

Definition of Terms

Alternative School: A non-traditional school of students grades nine through twelve. This school temporarily or permanently houses students who have not been successful in a traditional high school setting (Center School District, 2011).

Attendance: The number of persons attending (Webster's New World Dictionary, 2002).

Adequate Yearly Progress (AYP): is a measurement defined by the United States federal No Child Left Behind Act that allows the U.S. Department of Education to determine how every public school and school district in the country is performing

academically according to results on standardized tests (Missouri Department of Elementary & Secondary Education, 2011).

Early Childhood Center: A school of students ages four and five who qualify for services based on demonstration of a delay such as speech or language (Center School District, 2011).

Elementary School: A school of students' kindergarten through fifth grade (Center School District, 2011).

Keystone Information Systems Inc: A system that provides information management solutions for public school districts with integrated products modules in the areas of Financial Accounting & Operations. The Schools and Logic module forms a comprehensive, integrated suite of application software for public schools that are compliant with Generally Accepted Accounting Principles and Governmental Accounting Standards Board accounting standards, multi-fund budgetary accounting and encumbrance control system. General Ledger is real time date driven. Resources Management: Keystone Employee Management System (KEMS) is also a comprehensive integrated suite of application software for public schools that provide complete control over the payroll & human resource functions. KEMS interacts in an online environment providing for a seamless data access across system modules (Keystone Information Systems, Inc., 2010.)

Middle School: A school of students grades six through eight (Center School District, 2011).

Personal Leave: Two (2) days of personal leave will be granted to each employee. Unused personal leave will be carried forward up to a maximum of three (3)

personal leave days. When added to the two (2) days allowed annually for this purpose, an employee may use a maximum of five (5) personal leave days in any contract year. When a maximum of five (5) personal leave days have been accumulated, additional personal leave days will roll into sick leave days. All days will have the same cash value as unused sick days upon separation from the district. Personal leave requests will be made in writing to the director of human resources through the immediate administrator at least five (5) days in advance of such contemplated absence. However, 30 days' notice is required by law if the leave qualifies as FMLA leave and such notice is practical. Such leave shall then be authorized in writing by the director of human resources (Center School District Policy GCBDA, 2011).

Secondary School: A school of students grades nine through twelve (Center School District, 2011).

Sick Leave: Absence granted to employees in the event of personal illness, injury or temporary disability including pregnancy, childbirth and adoption, or permanent disability of the employee or the employee's immediate family. "Immediate family" in regard to sick leave includes the employee's dependents, or any persons deemed appropriate by the employee's immediate supervisor. (Note: "Family" for FMLA purposes is more limited.) The Board reserves the right to require a physician's certification, or FMLA Certificate of Health Care Provider in cases of serious health conditions under the FMLA, attesting to the illness or disability of the claimant and/or inclusive dates of incapacitation (Center School District Policy GCBDA, Center School District, 2006).

Teacher Incentive Pay (TIP): The name of the incentive plan implemented by the Center School District: Teacher Incentive Pay (Center School District, 2008).

Teachers Administrators Board (T.A.B.): Seven CEA (Center Educational Association) members representing certificated employees; one member from each school, three administrators representing the administration, and Board of Education designated members (Center School District, 1993).

Overview of the Methods

A quasi-experimental methodology was used to evaluate the effect of the Teacher Incentive Pay program. The population and sample included eligible teachers, librarians and counselors in Center School District. The sampling procedure was purposive. The sample included eligible staff employed in Center School District during the baseline year and two years of the plan.

The teacher attendance, teacher absenteeism and substitute teacher cost baseline data was collected at the end of the 2007 - 2008 school year to compare to the end of the 2008 - 2009 and 2009 - 2010 school years which were the years of implementation for the Teacher Incentive Pay plan. A one factor repeated measures ANOVA was used to test hypothesis one. A one-factor repeated measures ANOVA was used to test hypothesis two. A two factor one repeated measures factor, one between subjects factor ANOVA was conducted to test hypothesis three. An analysis of variance was conducted on the attendance and absenteeism data of eligible certificated elementary, middle and high school staff during the 2007 - 2008, 2008 - 2009 and 2009 - 2010 school years.

Organization of Study

Chapter one included the problem statement, background, conceptual framework, significance, purpose statement, delimitations, assumptions, research questions, assumptions, research questions, definition of terms, overview of methods and summary and organization of study. Chapter two is a review of the literature as it relates to teacher attendance, teacher absenteeism, and incentive plans that promote attendance. The discussion explores the need for incentive plans and improvements on leave policies that will impact teacher attendance. Chapter three presents the design and methodology of the study. This chapter includes a description of the population and sample, instrumentation, measurement, data collection procedures, data analysis, hypothesis testing, and limitations of study. Chapter four provides an analysis of the data and discussion of the findings. Chapter five includes the summary of the findings, surprises discovered, implications for actions, the conclusion and recommendations for future studies as it relates to employee absenteeism reduction and absenteeism incentive plans.

CHAPTER TWO

REVIEW OF THE LITERATURE

Every organization experiences employee absenteeism at times; but in the case of teachers, substitute teachers are called upon to carry on instruction while teachers are away. Teacher absenteeism can cause strain and stress upon a school system (Downey, 2009). In some parts of the world, substitute teachers are non-existent which means that if the teacher is absent, there is no school at all (Usman, Akhmadi, & Suryadarma, 2004). Elizabeth (2001) reported that teacher absence also causes a strain on teacher colleagues as they may be asked to combine classes. Speas (2010) found an estimated savings of approximately 2 million dollars due to teachers covering classes for colleagues; however she suggested the toll taken on co-workers should be studied. This can reduce the level of efficiency in instruction and student learning. Sometimes even more drastic measures are taken, such as organizing large groups in a common area and allowing students to engage in non-academic activities (Dell'Angela & Little, 2006). In some cases substitutes do not typically possess the level of education and training to successfully fill the shoes of the regular teacher (Bruno, 2002; Elizabeth, 2001). In many elementary schools, absent teachers receive a substitute teacher; thereby, the workload is relatively unaffected from other teachers (Jacobson, 1990). In the case of teachers in special content areas such as art, music and physical education, substitutes may not always be provided, which in turn requires the classroom teacher to cover the class. In situations such as this, absence patterns of teachers become much more noticeable and have a greater impact on the classroom teacher's schedule (Jacobson, 1990). Research in this area is limited due to the lack of recent studies.

There have been many studies about teacher absence in the literature. A body of studies was documented as early as the late 1970's (Bridges, 1979; Teacher Attendance, 1978) as school districts grappled with meeting state and national benchmarks for student achievement and growth. Incentive plans for teacher absence are extremely limited, but like teacher absence, incentive plans are increasingly being implemented and studied (Dunflo & Hanna, 2005; Jameel, 2009; Rogers & Vegas, 2009). School districts are also giving greater attention to reviewing and restructuring their policies and programs to reduce unnecessary absences and increase teacher attendance, increase student achievement and reduce expenditures (Collingwood, 1984; Gendler, 1977; Grant, 2000). This chapter reviews the literature on teacher absences, effects of teacher absence on achievement, absences in other professions, effects of absence policies, and attendance interventions and incentive plans.

Teacher Absences

Teacher absence is a topic that school districts have explored and have continued to examine with an increased intensity. According to Pitkoff (1993), during the 1986-1987 school year, school employees in Brooklyn high schools were absent an average of 7.8 days. He also stated that the rate of employees with no accumulated sick leave was 10%; almost one-fourth of school employees were absent 10 or more times, almost double the national average (Pitkoff, 1993). In this section, the researcher discusses teacher absence characteristics from 1980 – 2009 and the effects on student achievement.

During the 1980-1981 school year, the Detroit Public School system lost more than 120,000 teacher days due to absence, costing the district more than \$6.2 (Woods and Montagno, 1997). And in 2006, Pitt County, North Carolina, a near \$12,000 loss of

teacher productivity for an average school day was attributed to teacher absenteeism (Scott, Vaughn, Wolfe, & Wyant, 2007). Similarly, Snyder (2004) found that in 2001 – 2002 the Philadelphia public school teachers were absent on average nearly 6%, which was higher than the state average. In addition, Snyder found that large urban schools showed a higher teacher absence rate (2004). The absence rate in New York public schools was 6.2% with Chicago school districts trailing behind at 5% (Snyder, 2004). Massachusetts' Haverhill Public School officials and city council members, concerned with increasing substitute teacher cost, examined teachers' absentee records. They found that 2008 records showed an absence rate for high school teachers with an enrollment of 1,840 students, averaged from 20 to 25 on any given day (Black, 2009). In 2005, teachers were absent about 35 days per teacher, at Bouchet Elementary in Chicago, Illinois. Jensen Academy had the second worst absence rate in the Chicago school system. The average teacher absence during 2005 was 28 days for the school year (Dell'Angela & Little, 2006).

Illness tends to be the most common reason for teacher absence (Rogers & Vegas, 2009). However, according to Ramming (1998) there are a variety of other plausible reasons why a teacher may be absent from work (childbirth, caring for ill or aging family members, or a death in the family). Ramming (1998) conducted a study that investigated absenteeism within elementary schools across a suburban district in upstate New York. Ramming analyzed work related conditions: principal leadership, peer relationships and district leave accumulation policies and practices. The researcher found that age and leave accumulation were the only factors related to absenteeism. Stevens' (2008) study also found the higher the educational degree and years of experience, the less absent

teachers were. Bradley, Green & Leeves (2004) found through their Australian study that teachers under age forty and teachers in rural and remote areas showed less absenteeism.

Other variables have been found to impact teacher absence. For example Kight (2007) studied the relationship between principals' leadership style and teacher absenteeism using data from K-12 teachers in a suburban West Tennessee School District. Her findings suggested leadership styles have an effect on teacher attendance patterns. The study focused on five leadership styles: directive, supportive, bureaucratic, strategic and integrated. The directive leadership style was associated with lower teacher absence. In agreement with Kight (2007), Imants & Zoelen's (1995) research found teacher absenteeism to be lower in schools where the leadership style was directive, while higher absenteeism prevailed where the leadership style was more friendly and informal.

Another factor that can affect teacher absence is teacher position. The results of a study in Broward County public schools in Florida indicated that teacher absences in high schools during the 1997 - 1998 and the 1998 - 1999 school years, had a lower average of teacher absenteeism than did elementary and middle schools. Absences in middle schools were mostly attributed to vacant positions whereas illness was the top contributor to absenteeism in elementary schools (Green, Blasik, & Varela-Russo, 1999).

Miller (2008) conducted an analysis using data from a large, urban school district in northern United States. His findings showed absentee rates were elevated among the following: female teachers, teachers with longer commutes, elementary school teachers, teachers in larger schools, teachers in higher poverty schools, teachers in districts with higher paid leave plans, and tenured teachers. Earlier, Scott and Wimbush (1991) found that teacher absenteeism in junior and senior high schools located in one county in the

mid-Atlantic region of the United States was significantly related to distance to work and gender. Later, Ramming (1998) found that teachers approaching retirement had a 48% lower absence rate than younger teachers. In agreement with Ramming, Miller, Murnane and Willett (2007) found that new and experienced teachers had lower rates of discretionary absence. In support of Ramming's findings, Stevens' (2008) analysis concluded that the older the teacher the higher the attendance for schools in rural Northeast Mississippi school district.

Absences are sometimes discretionary in nature, meaning the employee can make a determination as to whether he or she really needs to be absent (Clotfelter, Ladd, & Vigdor, 2009; Jacobs & Kritsonis, 2007). Miller, Murnane, & Willet (2008) found that teacher absence due to personal needs was highly discretionary. Sagie (1998) researched the relationship between work attitude as it impacted voluntary and involuntary absence patterns of 320 municipality employees in Israel. Sagie concluded that organizational commitment and job satisfaction were strongly linked to voluntary absence but not involuntary absence. Workers demonstrating strong commitment and job satisfaction were present more often than those with weak commitment and low job satisfaction. Additionally, Miller's (2008) research showed that most absences (56%) were discretionary and often fell on Mondays and Fridays. Also absences typically increased before winter and summer vacations. Similarly, Miller, Murnane, & Willet (2008) also found absences to be highest on Mondays (5.7%) and Fridays (6.6%). Dell'Angela and Little's (2006) analysis showed that Chicago teachers sometimes take sick days that are called "mental health" days by the teachers. Teachers from this study reported that because of the increased exposure to routine violence and verbal abuse they needed to

take frequent breaks to avoid total burnout. The clash of cultural environments between middle class and poverty based schools is the result of such violence.

Stress is an increasing concern in the teaching profession. Some teachers take time off from work due to stress related conditions. Teacher absence is not a problem exclusive to the United States, but worldwide. Job stress can lead to increased teacher absence as also indicated in the research synthesis for educators in the Pacific island region (Brown & Uehara, 1999). In this study, stress was noted as an area of concern; however, stress is not a concern limited to educators only in the Pacific. In England, a teacher telephone helpline was put in place to offer support for teachers. An analysis of the support line revealed that during the first four years more than 10% of calls were about depression, anxiety and stress-related sickness (Lepkowska, 2004).

Steers and Rhodes (1978) proposed a process model to examine employee attendance behaviors consisting of two variables: an employee's motivation to go to work and an employee's ability to go to work which are influenced by internal and external pressures:

- job situation
- employee values
- job expectations
- personal characteristics
- satisfaction with job
- pressure to attend
- attendance motivation
- ability to attend

- employee attendance

Scott and Wimbush's (1991) findings are in agreement with some of the motivation to attend variables found in the Steers and Rhodes study. Their analysis revealed a 13% variance in absence among teachers due to job involvement, job satisfaction, gender and distance from home to work. Dell'Angela and Little (2006) analysis revealed that the teachers who experience poor job satisfaction have higher rates of absenteeism. Earlier, in contrast, Bridges (1979) found no statistically significant correlation between absenteeism and job satisfaction.

Jacobson, Gibson, and Ramming (1993) examined workplace absenteeism norms, arguing that teacher absence is a social invention that occurs within individual schools. This study involved four suburban elementary schools in western New York, from 1989 - 1992. They found no significant relationships based on teacher gender, age, marital status, educational level, years of experience, tenure status, teaching assignment or professional development days. A comparison between buildings showed consistent patterns. One building consistently had the best attendance each year. The other schools' attendance remained the same with two schools' attendance patterns changing once. Research by Jacobson, Gibson and Ramming (1993) also pointed toward culture. The results of the research indicated that absence culture at individual schools must first be studied to best ascertain its determinants before proceeding with implementing interventions to reduce teacher absenteeism. Similarly, Miller's (2008) study suggested that particular schools foster a culture of absence, but also discretionary absence rates vary depending upon the month (p. 13).

Bradley, Green, and Leeves talked about culture as well, but in a slightly different way (2004). The evidence of their findings focused on the health of the school. These researchers found that teacher absence behaviors were dependent upon both individual and school environment factors. Their study identified sick schools (high level of voluntary absence) and healthy (low level of voluntary absence) schools. A teacher who moved from a healthy to a sick school was likely to increase individual absenteeism up to 70% (Bradley, Green, and Leeves, 2004). The findings of this research support absence culture research, meaning that some employees may take on the attributes of acceptable behaviors (e.g. frequent absences) demonstrated within a school or organization.

Income is a common thread that appears in studies on teacher absenteeism. Elizabeth (2001) reported on ten of the poorest and ten of the richest school districts in Pennsylvania. She found that teachers in lower income areas call in sick on average of 6.2% of their working days as opposed to higher-income districts at 4.1%. Bruno (2002) examined a school's geographical area or the environmental context of a school setting and the effects on absenteeism rates for high school teachers in a large urban district. He found that teacher absenteeism is greater among schools in lower income areas. These studies share a common thread; the geographical area and socio-economic status of a school are predictors of teacher attendance patterns in schools. Clotfelter, Ladd, and Vigdor (2009), also found that personal leave requests tended to be higher in low income schools in their study of North Carolina public schools. A twenty-five year old study of schools in the United States showed that rural communities often have better attendance or teacher attendance that is closely parallel to student attendance ("Teacher Attendance," 1978). In agreement, Ballou (1996) also found that teacher absenteeism was a greater

problem in urban areas than rural and suburban areas. The distinctive difference had to do with school size, percentage of African American and Hispanic populations and the percentage of students eligible for free or reduced lunch.

Teacher absenteeism is not exclusive to absenteeism in the United States; however, studies have shown teacher absence is an even greater concern in countries outside of the United States due largely in part to economics and working conditions which are in many cases a greater problem than what is experienced in schools within the states. Most often these damaging conditions have the greatest impact on the poor and minorities. “South Asia governments often spend 70 to 90% of their recurrent education budgets on teacher salaries, without basic returns” (Rogers, 2007, p.1). In Ecuador, rural teachers are slightly less likely to be absent than urban teachers (Rogers, Lopez-Calix, Chaudhury, Hammer, Cordoba, Kremer, & Muralidharan, 2004). In contrast, rural schools in Pakistan experienced higher rates of teacher absenteeism (Javaid, 2009). The unannounced visits and observations (Alcazar, Rogers, Chaudhury, Hammer, Kremer, & Muralidharan, 2006; Chaudhury, Hammer, Muralidharan, Kremer, & Rogers, 2004) of teachers in public primary schools in Peru showed that teachers were absent 11% of the time. Peru’s poor and remote areas experienced greater teacher absence ranging between 16 – 21%. Absence was higher on Mondays and Tuesdays as opposed to Wednesdays and Thursdays (p. 124). This study also showed that poor working conditions, poorer communities, poor infrastructure, and teachers with fewer ties to the community displayed increased absence. The researchers reported that the remoteness of a community was found to be a strong predictor of teacher absence.

An absent teacher in the more remote areas could force a class to be canceled or without adult supervision. In some cases classes were taught by a senior student (Usman, Akhmadi, & Suryadarma, 2004, p. 24). Abeles (2009) studied the absenteeism patterns of teachers in 131 middle and high schools in Israel. The results of the research showed that teacher seniority, status, and salary had a positive effect on attendance. As age, status, salary and position increased, absence decreased. Some studies however, have shown age to have a negative relationship with attendance. Tenured teachers, but those not yet approaching retirement, and teachers in their thirties, tended to have more absences (Rosenblatt & Shirom, 2005).

Teacher absence in the Pacific Island regions has displayed a slightly different impact on teacher absenteeism than studies within the United States. The 1996 - 1997 Retention and Attrition of Pacific School Teachers and Administrators Study (RAPSTA) investigated specific risk factors impacting educators in the Pacific. The analysis was of elementary and secondary teachers and administrators in the Kosrae Department of Education. The average number of days a teacher was absent ranged from 5-22 while the national teacher absence average was 7 days in the United States. The findings also showed that in some communities, funerals were the number one reason for teacher absence, while illness was the second. Funerals had a great effect on absence because often a death impacted various members of the staff. Absence for a funeral typically meant 3 to 5 days away from school for a number of staff to prepare for and attend services. Other factors were extreme weather, cultural events, and family and village social roles. The latter factors are typically socially acceptable due to established cultural

norms in these Pacific areas (Brown et al., 1998; Hammond & Onikama, 1996; Uehara, 1999).

In agreement with Miller (2008), Javaid's (2009) study of teachers in Pakistan found that absence increased with teachers traveling longer distances to school. In addition, Javaid's findings revealed teacher absence is also impacted by other duties, official duties, quality of the Head Teachers and multi-grade teaching systems. His study also found that male teachers were more likely to be absent than females due to other employment. Similarly, Scott and McClellan (1990) studied a county school system in an urban mid-Atlantic region of the United States. Scott and McClellan (1990) reported that women took a significantly higher number of days off than men; however, the occurrence of absence was not found to be significantly higher for women. Women averaged 3.92 occurrences compared to 3.29 occurrences for men. The number of days absent for women was on average 6.92 in contrast to 4.83 for men. Child bearing years produced the highest occurrence of absence for women. In their study, the effects of role conflict, number of dependents and a person's involvement on the job were factors that showed the greatest difference in absence patterns between men and women (1990). Scott and Wimbush's 1991 study examined variables related to teacher absenteeism. The data revealed that absenteeism among teachers showed a significant relation to distance to work, gender, job involvement and overall job satisfaction (Scott & Wimbush, 1991 & Miller, 2008).

In nine Nova Scotia schools, Unicomb et al. (1992) found that gender, license, and level taught to be predictive variables in determining significant teacher absence. Elementary schools typically employ more women which explains why this variable has

been consistent in various studies. A relationship was found that the higher the level of certification, absence was decreased. In other words, the higher the teacher credentials the lower the absence. The educational level taught and the type of license were the most significant predictors for short term absences. In agreement with Unicomb et al (1992), Shirom and Rosenblatt (2006) found that teacher absence was reduced for teachers in higher positions. These researchers studied the effects of promotions to supervisory positions in Israeli schools of teachers and the subsequent changes in their absence behaviors. Teachers promoted to higher supervisory roles had a greater reduction in absence spells and time lost in absences than those in lesser or no supervisory duties. Teacher absence showed improvement when monitoring took place. Unannounced visits and observations (Alcazar, Rogers, Chaundhury, Hammer, Kremer, & Muralidharan, 2006) of teachers in public primary schools in Peru showed that teachers were absent 11% of the time. Peru's poor and remote areas experienced greater teacher absence ranging between 16-21%. Additionally, another study of primary and secondary schools showed that monitoring correlated with teacher absence. In Bangladesh 10% of secondary teachers were more likely to be absent than primary teachers when never visited by educational officials which demonstrated the importance of supervision (Chaudhury, Hammer, Kremer, Mularidharan, & Rogers, 2004). In addition, secondary teachers were 68% less likely to be absent if the students they serve had better educated mothers (Chaudhury, Hammer, Kremer, Mularidharan, & Rogers, 2004).

In summary, the research reviewed, focused on teacher absence characteristics from 1980 – 2009 and the effects on student education. In particular, the research reviewed teacher absence as it related to the geographical area of a school, work related

conditions and norms, culture and the socio-economic impacts. Teacher absence is universal, diverse and portrays patterns of concern that are felt world-wide. Before an organization can make improvements, it is important to first analyze the characteristics and patterns of teacher absence in their organizations.

Effects of Teacher Absence on Achievement

Not only does chronic teacher absence look bad, but it has damaging effects on students' overall development and achievement. The overwhelming evidence (Clotfelter, Ladd, & Vigdor, 2009; Finlayson, 2009; Pheas, 2010) suggests that student achievement is negatively impacted by teacher absence. Schools should be concerned with chronic teacher absenteeism as it may send unintended messages that attendance is not important (Harris & Thomas, 2003). Jacobs and Kritsonis (2007) reviewed student and teacher absenteeism, the causes and its effects on the educational system. These researchers concluded that recommendations by urban school district stakeholders must be considered when developing a strategic plan to better deal with excessive employee absences. These results are especially striking when studies have shown that students in urban districts are most negatively impacted by teacher absence (Clotfelter, Ladd, & Vigdor, 2009; Finlayson, 2009; Speas, 2010).

Teacher absence and its impact on student achievement is a concerning issue for governments, school board members and administrators alike (Keller, 2008; Pitkoff, 1993; Miller, Murnane & Willett, 2008). Pitkoff (2003) asserted that instruction suffers when the teacher is absent as a substitute teacher cannot maintain the continuity and quality of the instruction as to compared to regular classroom teacher. Studies have revealed noteworthy data drawing attention to the consequences of teacher absence as it

relates to student achievement. For example, Woods and Montagno (1997) found that teacher absence had a negative effect on student learning.

In other efforts to go beyond the surface of teacher absence, some researchers have uncovered the impact of teacher absence in relation to school educational status, teacher characteristics and student achievement. Miller, Murnane & Willet (2008) investigated student achievement in relation to teacher absences. Their findings implied that with every ten days of teacher absence, students' mathematic achievement for fourth grade students was reduced by 3.3%. In their conclusion, policy construction was identified as a key element in reducing discretionary absences thereby increasing employee production and student achievement.

Dell'Angela and Little (2006) examined a six year analysis of teacher absence in Chicago schools. The report showed that victims of teacher absence tended to be students in failing schools. A study of middle school and high school students in Broward County Public Schools in Florida was designed to determine if teacher age, educational level, experience, and attendance had an impact on student achievement (Bayard, 2003). Dell'Angela and Little concluded that gender was linked to decreased student achievement. The absence of male teachers had more damaging effect on 2002 scores on the mathematics subtest scores of the Florida Comprehensive Assessment Test than the absence of female teachers in grades eight and ten. The researchers also found that teacher absence was negatively related to student math achievement when teachers were absent more than two days with the relationship being statistically significant but with a small effect size. In contrast, Bayard (2003) also found that some teacher

attributes (age, educational level, experience, and including teacher attendance) had no influence on student achievement.

Similar to Bayard (2003), Clotfelter, Ladd, & Vigdor (2009) found that ten additional days of absence was associated with a reduced math test score of about 2.3% of a standard deviation for fourth and fifth grade students. In comparison, Speas (2010) reported a weak, yet statistically significant low association between teacher absences and mathematic achievement as measured on math end of course exams for grades six and seven. The scores indicated that increases in teacher absences were associated with a decrease in performance in math but no other associations were found with other grades or subjects (Speas, 2010).

Finlayson's (2009) results are parallel those found in other studies. Assessments from the Cobb County School District in the state of Georgia demonstrated strong evidence to support that there was a relationship between students' math scores and total leave taken by their teachers (Finlayson, 2009). As absence increased, math scores decreased on the Criterion Reference Competency Test (CRCT). Finlayson concluded that although statistically weak, overall teacher absence did show a significant relationship with student math scores but not with reading scores; however, Finlayson's research results indicated that students with a free or reduced lunch status were most negatively impacted by teacher absence in both mathematics and reading. Students receiving free and reduced lunch demonstrated statistically significant lower scores on the Criterion Reference Competency Test for math and reading. Finlayson (2009) concluded that the socioeconomic status of a student was indeed a predictor of academic success.

Hammond and Onikama (1996) examined the research on teacher absenteeism for schools on remote islands in the Pacific region. The goal of their review was to raise awareness of the impact of risk factors that affect teachers. Common risk factors found were stress and burnout, absenteeism and attrition. These authors concluded that teachers who are at risk place students at risk.

In summary, the research discussed demonstrated concerns with teacher attendance as it relates to student achievement. Mathematics was the subject matter that was most impacted by teacher absence; however, students with a free or reduced meal status were hindered most in both reading and mathematics. The impact of teacher absence on student achievement is an on-going concern that schools, states and governments share. The research results demonstrate a need for concern; hence, further studies are warranted.

Absences in Other Professions

Absenteeism is not an issue isolated to teachers. While not all workers or the industries in which they are employed require substitutes as do teachers, absenteeism remains a concern. According to a survey conducted by Hudson & Kafenstok (2005), 30% of US workers admit to taking a sick day and not really being sick (Hudson & Kafenstok, 2005). In the United States, employee absenteeism cost an estimated \$225.8 billion a year (Biron, 2012). Employee absence is a concern in both the private and public sector. The common thread shared is the toll absenteeism takes on worker productivity, company finances and overall climate of the workplace. The literature reviewed in this section focused on absence in other professions and their response to addressing employee absenteeism.

Another study on absence within other professions showed gender differences in absence among women and men. Barmby, Ercolani and Treble (2006) studied an international comparison of sickness behaviors in nine countries that showed that married women in the workforce had higher absence rates than men. Workers in heavy manufacturing jobs had higher absence rates with the lowest being with financial and related service workers. In general, sickness absence increased with age; however, this finding was not apparent in all countries (Barmby, Ercolani, & Treble, 2000).

Bowers and McIver (2000) compared teacher absence as it related to ill health that led to retirement of teachers in England. Full time teacher absence rates were lower than comparable local authority Social Services staff and 15% lower than those of other non-manual local government employees. Their research also found that nurses and midwives take 37% more time off work due to sickness than teachers and 30% of central government employees are absent more than teachers due to sickness. Bowers (2001) suggested that teachers' absence in England compared favorably with other public employees in England. Because teachers have an occupation which causes them to have close contact with their students, absence spells must be viewed with caution. Bowers (2001) examined teacher absence data from North America and Europe. In his review, he concluded that although teachers were in frequent direct contact with students, the rates reported by employee groups without the level of same contact reported higher rates of absenteeism. Bowers (2001) surmised that teachers reported to work more often than most other public sector employees on both sides of the Atlantic.

An analysis by Lepkowska (2004) showed public sector workers having higher levels of absenteeism. Public workers had a 4.6% absenteeism rate while employees in

the private sector had a 3.1% absenteeism rate. Teachers had an average of 4.2 days off within a year whereas workers in health, police, and fire were absent 5 days. Akeampong (1988) found that in 1987 workers in white collar jobs reported lower absence levels than those in blue collar jobs.

Lockhart (2001) investigated absence problems at the Cape Technikon Library in South Africa. Lockhart concluded that the overall employee's view of their absence culture produced excessive absence behaviors among employees. Lockhart's analysis of absenteeism patterns from 1998 to 2000 showed a steady increase in employee absenteeism. The gross absence rate went from 3.9% in 1998 to 5.2% in 2000. Lockhart's employee survey results also suggested another factor contributed to absenteeism, the lack of monitoring and reinforcement from managers.

The 2004 Commerce Clearing House (CCH) (Panszczyk, 2004) Absence Survey investigated characteristics within generational levels in the work place that can affect absenteeism among workers. Each generation embodies generalized characteristics followed by behaviors that can shape employee attendance. Traditionalists might display resentment toward the younger generation's demand for work/life balance as they feel there is work to be done and time off can come later. Baby Boomers may also resent younger generations' demand for work/life balance and their having the courage to ask for such accommodations they would have never dreamed of having. Gen Xers might not understand why the older generations don't understand why they don't want to wait for retirement to receive some balance in life. Panszczyk (2004) suggested studying the pulse of an organization often and making benefit adjustments as necessary to better increase more efficient and cost effective strategies. Baby Boomers are sometimes

classified as the “sandwich generation” meaning they are sometimes found in dual roles as caregivers to their children, spouse or aging parents. These dual roles can add to absence behaviors of employees. Panszczyk also suggested that benefit adjustments should appeal to various generations but caution organizations on stereotyping (2004).

The 2005 Commerce Clearing House survey found companies with low morale experienced higher rates and costs of unscheduled absences. The rate was twice as high at companies with poor/fair morale. The survey also revealed an increase in the average per-employee costs to \$660.00 per employee, costing some large employers over \$1 million per year (CCH, 2005).

Like teachers, absenteeism studies have also been conducted on medical personnel. Hackett and Bycio (1996) conducted a study on absenteeism among 54 hospital nurses and nurses’ assistants in Ohio. The survey findings of the study suggests that short term absences helped nurses maintain physical and psychological states at manageable levels, as well as decreased job dissatisfaction, tiredness and self-reported stress. Later, an international study found that medical personnel absenteeism rates ranged from 23 to 43%, but suggested that although this rate was higher than that of teachers it could not be concluded that it did not mean that the absenteeism rate was worse than for teachers (Chaudhury, Hammer, Kremer, Muralidharan, & Rogers, 2005). Their study found that doctors were reported to be absent more than other health care workers in every country. They also reported that in Peru, 48% of doctors reported an outside income from private practice.

In summary, the research reviewed absence in other professions. Absenteeism is not exclusive to teachers but also poses challenges to other organizations. Absence

characteristics share similarities, but work environments are diverse; therefore, comparisons are to be carefully made. All absences should be carefully monitored and addressed as appropriate within each organization.

Effects of Absence Policies

Every organization will experience some level of absence; however, not all absence behaviors or absence patterns are equal. In addition, health and benefit packages are often an attractor for teacher employment. Such benefits can prove to either decrease or in some cases increase absenteeism. Benefits and retirement plans act as strong incentives for teachers to enter and remain in the profession, especially those that are uncommonly generous (Roza, 2007). Because of this, many districts have a disproportionate number of veteran teachers (2007). Some studies have shown the experience level of a teacher does not equate to a more effective teacher (Rice, 2003). The norm of a health and retirement provision, along with an annual salary, could be creating “benefit lock” among veteran teachers (p. 7). These types of packages can handicap a district from hiring more talented teachers who are younger and also less expensive (p. 7). Lugo’s (2002) research indicated that policy and practice may have contributed to high absence. This information affirms the notion of the importance of analyzing absenteeism data and its impact on the whole of the organization. The following literature review indicates that some absences may be the result of poorly written or overzealous policies that encourage employees to take days off even when unnecessary. For example, state laws mandate a certain number of sick days for employees. Most districts provide ten days of paid leave; however, there are some states

such as Ohio where teachers are given 15 days of paid leave. The research suggests that generous policies such as this can add to excessive absences (Sawchuk, 2008).

Norman (2006) conducted a study on district leave policies in 522 public schools in the state of Missouri. The results of Norman's study suggest that factors contributing to the organizations absence culture could be a strong influence on policy design. In this study, certified employees received sick leave, personal leave, and bereavement leave. The days of leave varied among districts. Some districts used flexible leave plans which combined all types of leave into one category whereas the majority of districts utilized defined leave plans with a set number of personal and sick leave days allotted. The number of sick days ranged from 0 to an unlimited number of days. Personal days ranged from 0 to 15 days. Norman found that districts with flexible leave plans utilized less leave than those with defined benefit plans. Employees in districts with defined leave benefit plans used an average of 8.5 days whereas employees in districts with flexible plans used an average of 6.9 leave days. A sick leave bank is defined as a voluntary organization which seeks to meet the needs of its members (as cited in Norman, 2006). Members must meet the requirements of the bank in order to benefit from it, i.e. donate the designated amount of days to the bank, sickness shall be caused by illness of the member, spouse or children and meet eligibility requirements before withdrawing from the bank. Employees in school districts with sick leave banks used 1.1 more days than employees without sick leave banks (Norman, 2006). In addition, Norman concluded that the higher the allowable leave days, the higher the absenteeism and therefore, the higher cost. Based on the findings, Norman urged school districts to eliminate sick leave banks altogether to reduce absenteeism. Norman also suggested that

school districts evaluate policies and leave data to gauge how policy variables influence local leave usage within districts. In agreement with Norman (2006), Bowers (2001) concluded that there was no best solution to dealing with employee absenteeism; however the implementation of effective policies could have an impact.

Also in agreement with Norman (2006), Pitkoff (2003) surmised that while many absences are in fact necessary, some policies encourage teacher absenteeism. Pitkoff reported that the number of leave days is often dictated by state requirements and most states allowed for greater amounts of teacher sick time than the business community. Pitkoff suggested that most legislators would consider reducing the number of sick days a “hot-potato” issue fearing the loss of financial support from teachers’ unions. The author offered the following remedies to reduce teacher absenteeism: limit and monitor personal days and re-title emergency leave days; reduce generous sick leave provisions; eliminate sick leave banks; when possible, schedule staff development during non-instructional times; talk to teachers upon return from their absences; provide monthly reports on absence; don’t allow teachers to cover the lesser cost of substitute teachers so they can be absent; and require teachers to speak directly to their principal rather than leaving a voice message on a substitute phone line. Pitkoff suggested that teachers are less likely to call in when they have to speak directly to the principal.

Some teachers have become subject to discipline or even termination for misuse of sick leave policies as presented in the case studied by Zirkel & Gluckman (1995). The employees in this case were terminated due to infractions of district leave procedures. The employees submitted unsigned physician notices that were provided well after their absences. The absence notices did not align to actual absences nor did they substantiate

the employee claims of the inability to perform duties. Zirkel and Gluckman's analysis suggests that administrators know and understand the law, to best avoid errors that could result in legal penalties (1995).

In agreement with Jacobson, Gibson, and Ramming (1993), Miller, Murname, & Willet's (2008) research reported some schools showed greater absence trends suggesting cultural norms which may have contributed to the stark differences between some schools. For example, one veteran elementary principal required teachers to, personally, call her the morning of an absence. The adjusted absence mean in that school was 3.78 in contrast to the 5.13 absence mean for elementary teachers in the district. The principals interviewed in this study revealed that high caliber continuous leadership might be important or changing cultural norms that are conducive to discretionary absences.

Ehrenberg, Ehrenberg, Rees, & Ehrenberg (1991) also found that usage leave policies influenced teachers' usage of leave days. This study was based on survey data from superintendents in school districts in New York State during the 1986-1987 school year. The survey requested information on teacher usage of leave days. Results from the survey showed the mean usage of days increased with district size. Districts with sick leave banks averaged one day more absence than other districts. Districts with more generous buy back provisions of unused sick leave days had lower annual usage of leave days. Districts allowing unlimited accumulation of days tended to have lower annual usage of sick leave than other districts. In districts where cumulated unused sick leave days were "bought back," typically at retirement, an increase in the number of days that were "cashed-in" or in the dollars per day buyout, were associated with lower leave usage.

Boyer-Baker (2008) studied the implementation of a new leave policy for certificated staff in the North Kansas City Missouri School District. A previous policy provided a sick leave bank of ten sick days plus two personal business days per teacher per year. The new policy was designed to reduce the need for substitutes, allowing the staff to decide how to use their paid days off and not be tied to traditional labels of leave (sick and personal). Direct calls had to be made to a supervisor for absences only on Mondays and Fridays. On all other work days, teachers were required to document their absence using the automated SmartFind Express Employee Management System (Boyer-Baker, 2008). The plan was an effort to address the initial theory that sometimes staff lie about being ill in order to use allotted days. The goals of the plan were to empower staff to take control of their attendance, decrease the categories and complexity of the previous system, provide incentives and recognition to employees for being on the job to meet students needs, provide employees with increased flexibility, compensation, and leave benefits, improve communication between employees and supervisors regarding students' needs, provide incentives for employees to be at work, and reduce the Monday and Friday demand for substitutes. A surprising result was that the discretionary policy contributed to an increase in absenteeism from 2005 - 2006 to 2006 - 2007. The researcher suggested the removal of a defined leave plan and the addition of a flexible leave plan may have contributed to higher absenteeism. The new plan allowed teachers more freedom and flexibility in their calling in procedures. Teachers only had to make direct contact with the building administrator when absences occurred on Monday or Friday.

Henry (2004) conducted a study of seven Missouri school districts with student enrollments of 8,351 to 21,470 students. Teachers in districts with the greatest amount of time between regular attendance and the reward for attending accumulated time used more leave time than those with less time between attendance and the reward (p. 54). The data suggested that districts that only allowed employee reimbursement of accrued sick leave totaling fifteen years or less utilized fewer sick leave days than those requiring an excess of fifteen years (Henry, 2004). Based on these findings, the researcher suggested that policy makers consider a more frequent monetary reward that reinforced accrued sick leave for those with less than fifteen years and a resultant lower cost to the district. One of the districts Henry studied provided a monetary reimbursement to teachers after five years of experience in the district and teachers used the lowest percentage of available sick leave. The study supports the need to develop policies that provide more immediate rewards for desired attendance that may appeal to some employees. The results of this data are significant because younger employees are not typically thinking of life in the future. They may not recognize the benefit of having accumulated days in the event of a serious accident or illness. They also may not realize the potential sizable financial pay out at the end of their career within the organization they work. In agreement with Miller, Murname, & Willet (2008), Henry's (2004) research demonstrated that speaking directly to the administrator to report an absence may reduce sick leave use. Out of seven districts studied, only one required teachers to report absences to a designated person rather than an automated phone system. This district used 42% of their available leave time which was the second lowest in the sample.

The research has shown that policies particulars and procedures can determine the effectiveness of such plans. In some school districts teachers have specific calling in procedures they are expected to follow such as calling their principal or other designated personnel to report their absence. Calling in practices in other work environments show similar positive effects as it does for teachers. In the Cape Cod area, a study evaluating the reduction of short-term absences was conducted for employees at a private non-profit residential program for children with autism. The study showed a significant decrease in unscheduled absence when a new requirement was added to their procedures. In addition to contacting a person to arrange for coverage of an absence, employees also were required to contact their direct supervisor. This new procedure produced the desired effect that resulted in reduced leave by 56%, 66%, and 53% in the three group homes (Boudreau, Christian, & Thibadeau, 1993).

In summary, the researcher studied the various policies and procedures for leave benefits for teachers. The plans studied exhibited similarities and differences within the absence policies and procedures. The researcher discovered that leave policies could promote unnecessary absences and well written plans could deter absence abuse depending upon how policies and procedures were written and communicated to staff.

Attendance Interventions and Incentive Plans

Organizations both public and private have implemented Wellness Programs to help reduce employee absenteeism. Stress awareness, physiological training, environmental adjustment and mind control were identified as successful strategies with stress and burnout (Brown & Uehara, 1999). Interventions have also been tried to reduce stress and increase teacher effectiveness in the classroom. Collingwood (1984)

investigated a stress reduction and health awareness pilot program implemented in the Dallas Independent School District. Employees participating in the program showed significant improvement in their health and attitude. Staff absenteeism averaged 5.88% for those in the pilot program, in comparison to the 8.36 absenteeism for staff not participating in the program.

In the 21st century new research is showing promise for the concept of wellness programs promoting positive changes in employee behavior and health. “Wellness programs on average provide three to five times the return on investment by reducing cost for sick leave, hospital admissions, disability days and per capita workers’ compensation cost” (Ritter, 2000, p. 5). Organizations continue to implement and analyze the effects of wellness initiatives with the goal of increasing worker productivity and financial growth. The Emory University Rollins School of Public Health researchers studied weight management programs implemented at twelve Dow Chemical work sites. In 2006 - 2007 employees showed a decrease in absenteeism from 3.9 days in 2006 to 3.4 days in 2007. The estimated cost savings was \$414.90 per employee per year (Dobbs, 2009).

Employers across professions have implemented plans to help reduce the causes of employee absenteeism such as by providing child care services on the job site. Brandon and Temple’s (2006) data from a 1990 Australian study showed that various workplaces with on-site childcare reduced the rates of employee absenteeism. Employees with on-site childcare were less apt to take unapproved leave due to family obligations such as child-care. Employers could also better verify the legitimacy of an employee’s time off from work requests as well as account for employees’ time away

from work (Brandon and Temple, 2006). The findings suggest that worker provisions enhance worker production and retention. Eagle (1995) tested the perception of the employee “needs” and the available benefits provided by the employer “reward” and its effect on and absenteeism. He found that flexible work arrangements and child care were not related to absence; however, gender and age were. Female employees were more likely to have higher absence due to child care issues. His study also found that needs-reward was associated with job satisfaction, organizational commitment, and perceived organizational support. The findings of this study support Brandon and Temple’s study of absence reduction with on-site childcare provisions.

Reardon (2003) found that the majority of Illinois superintendents were not interested in implementing teacher absence reduction plans. The overall feeling was that such plans would not be effective for the cost and projected minimal gains. However, the majority of Illinois superintendents showed a greater interest in absence reduction plans that were of no cash value to the employee. The overall preference was to have plans that rewarded teachers in a manner that had a more direct impact on instruction and student achievement, e.g. plans that provided teacher recognition and practical incentives such as classroom supplies or professional development opportunities. Some superintendents opposed a cash incentive because teachers are already compensated. In Reardon’s interviews, one superintendent stated, “Whatever happened to professionalism?” and “I won’t buy their professionalism” (p. 87).

In contrast to Reardon’s results, Rogers and Vegas’ (2009) findings suggested that policy makers be willing to experiment with mechanisms to improve teacher attendance. The results of their research review concluded that promising policies for

experimentation are those that make teacher salaries and promotions dependent in part on performance and not just on qualifications and experience, introduce mechanisms for accountability and increase the intrinsic and non-pecuniary rewards for good attendance. Rogers and Vegas asserted that there was no foolproof recipe to eliminate or reduce teacher absence; however, there were promising strategies that should be considered to increase attendance improvements. The researchers also caution that reviews on absenteeism and incentives are still too scarce to fully draw general conclusions in order to determine future “best practice” policies.

Madden, Flanigan & Richardson (1991) found that an incentive plan implemented for three years in South Carolina secondary schools, although not statistically significant, did demonstrate higher attendance for teachers where the incentive was implemented versus schools with no incentive in place. Delisio (2009) found evidence that some school districts did have good success with attendance intervention programs. The studies that follow are examples of promising strategies to improve teacher attendance. The Carthage Texas School District launched an incentive program in 2007. School officials wanted to increase student achievement and had concerns about increasing substitute costs. Every teacher who had perfect attendance was placed in a share for a pool of \$5,000 to be split among qualifying recipients. Out of 204 teachers, 20 had perfect attendance (Delisio, 2009).

Ahn & Vigdor’s (2010) analysis of the North Carolina Public School data and the teacher accountability system for the state of North Carolina found that incentives led teachers to try harder. Bonus programs reduced the number of sick days taken about 0.6 for an average teacher and suggested that group level incentives could be more powerful

than individual incentives. Ann & Vigdor also suggested that incentive plans must be attainable but reasonably appropriate for low and high ability teachers.

Finlayson (2009) indicated the importance of trying incentive plans as some research indicates teacher absences do impact student achievement. Teacher attendance incentives do seem to work in some places under some conditions (Onofry, 1994). During the late 1960's and early 1970's, the Newark New Jersey School System had concerns with an increasing trend of employee absence. The district requested that the Greater Newark Chamber of Commerce conduct a study of the status of the district. Based on the findings of the report, the Greater Newark Chamber of Commerce recommended the district design an absence control program that was "Firm, fair, uniformly applied program to control and reduce excessive absence" (Greater Newark Chamber of Commerce, 1975). An Attendance Improvement Plan (AIP) was implemented in 1971 – 1972 in two New Jersey school districts for professional personnel. Each district developed its own plan based on the data analysis of staff absence in the district. In Newark's plan, the principal stressed the importance of staff attendance during monthly staff meetings, was provided with a new computerized produced attendance record for each teacher, visited the teacher's classrooms after a short term absence to personally welcome them back, communicated directly with the assistant superintendent when the teacher's absence was poor, reviewed attendance patterns before considering staff for possible promotions, stressed good attendance to potential new hires and utilized a positive approach where good attendance was encouraged and celebrated.

In the Ewing New Jersey Township District's Attendance Improvement Plan (A.I.P.), the principal guidelines were to utilize a positive approach in all dealings, take a

personal interest in staff absence (e.g. no one can teach your class like you can), share absence records with staff, share individual absence records with teachers who had excessive absences, stress that sick days are only to be used for illness, stress that accumulated sick leave is insurance against loss of pay, incorporate absences with evaluations, devote a brief amount of time about attendance at each faculty meeting, issue recognition letters for teachers with excellent attendance, place a copy of recognition letters in teachers' permanent file, discuss the importance of attendance and punctuality when interviewing new teachers, review absence records to determine patterns, post attendance records by department to encourage competition and have teachers evaluate their substitutes when absent. During the first year of the program, the absence rate in Newark, with an enrollment of 72,000 students dropped from 9 to 7%. The following year showed a 20% drop from the previous year. Ewing Township with an enrollment of 5,200 students, implemented the plan in 1972. The absence rate was reduced from 3.3% to 2.5% during the 1972 - 1973 school year (Greater Newark Chamber of Commerce, 1975).

The Merrick Long Island New York School District devised and implemented an incentive plan with cooperation from the school board, central office, building administrators and faculty (Gendler, 1977). The approach cut teacher absence by 55% in one year. The plan involved the school board, central office, and building administrators in cooperation with the faculty association. The following were components of the plan:

- Recommendations for tenure were based on the teachers' ability to demonstrate consistent attendance during their probationary period.
- Evaluations included attendance.

- The superintendent met with administrators and department heads to explain the new policy, which they were fully accountable for implementing.
- Administrators or middle managers promptly met with employees who demonstrated chronic absence patterns.
- Staff members were given the opportunity to improve but if improvement was not made a written note was sent to the teachers and placed in their permanent file.
- The superintendent or the designee met periodically with administrators to review building attendance data, annual evaluations reports and recommendations for continued probation or tenure; the results showed improvement in teachers at the satisfactory attendance level and even dramatic changes in several more flagrant cases.
- Improvement was also displayed financially. The annual expenditure for substitutes was reduced from \$90,000 to \$45,000.

Research from the 1980's (Ehrenberg et. al, 1991; Elliot, 1982; Jacobson, 1990) showed teacher absenteeism to be a threat and real concern in the work place. Because of this, school districts continue to search and pilot programs that will curb absenteeism. During the 1985 -1986 school year, the Meritorious Attendance Recognition Program was implemented in the DeKalb County School System in the state of Georgia (Grant, 2000). The features of the plan were:

- At the end of the year, employees with 4 or less days of absence received a U.S. Savings Bond and a letter of recognition.

- A personal computer was given to one employee with perfect attendance.
- Perfect attendance lists were posted monthly.
- Each month, schools having the best 10% attendance were presented with a certificate.
- Monthly lists were posted for the top 50 out of 110 schools.
- Plaques were given to the schools ranking in the top 10% for overall staff attendance.
- Plaques were given to schools ranking in the top 10% for attendance improvement for the staff for the year.
- The school with the best overall attendance for the year received a trophy.
- Schools with outstanding attendance for the year received computers.
- The board of education adopted a new policy establishing high expectations for staff attendance.
- The board policy was amended to increase the maximum accrual of sick leave from 120 to 135 days.
- A recognition bonus was extended from \$3.00 to \$9.00 for unused sick leave for those with exemplary attendance.
- Schools were encouraged to promote improved staff attendance through special recognitions and rewards such as luncheons for staff.
- News releases were prepared and published for recognizing staff with outstanding attendance.
- Computer profiles were printed monthly displaying staff with high absenteeism.

- Management reports were developed and provided monthly to principals ranking employees by number of absences (p. 42-43).

The Meritorious Attendance Recognition Program reduced staff absenteeism by an average of 1.23 days per staff member. Substitute costs were reduced by \$156,000. The results of the program exceeded all goals of the plan by reducing teacher absences by 3,916 days and staff absences by 8,063 days during the 1985-1986 school year. The incentives of the program were based on work-group competition and individual recognition and rewards. Perfect attendance among employees increased from 338 to 931 with an improvement of 175% along with 90% of the schools improving attendance at the individual sites (Grant, 2000).

Jacobson's (1989 & 1990) study of the Sugar Hill New York District showed that monetary rewards caused teachers, in the short-term, to change their absence behaviors. In the Sugar Hill district, the one year implementation of the attendance incentive plan increased teacher attendance. The Sugar Hill District created a pari-mutuel pool from which teachers were provided with a monetary stipend. The funding for this plan derived from a New York State reform initiative titled Excellence in Teaching (EIT). During the 1986 - 1987 school year, teachers withdrew one share of the pari-mutuel pool for each absence less than seven. Rewards were differentiated based on individual teacher attendance. A total of 1,274 attendance shares at a value of \$57.16 per share were awarded. Teachers with perfect attendance were awarded \$400.12. In the Sugar Hill district the average numbers of absences decreased from 7.2 days in 1985 - 1986 to 5.3 days in 1986 - 1987. Perfect attendance rose from 8% (25 teachers) in 1985 - 1986 to 34% (108 teachers) in 1986 - 1987. The plan reduced teacher absences by 2 days per

teacher. The payroll savings was over \$25,000. Jacobson's (1990) results showed that attendance was initially more of a concern in the North Forest District than Sugar Hill District. Teachers were rewarded with 3 additional sick days if the overall district absence rate was reduced by 25%. The data demonstrated different reactions to the incentive plan. At one school, increased teacher absence appeared to be an accepted cultural norm for teachers nearing retirement. Teachers in another school in the district with already good attendance felt they were unable to impact other schools where attendance was a problem with their own attendance behaviors. Jacobson concluded that teacher absence could be curbed by developing clear guidelines and practices with regards to excessive absence through analyzing and providing teacher attendance data, regular reporting of data and continual feedback to teachers.

The studies conducted on teacher absence and incentive plans have often left mixed or contradictory results (Bowers, 2001; Jacobson, 1990; Ramming, 1998). In Onofry's (1994) dissertation he found that the quantitative statistical analysis suggested that teacher absence rates in 28 districts, representing a wide geographic region in New York State, were not significantly affected by teacher attendance improvement plans. However, although not significant, the Jervistown School District in particular showed success with improved teacher attendance. Absence rates consistently declined during the initial three years of the program. Onofry (1994) suggested that some contributing factors proved successful due to the program being developed through a negotiated process, use of state funding and not tax payer dollars, on-going assessment of the program each year and a sizable cash incentive. The pot of money was divided among all eligible employees.

A survey of Georgia superintendents (Boyer, 1994) indicated that buy-back provisions had no significant relationship with teacher attendance rates. However, the directionality of the findings supports absence reduction through buy-back provisions within policies. The worth of the dollar amount of accumulated days and the number of accumulated days paid at teacher retirement increased attendance.

Incentive plans for teachers have also been implemented outside of the United States. An attendance incentive program implemented in schools in Kenya showed no improvement in teacher attendance (Glewwe, Ilias, & Kremer, 2003). The prizes had a value of 21 to 43% of a typical teacher salary which was comparable to merit pay programs conducted in the United States (2003). Teachers were provided with prizes provided students demonstrated achievement on exams. In the treatment schools, students were more likely to take exams and score higher on most exams; however, in the long run, dropout rates did not decrease, teacher attendance did not improve, homework completion did not increase and teacher practices did not change (Glewwe, Kremer & Ilias 2003).

In rural India (Duflo & Hanna, 2005) the Seva Mandir incentive program was implemented to reduce teacher absenteeism. Cameras with a tamper-proof date and time function were used to monitor daily teacher absence. Teachers were provided with an incentive based on the documentation of their attendance on their camera. Teachers were paid for each day they were actually in attendance. A full day was one that showed a teacher being in attendance at the start and end of each day while displaying the minimum number of students required for attendance in the picture. The overall decrease

in teacher absence, in an 18 month period was 22%. Test scores were also 0.17 standard deviations higher than students in the comparison schools.

Other non-educational organizations have also experimented with incentive based programs to address absenteeism. For example, Rickert, Duncan, and Ginter (1995) reviewed a study by The Jefferson County Alabama Health Department. This study was a compensation-based incentive program to address absenteeism. The study consisted of 800 people including physicians, dentists, nurses, other professionals, and clerical, technical and support personnel. In 1990, the Sick Leave Incentive Program was piloted with the targeted audience being full-time employees. The goal was to promote improved attendance using a financial incentive and participation in the plan was voluntary. Full-time, classified employees could earn one day of sick leave per month. A permanent employee could “sell back” at his or her current hourly rate, one half of the unused sick leave earned during the calendar year, from a minimum of 8 hours to a maximum of \$800 (p. 64). A reduction in the use of paid sick leave resulted in a savings for \$71,880. Compared to the total cost of the 1991 stipend, the approximate net savings of \$1,231 exceeded the cost of the stipend during the first year of the plan. The middle-level employees showed the greatest reduction in sick leave usage whereas entry level employees remained highest.

Hubbell’s (2008) Wisconsin Association of School Board (WASB) report reviewed research on the effect of teacher absence on school district budgets and student achievement and initiatives school boards could implement to address teacher attendance. Hubbell concluded that school boards would be well advised to analyze their current leave policies in light of the evidence documented in his memo that showed some

initiatives could decrease overall district expenses. The question remains whether attempts to reduce teacher absenteeism from the perspective of school boards and administration is to decrease costs, increase student achievement or both. Like Hubbel, Cassel, Caruso, & Blumsack (2009) provided possible questions for school boards to consider when analyzing and planning for improvement in the area of teacher absenteeism.

In summary, this review of literature examined incentive plans implemented as early as the late 1960's until the present time. Incentive plans were designed and implemented to curb attendance problems identified with the impact of student achievement being the ultimate goal. The research revealed mixed but sometimes significant results that could not be ignored.

Summary

The review of literature demonstrated the importance of school districts researching their own culture of absence by taking a thorough look at the data. Having a better understanding of the attendance patterns of a company or organization can be instrumental to identifying patterns, trends, and getting to the root cause of teacher absenteeism and minimizing discretionary absences. This literature review focused on five areas: teacher absence, effects of teacher absence on achievement, absence in other professions, effects of absence policies and procedures, and attendance interventions and incentive plans.

Teacher absence is not a new phenomenon but has gained greater attention with the increase of absence among teachers and the negative impact it appears to have on student learning especially among schools with diverse needs.

The second section explored the effects of teacher absence on achievement. The research showed that mathematics was the subject most negatively impacted by teacher absence. Students identified with a free or reduced meal status were hindered in both mathematics and reading.

The third section was on absence in other professions which gave an avenue to make comparisons to teacher absenteeism. Absence in any profession poses a concern as job productivity is hindered and is often costly to the organization. It is also a concern because of the foundation that is laid among the youth that are in the classrooms who will soon be employed in various jobs in the future.

The fourth section was on absence policies and procedures. In addition to the potential loss of quality instruction and student learning, substitutes can be an extreme financial burden on a school system. Teacher absence is no different but the financial impact tends to be greater than with other professions. Benefit packages are an important aspect and added fringe benefit of an employee's job such as health care and paid leave plans. The absence policies studied in this review revealed commonalities. The policies studied also showed some variety; however, a concerning trend was discovered in how the design of some policies encourage leave abuse.

The final section was on attendance intervention and incentives. Some plans found success, varying in significance while others left mixed and contradictory results. Based on the review of the literature it is clear incentive plans are worthy of careful exploration with the goal of curbing discretionary absences. Diverting district expenses to more important areas should help to place a greater focus on student achievement by having the "A Team" teaching in the classroom.

Chapter three presents the design and methodology of the study. The population sample, instrumentation, measurement, data collection procedures, data analysis, hypothesis testing, and limitations of study are included.

CHAPTER THREE

METHODS

The purpose of this study was to determine if the implementation of the Teacher Incentive Pay program had an effect on the district finances and attendance for certificated staff in the Center School District for the 2008 - 2009 and 2009 - 2010 school years. This chapter presents the research design, population and sample, sampling procedures, measurement of variables, data procedures, data analysis, hypothesis testing, and limitations of study.

Research Design

Gall, Gall, and Borg (2005) defined quasi-experimental research as a quantitative method involving an experimental group that receives the treatment and a control group that does not receive the treatment. A quasi-experimental methodology was used to measure the effect of the Teacher Incentive Plan implemented in the Center School District. In this study the dependent variable was staff attendance. The independent variable was absence of a monetary stipend. The researcher sought to find if the monetary stipend had an effect on staff attendance and district finances.

Population and Sample

The population for the study included eligible certificated teachers, librarians, and counselors in the Center School District where the Teacher Incentive Plan was implemented. Certificated staff for the 2007 - 2008 school year included 123 staff in the elementary; pre-k to fifth grade, 57 staff in the middle school; sixth through eighth grade, and 62 staff in the high school; ninth through twelfth grade with 242 staff. Certificated staff for the 2008 - 2009 school year included 123 staff in the elementary, 59 staff in the

middle school, and 63 staff in the high school with 245 staff. Certificated staff for the 2009 - 2010 school year included 144 staff in the elementary; pre-k to fifth grade, 66 staff in the middle school; sixth through eighth grade, and 77 staff in the high school; ninth through twelfth grade with 287 staff. The staff that participated in the Teacher Incentive Plan had to meet the criteria to be included in the study.

Table 6

Center School District School Totals and Certificated Staff

Schools	Number	2007 - 2008	2008 - 2009	2009 - 2010
Elementary	5	123	123	144
Middle	1	57	59	66
High	1	62	63	77
Total	7	242	245	287

Note. From *Center School District Staff Enrollment*, by Missouri Department of Elementary and Secondary Education, 2010. Retrieved from <http://dese.mo.gov/directory/048080.html>

Sampling Procedures

Purposive sampling was used to identify staff members within the population who met the criteria for this sample study. Purposive sampling involves selecting a sample based on a researcher's experience or knowledge of the group sampled (Lunenburg & Irby, 2008). In this study, the sample consisted of elementary, middle, and high school teachers, counselors and librarians as the units of analysis. This criteria caused some not to be included. Center School District certified elementary and secondary teachers, counselors, and librarians who were employed during the years of the implementation were included in the data analysis. Initially there were 223 participants in this study.

Eligible staff members who were employed during the implementation of the incentive pay plan were studied. The study consisted of 58 staff from the high school, 48 staff from the middle school, 12 staff from the alternative school, 99 staff from the elementary and 6 staff from early childhood. During the analysis, some staff were deleted because they were not eligible because they were not employed all years of the study or exceeded twenty days of absence.

Measurement

The dependent variables in this study were financial cost associated with teacher absenteeism and elementary, middle, and high school staff attendance. Teacher attendance was computed by subtracting the number of days absent from the 185 contracted days. The calculation revealed the number of days of attendance for each staff member for each year. To compute the financial cost, the number of days absent and the daily rate was multiplied to calculate the cost for each substitute teacher. The cost for a substitute was \$100.00 per day. The cost for the Teacher Incentive Plan was \$85.00 per day. Each teacher receives ten sick days and two personal days at the beginning of each school year. The TIP payment was calculated by multiplying days not used times \$85.00 (Bartman, 2008).

Data Collection Procedures

The researcher verbally requested permission from the superintendent of the Center School District to conduct the research study for the Teacher Incentive Pay program. The researcher received written permission to conduct the study. Refer to Appendix B for the letter of permission to conduct the Teacher Incentive Pay study. Permission to conduct the study was also granted from Baker University (Appendix B).

All data was extracted by the director of finance and the senior payroll specialist from the payroll and human resource function of the Keystone Employee Maintenance computer system. The researcher requested and received attendance, school enrollment and financial data from the director of business. The director of business sent the requested data information to the researcher by electronic documents and interoffice mail. During the 2009 - 2010 year the senior payroll assistant also supplied data as directed by the business director. The data was emailed to the researcher. The data received was organized in Excel spread sheets by year which included staff name, name of substitute, school name, school level, individual absence number, individual substitute cost, individual substitute payments and individual stipend pay out. The researcher then organized the data into Excel sheets to complete calculations for absence and stipend payments. The data was then organized into new Excel sheets by staff last and first name, school, school level and days absent for 2007 – 2008, 2008 – 2009, and 2009 - 2010 school years and stipend payments for 2008 – 2009 and 2009 – 2010 school years. Staff not in attendance for the entire time period of the study was eliminated from the Excel worksheet before the data was analyzed. To maintain staff privacy and anonymity, staff names were eliminated and the data was extracted from the excel sheet into the SPSS program.

Data Analysis and Hypothesis Testing

The data analysis and hypothesis testing consists of each research question, hypothesis and analysis.

Research Question 1: Did the implementation of the Teacher Incentive Pay program affect teacher attendance?

H1: The implementation of the Teacher Incentive Pay program affected teacher attendance as determined by attendance reports from the Keystone system at the .05 level of significance.

ANOVAS with the Tukey's HSD post hoc were used as the analysis methods. The Teacher Incentive Pay plan was studied using a quantitative method of data collection and analysis. A one factor repeated measures ANOVA was used to test (H1) ($\alpha = .05$). The independent variable was year. In 2007 the TIP was not in existence. In the fall of 2008, the TIP was implemented. During 2009 the TIP continued and ended at the end of the 2009 - 2010 school year. The dependent variable was the number of days certified staff was absent.

Research Question 2: Did the implementation of the Teacher Incentive Pay program affect financial cost associated with teacher absenteeism?

H2: The implementation of the Teacher Incentive Pay program affected financial cost associated with teacher absenteeism as determined by substitute pay reports from the Keystone system at the .05 level of significance.

A one factor repeated measures ANOVA was used to test (H2) ($\alpha = .05$). The independent variable was year. The dependent variable cost associated with teacher absence was conducted two ways. Cost was measured two ways; total cost and substitute cost. The total cost of the program included substitute and stipend payments. Substitute cost was calculated by multiplying the daily rate of \$100.00 times the number of days absent, excluding staff with more than twenty days of absence. The cost for the stipend was \$85.00 per day. One Anova was conducted using total cost as the dependent variable. A second Anova was conducted using substitute cost as the dependent variable.

Research Question 3: Was there a difference between elementary, middle or high school staff attendance due to the Teacher Incentive Pay program?

H3: The implementation of the Teacher Incentive Pay program affected elementary or secondary attendance as determined by reports from the Keystone system at the .05 level of significance. A two factor one repeated measures factor, one between subjects factor was conducted.

A two factor one repeated measures factor, one between subjects factor was conducted to test hypothesis (H3) ($\alpha = .05$). The repeated measures independent variable was year. In 2007 the TIP was not in existence. In the fall of 2008, the TIP was implemented. During 2009 the TIP continued and ended at the end of the 2009 school year. The between subjects independent variable was level (elementary and secondary). The dependent variable was the number of days eligible staff were absent.

Limitations

Limitations are not in the control of the researcher but are real factors that may have an effect on the interpretation of the findings or generalizability of the results (Lunenburg & Irby, 2008). The following are the limitations of this study.

The Teacher Incentive Pay program did not include administrators. Administrators were never a part of the study as it was originally designed. The Center School District Board of Education supported the superintendent, Dr. Robert Bartman's, proposal that reducing substitutes and keeping the teachers in the classrooms was a worthy goal. If the program proved successful there were plans to possibly include administrators and non-certified staff. The study focused on sick days and personal days.

The researcher chose to focus on days most common and researched in other studies. The researcher felt this approach would give a more reliable analysis of true staff attendance. Professional leave days are not always an option for an employee thus it would not be appropriate to include them in this analysis. Long-term leave are extreme cases of absence that don't typically reflect the overall attendance of an organization therefore the researcher chose not to include these days of absence.

Summary

This quasi-experimental study was used to determine if the Teacher Incentive Pay program had an effect on the attendance of eligible full-time teachers, counselors, and librarians in the Center School District. The study also looked at the financial cost associated with teacher absenteeism and the difference in attendance between elementary, middle, and high school staff. This chapter discussed the research design, population and sample size, sampling procedures, data collection procedures, data analysis and hypothesis testing, and limitations of study. Chapter four provides an analysis and discussion of the findings of the data. This chapter will illustrate the impact of the Teacher Incentive Pay implemented to curb staff unnecessary absenteeism and increase district financial savings.

CHAPTER FOUR

RESULTS

The purpose of this study was to determine if the implementation of the Teacher Incentive Pay program had an effect on the attendance of certificated staff and substitute cost in Center School district for the 2008 - 2009 and 2009 - 2010 school years. The attendance and financial data from the 2008 - 2009 and 2009 - 2010 school years were compared to baseline attendance and financial pre-implementation data from the 2007 - 2008 school year to establish whether there was improvement made as it related to increased teacher attendance and substitute cost reduction. This chapter provides an analysis and discussion of the results of the analysis.

Three research questions were addressed using analysis of variance. The results of those analyses are presented below.

Research Question 1: Did the implementation of the Teacher Incentive Pay program affect teacher attendance?

H1: The implementation of the Teacher Incentive Pay program affected teacher attendance as determined by attendance reports from the Keystone system at the .05 level of significance.

A one factor repeated measures ANOVA was used to test Hypothesis one (H1) ($\alpha = .05$). The independent variable was year. During the 2007 - 2008 school year the TIP was not in existence. In the fall of 2008, the TIP was implemented. During the 2009 - 2010 school year the TIP continued and ended at the end of the school year. The dependent variable was the number of days certified staff were absent. The results of the analysis indicated a statistically significant difference somewhere among the means (F

=10.117, $df = 2, 368$, $p = .000$). See Table 7 for the means and standard deviations for this analysis.

Table 7

Means and Standard Deviations for Hypothesis 1

	<i>M</i>	<i>SD</i>	<i>N</i>
2007 - 2008	7.322	3.722	185
2008 - 2009	6.064	3.822	185
2009 - 2010	7.165	3.971	185

A follow up post hoc was conducted to determine which pairs of means were different. The Tukey's Honestly Significant Difference (HSD) critical value was .713. The differences between the means had to be greater than this value to be considered significantly different ($\alpha = .05$). The differences that were greater than this value were between 2007 – 2008 and 2008 – 2009 and between 2008 – 2009 and 2009 - 2010. The number of absences in 2008 - 2009 (6.06) was significantly lower than those in 2007 - 2008 (7.32). The number of absences in 2009 - 2010 (7.16) was significantly higher than those in 2008 - 2009 (6.06). Figure 1 displays the means. The absence rate dropped significantly the first year of the TIP implementation but increased the following year.

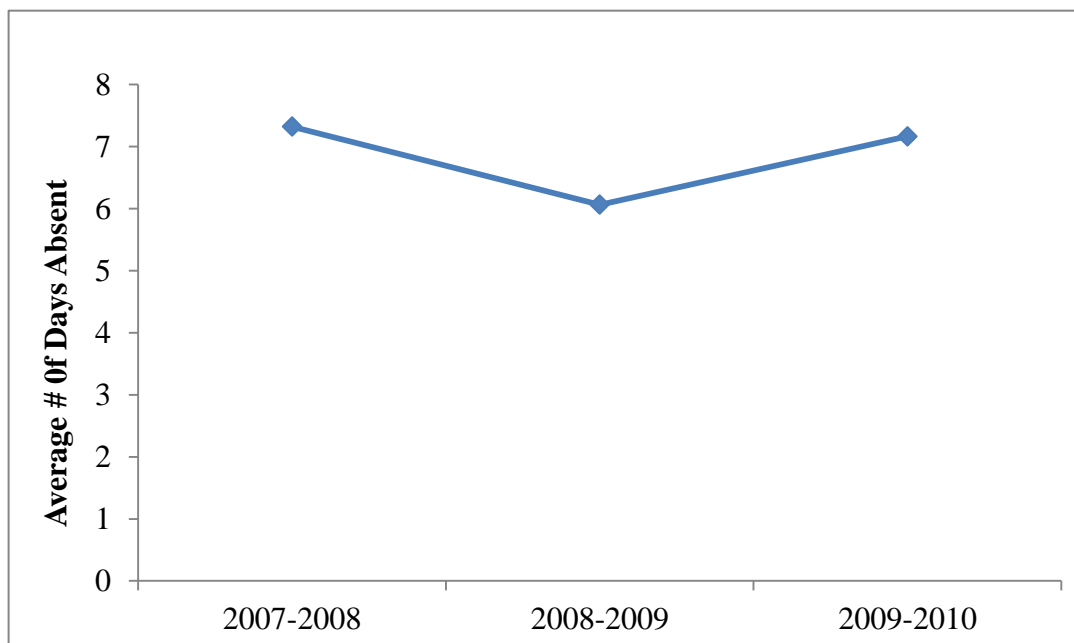


Figure 1. Average days absent.

The results of the hypothesis testing for research question 2 follows.

Research Question 2: Did the implementation of the Teacher Incentive Pay program affect financial cost associated with teacher absenteeism?

H2: The implementation of the Teacher Incentive Pay program affected financial cost associated with teacher absenteeism as determined by substitute pay reports from the Keystone system at the .05 level of significance.

A one-factor repeated measures ANOVA was used to test H2 ($\alpha = .05$). The independent variable was the school year. The dependent variable cost, associated with teacher absence, was measured two ways. The total cost of the program included substitute and stipend payments. The substitute cost was calculated by multiplying the daily rate of \$100.00 times the number of days absent. Any staff with an absence of more than twenty days was excluded. The cost for the stipend was calculated by

multiplying the daily rate of \$85.00 times the number of days absent within the 185 day school year. One ANOVA was conducted using total cost as the dependent variable. A second ANOVA was conducted using substitute cost as the dependent variable.

The results of the first ANOVA using total cost as the dependent variable indicated a statistically significant difference somewhere among the means ($F = 228.309$, $df = 2, 368$, $p = .000$). See Table 8 for the means and standard deviations for this analysis.

Table 8

Means and Standard Deviations for Hypothesis 2

	<i>M</i>	<i>SD</i>	<i>N</i>
2007 - 2008	\$448.573	\$364.421	185
2008 - 2009	\$910.597	\$265.004	185
2009 - 2010	\$974.713	\$288.345	185

A follow up post hoc was conducted to determine which pairs of means were different. The Tukey's Honestly Significant Difference (HSD) critical value was \$62.88. The differences between the means had to be greater than this value to be considered significantly different ($\alpha = .05$). The differences that were greater than this value were between 2007 – 2008 and 2008 – 2009, between 2008 - 2009 and 2009 - 2010, and between 2007 - 2008 and 2009 - 2010. The average total cost in 2008 - 2009 (\$910.60) was greater than the average total cost for 2007 - 2008 (\$448.57). The average total cost for 2009 - 2010 (\$974.71) was significantly higher than 2008 - 2009 (\$910.60). The average total cost for 2009 - 2010 (\$974.71) was significantly higher than 2007 - 2008 (\$448.573) total cost.

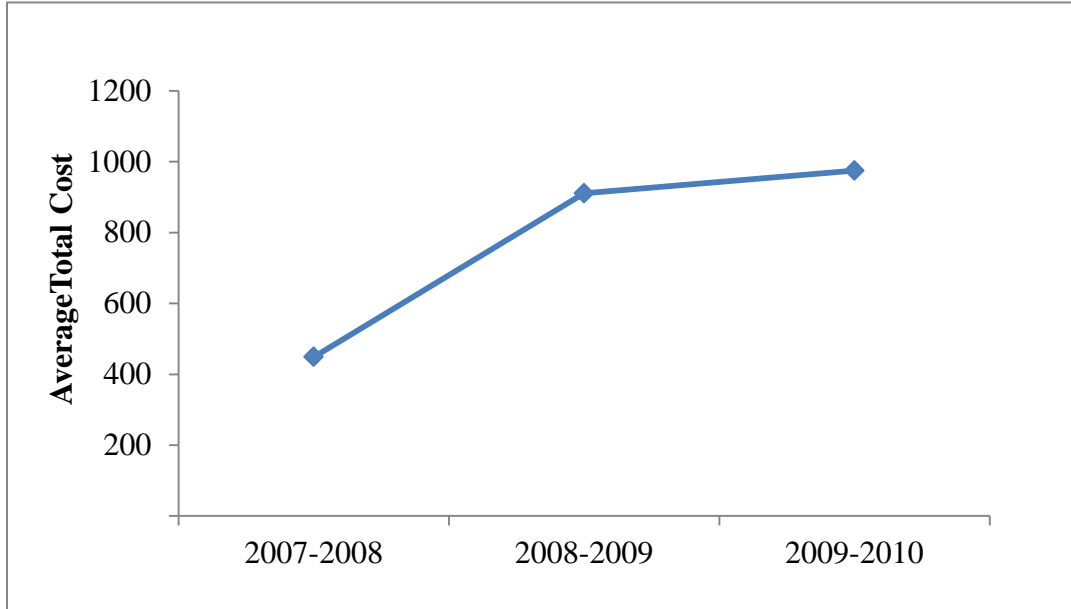


Figure 2. Average total cost.

The results of the second ANOVA using substitute cost as the dependent variable indicated a statistically significant difference somewhere among the means ($F = 13.629$, $df = 2, 368$, $p = .000$). See Table 8 for the means and standard deviations for this analysis.

A follow up post hoc was conducted to determine which pairs of means were different. The Tukey's Honestly Significant Difference (HSD) critical value was \$72.68. The differences between the means had to be greater than this value to be considered significantly different ($\alpha = .05$). The differences that were greater than this value were between 2008 – 2009 and 2009 - 2010, and between 2007 - 2008 and 2009 - 2010. The average substitute cost for 2009 - 2010 (\$565.33) was significantly higher than 2008 - 2009 (\$409.56). The average substitute cost for 2009 - 2010 (\$565.33) was significantly higher than 2007 - 2008 (\$448.57).

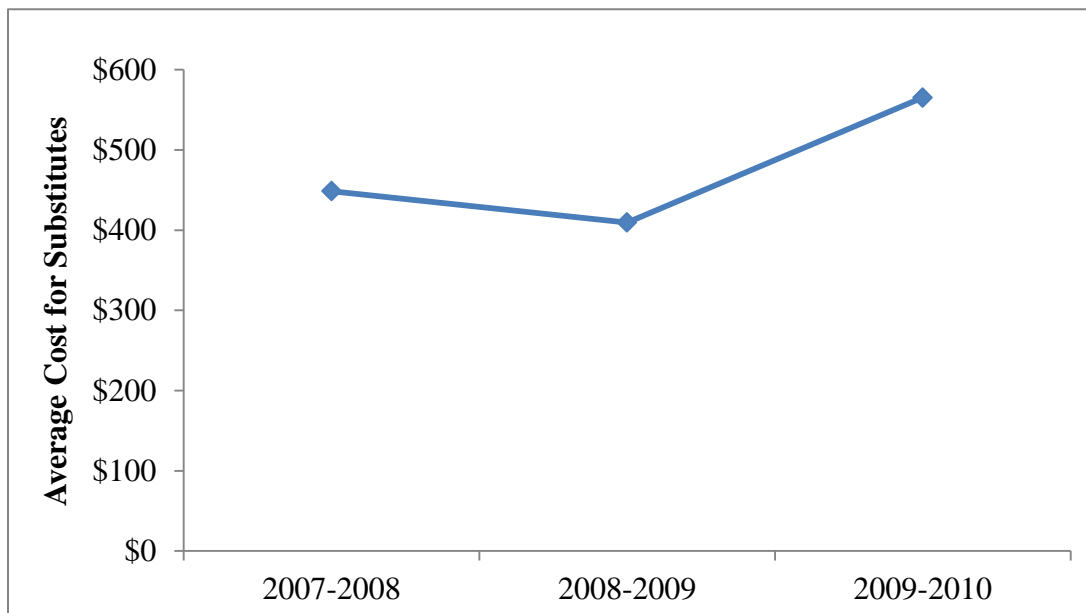


Figure 3. Average substitute cost.

The average substitute cost for substitute pay was statistically significant in the 2008 - 2009 and 2009 – 2010 school years. The results for research question 3 are presented below.

Research Question 3: Was there a difference between elementary, middle or high school staff attendance due to the Teacher Incentive Pay program?

H3: There was a difference between elementary and secondary attendance due to the implementation of TIP.

A two-factor analysis of variance was conducted to test hypothesis three. The two categorical variables used to group the data were year and level. The two-factor ANOVA can be used to test-three hypotheses including a main effect for year, a main effect for level, and an interaction effect (Year X Level). The interaction effect was used to test hypothesis three. The results of the analysis indicated no statistically significant difference between at least two of the six means ($F = .381, df = 2, 366, p = .683$). See

Table 9 for the means and standard deviations for this analysis. No follow up post hoc was necessary.

Table 9

Means and Standard Deviations for Hypothesis 3

	Level	<i>M</i>	<i>SD</i>	<i>N</i>
2007	Elementary	193.833	372.874	42
	Secondary	523.392	327.274	143
2008	Elementary	191.738	317.131	42
	Secondary	473.531	365.484	143
2009	Elementary	299.698	438.428	42
	Secondary	643.353	418.979	143

Chapter four provided an analysis and reviewed the findings from the data analysis for the Teacher Incentive Pay program implemented in the Center School District in Kansas City Missouri. The plan was designed to curb staff unnecessary absenteeism and increase district financial savings. The findings indicated significant differences in absenteeism at the .05 level between the 2007 - 2008 and 2008 – 2009 and between 2008 - 2009 and 2009 - 2010 school years. The findings also indicated significant differences in total cost. The average total cost in 2008 - 2009 was greater than the average total cost for 2007 -2008. The average total cost for 2009 - 2010 was significantly higher than 2008 - 2009. The average total cost for 2009 - 2010 was significantly higher than 2007 - 2008 total cost. Substitute costs were also significantly different. The average substitute cost for 2009 - 2010 was significantly higher than 2008

- 2009. The average substitute cost for 2009 - 2010 was significantly higher than 2007 - 2008. There was no evidence for a difference in absenteeism at the elementary or secondary levels. Chapter five includes the summary of the findings, implications for action, the conclusion and recommendations for future studies as it relates to employee absenteeism reduction and absenteeism incentive plans.

CHAPTER FIVE

INTERPRETATION AND RECOMMENDATIONS

The researcher sought to determine the impact of the Teacher Incentive Plan implemented in the Center School District. This chapter includes a summary of the study, overview of the problem, purpose statement and research questions, review of the methodology, major findings, findings related to the literature, implications for action, recommendations for future research, and concluding remarks.

Study Summary

The summary of study includes the overview of the problem, purpose statement and research questions, review of the methodology and major findings. The overview of the problem provides validity for the study. The purpose statement and research questions provide an explanation and guiding questions for the study. The review of the methodology explains the methods used to conduct the study. The major finding section states the main results revealed in the study.

Overview of the Problem

Teacher absenteeism is a growing problem in schools. Clotfelter, Ladd, and Vigdor (2009) concluded that teacher absenteeism was important for four main reasons: hiring substitutes was costly and distracted administrative time, has a negative impact on academics, occurred more frequently in low-income schools and can be influenced by district compensation packages. These types of concerns have prompted school districts to explore and implement incentive plans to help encourage teacher attendance while simultaneously boosting student achievement and school finances (“Districts Use

Incentives,” 2008). The problem addressed in this study was how the TIP impacted the Center School District.

Purpose Statement and Research Questions

The purpose of this study was to determine if the implementation of the Teacher Incentive Pay program had an effect on the attendance of certificated staff and substitute cost in Center School district for the 2008 - 2009 and 2009 - 2010 school years. The attendance and financial data from the 2008 - 2009 and 2009 - 2010 school year was compared to baseline attendance and financial pre-implementation data from the 2007 - 2008 school year to establish whether or not there was improvement made as it related to increased teacher attendance, total cost, substitute cost reduction and was absenteeism affected differently in elementary and secondary schools. There were three research questions which analyzed how the implementation of the Teacher Incentive Pay program affected teacher attendance, financial cost associated with teacher absenteeism and if there was a difference between elementary, middle or high school staff attendance due to the Teacher Incentive Pay program.

Review of the Methodology

A quasi-experimental methodology was used to evaluate the effect of the Teacher Incentive Pay program. The population and sample included eligible teachers, librarians and counselors in Center School District. The sampling procedure was purposive. The sample included eligible staff employed in Center School District during the baseline year and two years of the plan.

The teacher attendance, teacher absenteeism and substitute teacher cost baseline data was collected at the end of the 2007 - 2008 school year to compare to the end of the 2008

- 2009 and 2009 - 2010 school years which were the years of implementation for the Teacher Incentive Pay program. Analysis was conducted on the attendance and absenteeism data of eligible certificated elementary, middle and high school staff during the 2007 - 2008, 2008 - 2009 and 2009 - 2010 school years.

Major Findings

The major findings of this study yielded evidence that the Teacher Incentive Plan program did have an impact on staff attendance and finances. The first research question analyzed if the Teacher Incentive Pay program affected teacher attendance. Teacher absence demonstrated a significant decline during the first year of the implementation of the program; however, absenteeism increased back to almost the same number of days as the baseline during the final year of the program.

The second research question analyzed if the Teacher Incentive Pay program affected financial cost associate with teacher absenteeism. Substitute cost demonstrated a decrease during the first year and increased the final year of the TIP.

The third research question analyzed if there was a difference between elementary, middle or high school staff attendance due to the Teacher Incentive Pay program. There was no significant difference in attendance between elementary and secondary staff.

Findings Related to the Literature

The researcher found ample evidence to support the concern for teacher absence. Pitkoff (1993) found that almost one-fourth of school employees were absent 10 or more times; almost double the national average. Woods and Montagno (1997) found that the Detroit Public School system lost more than 120,000 teacher days due to absence.

Although limited, the researcher did find some evidence of incentive plans to decrease teacher absenteeism that have been implemented and studied (Dunflo & Hanna, 2005; Jameel, 2009; Rogers & Vegas, 2009).

The findings of this study yielded evidence that supported Hypothesis One which revealed significant absenteeism differences at the .05 level between the 2007 - 2008 and 2008 – 2009 and between 2008 - 2009 and 2009 - 2010 school years. Teacher absence demonstrated a significant decline during 2008 – 2009; however, absence increased in 2009 – 2010. This result indicated that teachers responded positively to the TIP during the first year of the plan but by the second year there was little to no impact. This supports the research from the Greater Newark Chamber of Commerce (1975). The Attendance Improvement Plan (A.I.P) implemented in the Ewing New Jersey Township showed a decline in teacher absence from 9% to 7% during the first year. The following year demonstrated a 20% decrease in teacher absence. Gendler's (1977) research found that the incentive plan implemented in the Merrick Long Island New York School District cut teacher absence by 55% in one year. Grant's (2000) study revealed that perfect attendance improved 175% due to the Meritorious Attendance Recognition program. Finlayson's (2009) study demonstrated a decline in teacher absence from 9% to 7% during the first year. Delisio (2009) found that some schools showed success with attendance improvement programs. Ahn & Vigdor's (2010) analysis revealed that bonus programs reduced the number of sick days teachers took. Jacobson's study revealed a short-term decrease in teacher absence behaviors. In contrast, Onofry's research suggested that teacher absence was not significantly affected by teacher attendance

improvement plans. Rogers & Vegas (2009) concluded that there was no foolproof recipe to reduce teacher absenteeism but there are strategies worth strong consideration.

Hypothesis Two was also supported. The findings resulted in significant difference in cost due to the implementation of the TIP. The total average cost increased each school year. The daily substitute rate did increase during the 2008 – 2009 school year, and then remained the same during the 2009 – 2010 school year which may have contributed to the increase. The study findings indicated a significant difference in average substitute cost. The average substitute cost decreased the first year of the TIP and increased the final year of the program. There were no additional funds used for substitute pay or TIP stipends. The funds for the TIP stipend came directly from the personal and sick days allocated for each staff member. The substitute pay was a pre-determined budget line for each school year. By law, districts establish budgets at the start of the school year. Base line item amounts are predicated on previous history. This result supports the research from Gendler (1977) where his study indicated annual expenditures for substitutes were reduced from \$90,000 to \$45,000 with the Merrick Long Island incentive plan. Jacobson's (1989, 1990) studies demonstrated a payroll savings over 25,000 due to an attendance improvement plan implemented in the Sugar Hill School District in New York. Grant (2000) found that substitute costs were reduced by \$156,000 during the Meritorious Attendance Recognition Program.

Hypothesis Three was not supported. There was no evidence for a difference in the changes in absenteeism between the elementary or secondary levels. The findings from the current study were in contrast to some of the research. Green, Blasik, & Varela-Russo's (1999) and Miller's (2008) research revealed a difference between absence

among elementary and secondary staff. Elementary staff tended to have a higher absence rate than secondary staff.

Conclusions

“Conclusions are assertions based on the findings”(Lunenburg & Irby, 2008, p. 240). The findings of this study furthered the body of research in the area of teacher absenteeism and incentive plans to reduce teacher absenteeism while increasing finances.

Implications for Action

The review of literature revealed that there is need for concern for teacher absenteeism as it relates to district finances and student learning. Sawchuck (2008) stated that data from the National Center for Education Statistics placed 2008 expenditures on substitute teachers at about 4 billion annually; costs typically borne by individual schools' discretionary budgets. In addition, Snyder found that large urban schools showed a higher teacher absence rate (2004). Absences are sometimes discretionary in nature, meaning the employee can make a determination as to whether he or she really needs to be absent (Jacobs, 2007; Clotfelter, Ladd, & Vigdor, 2009).

Center School District implemented an incentive program unlike others studied by this researcher. The TIP program, which utilized existing funds, demonstrated promise and provided a significant impact that did curb teacher absenteeism in the short term. The Teacher Incentive Pay program would have continued; however, it was discontinued due to budget cuts that were made. Because there were no additional funds used to support the TIP, the Board of Education could not justify continuing the plan when severe budget cuts were being made (e.g. salary freezes, cutting of staff and reduction of programs, as a result of the recession).

Recommendations for Future Research

Although results were mixed the research discussed has revealed valuable findings worth further study. In this study, Center School District provided an option in which staff members were awarded a stipend at the end of each school year for unused sick and personal days. This program was different from typical paid leave pay-outs. Rather than waiting until the end of employment or retirement to cash in unused days, a stipend was paid at the end of each school year for days not used. This type of plan is an alternative way for encouraging good attendance in the immediate rather than delay the incentive. Based on situations such as current economic conditions and increased life expectancy due to improved health, teachers are not retiring from the profession like they once were. Younger generations are leaving the professions at a higher rate than previous generations. This type of program may provide for a more immediate return which younger generations may respond to such an incentive. School boards would be wise to review and revise paid leave policies and plans that will help encourage better attendance. Some school districts have incorporated High Deductible insurance plans that encourage employees to take more control of their health while providing appealing incentives to the policy holder. Experience has shown that employees are less abusive when their costs increase; thus, they may practice better health management and visit the doctor less. Like these High Deductible insurance plans, employee attendance could benefit if approached in the same manner. Further study is warranted that investigates teacher absenteeism in districts that use incentives other than that, which were studied. The second recommendation is to survey staff concerning absenteeism and incentive plans. Additional insight may be gained by surveys of teacher thoughts and opinions

about incentive and absenteeism programs. Third, the researcher recommends that a comparative study be conducted to analyze paid leave plans with school districts comparable to the Center School District's. The fourth recommendation is that, if Center School District were to re-implement the plan, further study may reveal additional findings over an extended period of time in order to gather more information that can be analyzed in greater depth.

Finally, the researcher recommends that student achievement be studied in conjunction with teacher absence. Common sense and research (Clotfelter, Ladd, & Vigdor, 2009; Dell'Angela & Little, 2006; Miller, Murnane & Willet, 2008; Woods & Montagno, 1997.) demonstrates that strong teacher attendance positively impacts student achievement; however, more in-depth studies are needed to further confirm this.

Concluding Remarks

“You can revise curriculums, toughen graduation requirements, and sing the songs of excellence until you're hoarse: If teachers fail to show up for work, all your good intentions will wither on the boardroom floor” (Freeman & Grant, 1987, p. 31). In the era of high stakes testing and increased accountability it is concerning that populations with the greatest needs are most negatively impacted by teacher absence. Good teachers are needed in every school but especially in high poverty and minority populations. Parents of children in these areas often do not have a choice about where they live. They too deserve a quality education despite the hardships they face and depressed conditions they are often subject to or in which they are engrossed. The researcher agrees that teacher absenteeism cannot be ignored (Whitehead, 2009). The

evidence is alarming and demands attention to improve teacher attendance, especially in areas with the most elevated needs.

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APPENDIX A: IRB REQUEST FORM



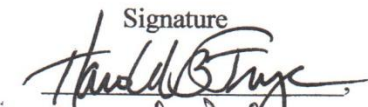
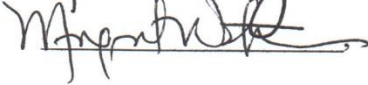
SCHOOL OF EDUCATION
GRADUATE DEPARTMENT

Date: June 22, 2010
IRB PROTOCOL NUMBER _____
(IRB USE ONLY)

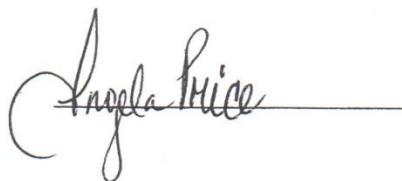
IRB REQUEST
Proposal for Research
Submitted to the Baker University Institutional Review Board

I. Research Investigator(s) (Students must list faculty sponsor first)

Department(s) School of Education Graduate Department

Name	Signature	
1. Dr. Harold Frye		Major Advisor
2. Peg Waterman		Research Analyst
3. Angela Price	_____	Principal Investigator
4. Dr. Sheryl Cochran		

Principal Investigator: Angela Price
Phone: 816-519-9217
Email: aprice@center.k12.mo.us
Mailing address: P.O. Box 302
Belton, MO 64012



Expected Category of Review: Exempt Expedited Full Renewal

II: Protocol Title

Effects of the Teacher Incentive Pay Plan in the Center School District"

Summary:

The following summary must accompany the proposal. Be specific about exactly what participants will experience, and about the protections that have been included to safeguard participants from harm. Careful attention to the following may help facilitate the review process: In a sentence or two, please describe the background and purpose of the research.

The Center School District Teacher Incentive Pay program was initiated because the superintendent of the district, Dr. Robert Bartman had concerns about the number of teacher absences and the effect on student performance as measured by the state and district state assessments. The board of education, district administrators, and members of the Teacher Administrator Board committee designed the features of this program. On August 18, 2008, the Center Board of Education approved the implementation of the pilot of the Teacher Incentive Pay plan. This plan was designed to discourage unnecessary absences while keeping primary staff in the classroom thus positively impacting student achievement.

The purpose of this study is to determine if the implementation of the Teacher Incentive Pay program had an effect on the attendance and cost for certificated staff in the Center School district for the 2008-2009 and 2009-2010 school year. The attendance and financial data from the 2008-2009 and 2009-2010 school year will be compared to baseline attendance and financial data from the 2007-2008 school year to establish whether or not there was improvement made as it related to teacher attendance and substitute cost reduction. This study also will analyze the attendance between school buildings as well as attendance between elementary, middle, and high school levels within the Center School District.

Briefly describe each condition or manipulation to be included within the study.

What measures or observations will be taken in the study? Teacher attendance and substitute teacher cost will be calculated utilizing district attendance and substitute cost data.

If any questionnaire or other instruments are used, provide a brief description and attach a copy.
No questionnaire or other instruments will be used.

Will the subjects encounter the risk of psychological, social, physical or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk.
No, there are no contacts planned with anyone and, therefore, no potential or real risks are at stake.

Will any stress to subjects be involved? If so, please describe.
No, there will be no stress imposed on subjects involved.

Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing.
No, the subjects will not be deceived or misled in any way.

Will there be a request for information which subjects might consider to be personal or sensitive? If so, please include a description.
No, there will not be request for information which subjects may consider to be personal or sensitive.

Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading? If so, please describe.
No, subjects will not be presented with materials which might be considered offensive, threatening, or degrading.

Approximately how much time will be demanded of each subject?
There are no subjects as the study will utilize existing data files and therefore, no time required of anyone.

Who will be the subjects in this study? The subjects in the Teacher Incentive Pay study are teachers.

librarians and counselors from the Center School District.

How will they be solicited or contacted? The subjects in the study will not be solicited nor contacted.

Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation. There were no volunteers for this study. The superintendent of the Center School District gave me permission to analyze staff information and data for this study.

What steps will be taken to insure that each subject's participation is voluntary? NA

What if any inducements will be offered to the subjects for their participation? There will be no inducements offered in this study.

How will you insure that the subjects give their consent prior to participating? NA

Will a written consent form be used? Yes. The researcher obtained written permission to conduct this study from the superintendant of the Center School District. The written permission is attached. **If so, include the form. If not, explain why not.**

Will any aspect of the data be made a part of any permanent record that can be identified with the subject? No data will be made of any permanent record that can be identified with subjects in this study. **If so, please explain the necessity.**

Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher or employer? No. The fact that any subject did or did not participate in a specific experiment or study will not be made a part of any permanent record available to a supervisor, teacher, or employer. **If so, explain.**

What steps will be taken to insure the confidentiality of the data? The names of subjects in the study will be identified by numbers to provide confidentiality.

If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society? No, there are no offsetting benefits that might accrue to either the subjects or society because of this study.

Will any data from files or archival data be used? If so, please describe

Yes. The researcher will retrieve district financial and attendance data from the 2007-2008, 2008-2009 and 2009-2010 school year to conduct the study. Attendance rates and cost associated with each staff member will be renamed to protect confidentiality.

APPENDIX B: PERMISSION TO CONDUCT RESEARCH

2-24-2011

Ms. Angela Price
School of Education Graduate Department
Baker University



BAKER
UNIVERSITY
Own Confidence

RE: IRB: BU-2010-12: Effects of the Teacher Incentive Pay Plan in the Center School District

Dear Ms. Price:

The Baker University Institutional Review Board (IRB) has reviewed your research project application (BU-2010-12) and approved this project under the Exempt category. As described, the project complies with all the requirements and policies established by Baker University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

1. A Project Status Report must be filed with the IRB annually for continuation.
2. Any significant change in the research protocol must be reviewed and approved by the IRB prior to altering the project.
3. Any change in the investigator(s) named in the original application must be reviewed and approved by the IRB prior to altering the project.
4. Any injury to a subject because of the research procedure must be reported to the IRB immediately.
5. When signed consent forms are required:
 - a. the primary investigator must retain the forms until filed,
 - b. consent forms must be filed with the OIR with the annual report,
 - c. the subject must be given a copy of the form at the time of consent.
6. If this is a funded project, a copy of this letter must be with the grant file.

The Office of Institutional Research (OIR) must be notified when this project is completed or terminated. As noted above, you must provide an annual status report to receive approval for maintaining your project. If your project receives funding which requests an annual update, you must file your annual report at least one month prior to the annual update.

Thanks for your cooperation. If you have questions, please contact me.

Sincerely,

William R. Miller, Ph.D.
Chair, Baker University Institutional Review Board

CC: Harold Frye, Ph.D., Faculty Supervisor.

P.O. Box 65
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Dr. Robert Bartman, Superintendent
8701 Holmes, Kansas City, Missouri 64131-2899
Telephone: (816) 349-3312
Fax: (816) 349-3431
E-mail: rbartman@center.k12.mo.us

A Fully Accredited, Missouri A+ School District...

July, 26, 2010

To Whom It May Concern:

The purpose of this letter is to advise that I authorized and approved Angela Price's use of Center data to conduct a research project associated with her dissertation on the impact of the Center School Board approved incentive pay program on teacher attendance.

Furthermore, I shall be eager to review her findings and conclusions in the context of Board policy recommendations.

Sincerely,

A handwritten signature in black ink that reads "Bob Bartman". The signature is written in a cursive, flowing style.

Robert E. Bartman

Superintendent

APPENDIX C: TEACHER INCENTIVE PAY PROGRAM

Teacher Incentive Pay (TIP) Program

Approved on a trial basis for the 2008-2009 school year.

Students learn more efficiently when the regular classroom teacher is healthy and regularly leading the instruction each day school is in session. Therefore in order to encourage instructional staff to better attend to their own health needs so that they can maximize their instruction time with students the following program shall be implemented on a trail basis for the 2008-2009 school year:

Each full time building level certificated classroom teacher, librarian, guidance counselor, and other specified certificated building level instructional staff shall receive as part of a pilot teacher incentive pay (TIP) program a stipend of \$1,020 in addition to their contracted salary amount. The TIP for each eligible individual shall be reduced by \$85 for each day of sick leave or personal leave taken during the contracted year. The net amount of each earned TIP shall be paid to the individual in a lump sum payment after the end of the school year. This program shall not diminish or in any other way affect the current Board policy regarding sick leave and personal leave accrual.

APPENDIX D: EMAIL CORRESPONDENCE FROM DAVE LEONE

From: Dave Leone
To: All District-Staff
Date: 8/19/2008 9:00 AM
Subject: Teacher Incentive Pay
Attachments: Teacher Incentive Pay.doc

Last evening at the Board of Education work session, the Board approved the attached Teacher Incentive Pay (TIP) plan. This plan was designed to encourage stellar attendance among staff in hopes that we have the best person in the classroom at all times - you. Students learn more efficiently when the regular classroom teacher is healthy and consistently leading instruction each day. In conjunction with this plan encouraging healthy behaviors, Sarah Hart will be sending out information about the "Center on Legs" walk to Boston later today.

In talking with various staff members, this plan received overwhelming support. However, this is a pilot program. The program will be evaluated at the end of the school year by the Board of Education with the possibility of expansion to additional staff in 2009-10. Hopefully results show increased attendance among staff members.

The TIP plan includes:

- Classroom teachers
- Art/Music/PE Teachers
- Special Ed. Teachers including Speech/Language Pathologists
- Counselors
- Librarians
- Reading Teachers and Coaches

The TIP plan starts immediately. If you have questions, please visit with your building administrator or call me directly.

Thanks,
David Leone

APPENDIX E: TEACHER INCENTIVE PAY

Teacher Incentive Pay (TIP)

The TIP program was first operational during the 2008-2009 school year. Compared to the base year, 2007-2008, teachers used 512 fewer sick leave and personal leave days. Although the TIP program may not have been the sole reason for the improved teacher attendance, I believe it significantly influenced the increase in teacher attendance.

Students learn more efficiently when the regular classroom teacher is healthy and regularly leading the instruction each day school is in session. Therefore in order to continue to encourage instructional staff to better attend to their own health needs so that they can maximize their instruction time with students, it is recommended the TIP be continued for the 2009-2010 school year.

Each full time building level certificated classroom teacher, librarian, guidance counselor, and other specified certificated building level instruction staff member shall receive as part of the teacher incentive pay program (TIP) a stipend of \$1,020 in addition to their contracted salary amount. The TIP for each eligible individual shall be reduced by \$85 for each day of sick leave or personal leave taken during the contracted year. The net amount of each earned TIP shall be paid to the individual in a lump sum payment after the end of the school year. This program shall not diminish or in any other way affect the current Board policy regarding sick leave and personal leave accrual.

Boone	121.5 fewer days
Center Elementary	57.5 fewer days
Indian Creek	39.5 fewer days
Red Bridge	41.0 fewer days
Middle School	194.5 fewer days
High School	86.0 fewer days
Center Alt. School	18.5 more days
Early Childhood	<u>9.5</u> more days
TOTAL	512.0 fewer days

APPENDIX F: EMAIL CORRESPONDENCE FROM DR. BARTMAN

From: Robert Bartman
To: Angela Price; Danelle Marsden; Kim Smith; Linda Williams; Sandage, T...
Date: 8/14/2009 8:00 AM
Subject: Connect Ed/TIP

For most of our students school starts Monday. Earlier this week I did a ConnectEd call to our families to remind them of the school starting date. Please follow-up with a principal ConnectEd call this evening or over the weekend. It would be great to start school with 100% attendance.

At the July Board meeting the Board approved the continuation of the **TIP** program. Last year teachers earned about \$113,000 through the **TIP** and our students benefitted from having the regular teacher in the classroom more consistently. The program remains the same as last year. Please make sure your teachers understand that the TIP program is up and running for the current year.

REB