# The Perceived Impact of the Four-Day School Week on Teacher Recruitment, Teacher Retention, and Job Satisfaction 

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The Perceived Impact of the Four-Day School Week on Teacher Recruitment, Teacher Retention, and Job Satisfaction

## by

Kristi Sue Marion

February 2018

A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of

Doctor of Education
School of Education

The Perceived Impact of the Four-Day School Week on Teacher Recruitment, Teacher Retention, and Teacher Job Satisfaction by

Kristi Sue Marion

This Dissertation has been approved as partial fulfillment of the requirements for the degree of

Doctor of Education

Lindenwood University, School of Education


Dr. Kathy Groper, Dissertation Chair


Dr. Sherry DeVde, Committee Member


Dr. Kevin Kopp, Committee Member


## Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

Full Legal Name: Kristi Sue Marion

$$
\text { Signature: These Sue Main Date: } 2 / 26 / 18
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#### Abstract

As school districts consider transitioning from a traditional five-day school week to a four-day school week, administrators and school boards seek information about the fourday school week to assist in making the best decision possible. This collective case study was undertaken to examine the perceptions of administrators, school counselors, and teachers on the four-day school week and the impact of the new calendar format on teacher recruitment, teacher retention, and job satisfaction. Three school districts were studied; each began implementation of the four-day school week during the 2015-2016 academic year. A total of 21 school personnel were interviewed, including three superintendents, three building administrators, three school counselors, and 12 teachers. Participants overwhelmingly identified the four-day school week as a benefit to them personally, citing the ability to balance work and family as positive. Employees of two of the three school districts reported improved ability to recruit potential candidates for teaching positions. Educators from all three districts reported an improvement in teacher retention, as the four-day schedule is very popular with teachers. Also noted as valuable and important to the teaching staff is the additional time for professional development and collaboration built into the school calendar. Given the difficulties small rural school districts frequently face when securing and retaining a highly qualified teaching staff, the findings of this study point to an unintended, yet powerful outcome of implementation of the four-day school week-the ability to recruit and retain teachers.


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## Chapter One: Introduction

The National Center for Education Statistics (NCES) (2013) reported rural areas house more than $50 \%$ of operating school districts. Roughly one-third of all public schools exist in rural regions of the United States (NCES, 2013). To be considered rural by the U.S. Census Bureau, a community must have fewer than 2,500 residents or meet low-density requirements (Barton, 2012). Nearly $25 \%$ of the nation's students are educated in rural schools (Barton, 2012). Ulferts (2015) argued, "Rural schools have a clear interest in their most valuable resource: their teaching staff" (p. 1).

Barton (2012) noted, "[In] a national survey of school administrators in forty-four states, $84 \%$ of responding districts said they experienced some difficulty in filling teaching vacancies; more than half of the respondents reported moderate to extreme difficulty" (p. 1). This problem is due, in part, to the isolation of many rural schools (Barton, 2012). The difficulty faced by remote rural school districts is exacerbated $b$ the fact that they are isolated geographically from cities and towns (Barton, 2012). Player (2015) stated:

The fact that rural areas produce fewer people who are qualified to become teachers, combined with the fact that teachers tend to prefer not to leave the settings in which they grew up, creates the potential for a significant lack of available teachers in rural areas. (p. 5)

In addition, the applicant pool for open rural teaching positions lacks sufficiently qualified candidates (Oliveira, 2015).

Some state legislatures have introduced policies aimed at stimulating substantial reform through the reorganization of traditional school governance structures (Farbman, Davis, Goldberg, \& Rowland, 2015). A typical school-reform-by-choice structure
involves district leaders submitting an application to the state to earn a more autonomous status (Farbman et al., 2015). Within that application, schools propose how they will reconfigure structural elements to provide an improved educational model (Farbman et al., 2015). Districts are expected to fund the innovation, reconfiguring the educational delivery model in a way to extract more value out of existing dollars (Farbman et al., 2015).

The four-day school week has become a viable alternative for school districts looking for creative and innovative ways to manage tight budgets (National Conference of State Legislatures [NCSL], 2016). The utilization of a four-day school week may provide savings by reducing transportation, food-service, custodial, and utility costs (Tharp, Matt, \& O’Reilly, 2016). Koki (1992) offered, "The new schedule may not work in urban areas, but it has demonstrated its effectiveness in small, rural school districts" (p. 8). Supporters note enhanced positive outlook for teachers, as well as students (National Conference of State Legislatures, 2016). In addition, attendance rates have been positively impacted for both groups (NCSL, 2016). Koki (1992) noted in order to promote more active learning, one should consider structuring available learning time in more productive ways. Non-traditional approaches represent a key component of school reform models and calendar organization frameworks. (Koki, 1992).

## Background of the Study

The Arab Oil Embargo of the 1970s and the subsequent deregulation of natural gas forced industries throughout the United States to search for energy saving options (Leiseth, 2008). The Emergency Conservation Act of 1979 provided authority to the executive branch of the United States government to implement stiff federal and state
austerity measures (Jess, 1997). One of the initiative's key factors was a voluntary fourday work week for industry and public schools (Jess, 1997). Increased budgetary pressure in the United States has forced schools to consider alternative scheduling patterns in an effort to reduce operational costs (Tharp et al., 2016). School districts in the U.S. are considering abbreviated work week schedules patterned after industry and government to address financial difficulties (Turner, Finch, \& Ximena, 2017).

Plucker, Cierniak, and Chamberlain (2012) noted positive impacts on instruction and the use of classroom time have been realized by districts utilizing a four-day school week. Other potential benefits of the four-day school week include heightened attendance rates for teachers and students, improved attitude for faculty and students, and more efficient use of instructional time (Plucker et al., 2012). Added minutes available for professional development and teacher preparation has also been described as a benefit (Plucker et al., 2012). Heyward (2017) emphasized similar reasons schools might consider transitioning to the four-day school week. Districts often consider the four-day school week to find cost savings (Heyward, 2017). In addition, school officials believe the four-day school week will improve quality of life for teachers, students, and community members by affording them one day each week to accomplish personal tasks such as visiting the dentist (Heyward, 2017).

According to data collected by the National Conference of State Legislatures (2016), 21 states currently allow school districts to operate on a four-day week school calendar. Missouri is one of those states, with the legislature approving that option in 2009 (Mo. Rev. Stat. §160.041, 2016; Mo. Rev. Stat. §171.029, 2016; Mo. Rev. Stat. §171.031, 2016). Missouri Revised Statutes §160.041, §171.029, and §171.031 (2016)
require a minimum of 142 instructional days and 1,044 instructional hours per school year (Rowland, 2014). To attain the state-mandated minimum instructional hour criteria, the four school days are each lengthened to reach the minimum 1,044 hours in only 142 instructional days (Rowland, 2014). The bills stipulated if academic achievement on the Annual Performance Report drops over two consecutive years, the district must return to a five-day week (Knapp, 2014).

Districts implementing the four-day week typically choose Monday or Friday as the day off from school, with school in session for four consecutive days (Plucker et al., 2012). Districts in Iowa reported cutting Monday out of the school week reduced absenteeism, since parents could schedule doctor appointments for children on that day (Morones, 2013). Teachers and staff were also encouraged to use the fifth day for medical appointments and personal business to reduce teacher absenteeism (Morones, 2013).

## Conceptual Framework

According to Fraenkel et al. (2015), researchers make assumptions that orchestrate the approach to an investigation. To build the foundation for this study, Boylan et al.'s (1993) Rural Teacher Retention Model was selected as a conceptual framework as it was most closely associated with the problem and purpose of the study. Rural schools experience problems maintaining a consistent teaching workforce due to perpetual turnover. Boylan et al. (1993) analyzed teacher satisfaction and retention in rural school districts of New South Wales, Australia (Boylan et al., 1993). While this model did not examine rural schools implementing a four-day school week, the four spheres of influence reported by Boylan et al. (1993) which resulted in the creation of the

Rural Teacher Retention Model provided a logical way to categorize responses generated by participants who were interviewed.

The four spheres of influence which Boylan et al. (1993) recognized included: within classroom factors, whole school factors, community factors, and family-personal factors (Ulferts, 2015). In 2002, Davis designed and administered a quantitative survey to measure teacher recruitment, retention, and job satisfaction factors based on Boylan et al.'s four spheres of influence. The Davis (2002) survey asked rural teachers to identify strategies they felt were important and impactful to encourage teachers to select and remain teaching in small rural Montana school districts (Ulferts, 2015). Davis (2002) found rural teacher recruitment was most robustly influenced by circumstances within and related to the family-personal sphere, while teacher retention was most powerfully affected by the community sphere (Ulferts, 2015).

The interview questions for this study were carefully designed to allow participants from rural school districts to freely share perceptions of the four-day school calendar as it relates to teacher recruitment, teacher retention, and job satisfaction. The four spheres of influence developed by Boylan et al. (1993) were not used to construct the interview questions, but rather, to categorize the responses of participants. The interview questions were designed to align to the study research questions.

Researchers in the field of teacher retention have indicated the most influential sphere of influence on teacher recruitment is the family-personal sphere (Boylan et al., 1993; Davis, 2002). However, rural teachers have been most swayed to persist in their teaching assignments because of the community sphere (Boylan et al., 1993; Davis, 2002). The analysis of data from this study was intended to assist rural school leaders in
their efforts to determine whether the four-day school calendar impacts one of Boylan et al.'s (1993) four spheres of influence enough to encourage teachers to select employment in a district based upon the four-day school week schedule. In addition, an analysis of the data may allow school leaders to determine if the community sphere of influence, namely the identification of the school culture as a four-day school, is significant in the retention of teachers.

## Statement of the Problem

Despite the relatively long history of districts with four-day school weeks, research on the four-day school week is shallow (Hopkins, 2013). Plucker et al. (2012) acknowledged the "lack of peer-reviewed research" (p. 1). Turner et al. (2017) recognized little research on compressed work weeks in the school setting has been done. Donis-Keller and Silvernail (2009) from the University of Southern Maine shared a broad conclusion from the limited research that the four-day week has no negative consequence on student learning outcomes.

The Education Commission of the States examined the fiscal rewards schools can expect when switching from a five-day school week to a four-day school week (Griffith, 2011). The Education Commission of the States reviewed data from six school districts, and these districts reported an actual savings of between $0.4 \%$ and $2.5 \%$ (Griffith, 2011). The Bisbee Unified School District superintendent explained the financial savings of $2.5 \%$ might not be as large as some had anticipated, but were significant enough to justify continuation of the four-day school week (Griffith, 2011).

Oliveira (2015) conveyed the frustrations of teachers who remain in rural schools. Teachers who remain in rural schools express the problem of constantly reinventing the
wheel due to teacher turnover, which results in burnout (Oliveira, 2015). Because teacher turnover rates have been historically high in small rural school districts (BehrstockSherratt, 2016), a study of the perceived value of the four-day school week on teacher retention, recruitment, and job satisfaction may reveal an unintended benefit of the transition from a five-day school week to a four-day school week.

## Purpose of the Study

Ulferts (2015) contended, "Rural schools have a clear interest in their most valuable resource: their teaching staff" (p. 14). Rural educational leaders require clear vision of the issues impacting the recruitment and retention decisions made by teachers in small school districts (Ulferts, 2015). Yet, rural schools continue to be under-represented in comparison to their suburban and urban school counterparts within the school reform literature (Miller, 2012). Barratt, Cowen, Toma, and Troske (2015) stated, "The absence of emphasis on rural locales in the educational policy literature and in teacher quality literature, specifically, is glaring" (p.1).

The purpose of this study was to determine whether the four-day school week, particular to rural school districts, has an added feature of enhanced teacher recruitment, increased teacher retention, and improved teacher job satisfaction. The goal of this study was to add to the body of existing knowledge regarding the impact of the four-day school week on teacher recruitment and retention. This study will provide districts of similar populations and comparable characteristics with valuable data to consider when developing policies related to teacher recruitment and retention (Leiseth, 2008).

Research questions. The following research questions guided the study:

1. What are the perceptions of teachers, counselors, building principals, and superintendents related to teacher retention within rural schools implementing a four-day school week?
2. What are the perceptions of rural school administrators regarding the quality of applicants for professional teaching positions since transitioning to a four-day school week?
3. What are the perceptions of teachers, counselors, building principals, and superintendents working in a rural four-day school week district regarding job satisfaction and positive working conditions?

## Significance of the Study

This qualitative study on the impact of the four-day school week on teacher recruitment, retention, and job satisfaction included an examination of the four-day school week that has heretofore received little attention by researchers (Hopkins, 2013; Plucker et al., 2012; Turner et al., 2017). Turner et al. (2017) conducted a study that included 136 faculty and staff members in three rural school districts in Missouri. Turner et al. (2017) engaged a similar demographic; however, the focus of the study was to compare whether the certificated staff favored the four-day school week more than the hourly staff.

This study is significant as it is a collective case study incorporating results from three separate rural school districts involving teachers, school counselors, building administrators, and superintendents. Specifically, this study was designed to fill the gap found in existing literature on the perceptions of educational staff concerning the value of
the four-day school week in the areas of teacher recruitment, teacher retention, and job satisfaction. The variety of perspectives obtained from representatives of four different educational positions was significant in building the knowledge base about the impact of the four-day school week on teachers and administrators. The results of this study will provide school districts contemplating a transition to the four-day school week additional information to include in the decision-making process.

## Definition of Key Terms

For the purposes of this study, the following terms are defined:
Four-day school week. Donis-Keller and Silvernail (2009) explained, "A fourday week during the entire school year consisting of four lengthened instructional days with a fifth day off" (p. 3).

Rural school district. Barton (2012) stated, "To be considered rural by the U.S. Census Bureau, a community must have fewer than 2500 residents or meet low density requirements" (p. 1).

## Limitations and Assumptions

The following limitations were identified in this study:
Sample demographics. This study was limited to results received from 21 participants working in three rural school districts in Missouri. Given the participating school districts were identified as rural, results may not be generalizable to districts with differing demographics. The scope of the project was limited to the responses received from teachers, school counselors, building principals, and superintendents in the three participating rural Missouri school districts. The decision to include only certificated staff was made at the onset of the project design. After completion of the interview
process, the importance of input on the topic by non-certificated staff was revealed; however, there was not a mechanism for capturing those data. Researchers may want to include non-certificated staff in future discussions on this topic.

Instrument. The interview questions were designed by the investigator. The study was limited to the veracity of information gained through the transcription of recorded interviews and the analysis of compiled field notes.

The following assumption was accepted:

1. The responses of the participants were offered honestly and without bias.

## Summary

School turnaround framework touted in the Race to the Top competition are incongruous in the context of the rural teacher labor market (Miller, 2012). Thus, the federal School Improvement grant process is inherently skewed for rural school districts placing them at a distinct disadvantage (Miller, 2012). An understanding of the difficulties that exist within the rural teacher labor market is hard to ascertain, in part due to the generic classification of districts as rural (Miller, 2012).

Schools classified as rural, yet situated just outside of urbanized areas often benefit from greater resources and a distinctly different student body (Miller, 2012). Studies involving rural schools often classify all rural schools in one category without regard to the remoteness of the district's locale (Miller, 2012). This type of lump sum classification fails to delineate the important differences in rural communities (Miller, 2012).

This study was designed to explore implementation of the four-day school week in rural schools through the lenses of teacher recruitment, teacher retention, and teacher job satisfaction. In the following chapter, literature regarding the history of the four-day
school week is reviewed. The related topics of teacher salaries and rural schools are included to contribute to understanding of the four-day school week's potential impact on rural education.

## Chapter Two: Review of Literature

The topics in the literature review for this study were selected to focus primarily on the four-day school week. The available research includes history of the four-day school week, student achievement related to the four-day school week, a discussion of anticipated and actual financial savings, and the benefits of increased collaboration and planning time for teachers working in the four-day school week. In addition, the related topics of teacher attrition, teacher recruitment, teacher retention, and teacher job satisfaction are discussed. Furthermore, the related topics of teacher salaries and rural schools are included to contribute to understanding of the four-day school week's potential impact on rural education.

Barratt et al. (2015) noted rural schools remain under examined in comparison to corresponding suburban schools across a variety of reform dimensions. To better discern the issues that contribute to teacher recruitment and retention, rural leaders need to develop a clearer picture of the influences that cause teachers to accept positions in and remain teaching in small rural school districts (Ulferts, 2015). In the Gallup Survey of Teacher Satisfaction, researchers indicated school leaders have important issues to address in the arena of workplace well-being (Lopez \& Sidhu, 2013).

## Conceptual Framework

Boylan et al. (1993) developed a Rural Teacher Retention Model as a result of a two-year study of teacher retention and satisfaction in the rural region of New South Wales, Australia. The purpose of the study was to address a major concern, the staffing of rural schools (Boylan et al., 1993). Boylan et al. (1993) claimed, "Good teachers who are prepared to stay in isolated communities for relatively long periods of time are seen
as assets to those communities" (p. 2). Boylan et al.'s (1993) synthesis of data collected from 1,100 written responses and 140 follow-up interviews with teachers produced a conceptual model for teacher retention.

The following four spheres of influence on a teacher's desire to remain in a rural school district were identified: 1) within-classroom activities; 2) whole school-level activities; 3) community-level activities; and 4) family factors (Boylan et al., 1993). Boylan et al. (1993) posited, "It is likely that the way in which teachers perceive the community in which they work exerts an influence, possibly considerable, upon their preparedness to stay" (p.11). Teacher retention is a complex set of interactions among the four spheres of influence, with two of the four spheres having an immediate and direct influence on the desire of the teacher to remain: within-classroom activities and family factors (Boylan et al., 1993).

Within-classroom activities were determined to be those that pertain to the teacher's degree of satisfaction and sources of that satisfaction with teaching (Boylan et al., 1993). Boylan et al. (1993) stated, "High levels of satisfaction with teaching were found to correlate with high levels of commitment to teaching as a professional career" (p. 15). Teacher satisfaction is reportedly derived from interactions with children in the class, colleagues and fellow teachers, and the implicit challenges involved with teaching (Boylan et al., 1993).

Whole school-level activities reflect the assortment of activities teachers participate in outside of the actual classroom (Boylan et al., 1993). These include relationships with coworkers, executive staff and regional personnel, and work-related issues (e.g., administrative responsibilities, availability of high-quality professional
development, and the state of repair or disrepair of the school) (Boylan et al., 1993). This sphere of influence was reported in a negative light in the research (Boylan et al., 1993). Examples of the negative comments included items such as executives putting their own advancement ahead of students, too much paperwork, and poor communication within the school (Boylan et al., 1993).

Community-level activities represent a more complex set of influences (Boylan et al., 1993). These include parental support for the educational process within the school, local community engagement, the advancement of durable friendships, the geographic venue of the school, the secure climate where children can develop, and the rural style of living (Boylan et al., 1993). Boylan et al. (1993) reported:

This analysis of the community level influence suggests that the community has an important role to play in retaining teachers in rural schools, particularly through assisting and supporting teachers to become part of the local community; and, the advantages associated with the rural lifestyle should be promoted in attracting teachers to rural schools. (p. 17)

Community members play an important role in attracting and retaining teachers in rural communities by their acceptance of teachers into the community (Boylan et al., 1993).

Family factors were reported as key in a teacher's decision to remain at a school district (Boylan et al., 1993). A teacher's resolve to remain in a school is strongly impacted by family and personal factors (Boylan et al., 1993). Topics such as the ability to purchase a residence, commitment to the family, quality of personal life, and fulfillment in rural living were reported as positive influences (Boylan et al., 1993). In addition, other influences could affect, either positively or negatively, a teacher's
decision to remain (Boylan et al., 1993). These include opportunity for employment for other family members; access to education for teacher's children; and access to sporting, social, and recreational amenities (Boylan et al., 1993).

Utilizing the work of Boylan et al. (1993) as a guide, Davis (2002) completed a study to identify inherent factors that attract and retain teachers to Montana's smallest elementary schools. Davis (2002) related, "Factors associated with the family-personal sphere had the greatest influence on teachers' decisions to accept employment" (p. 110). Community sphere factors were influential in teachers' decisions to remain in their current schools (Davis, 2002). Davis (2002) shared spouse or partner employment does not influence teachers' decisions to either accept or remain. Further, Davis (2002) reported enjoyment of the rural lifestyle ranked first among factors that influence teacher decisions to accept employment and second in the influence to remain.

Ulferts (2015) sought to duplicate the study completed by Davis (2002) to determine if the findings presented by Davis were generalizable to rural schools in other sectors of the United States. The results of the study by Ulferts (2015) were compared and contrasted to the earlier Davis (2002) study. The whole-school sphere was more impactful to teacher recruitment in the Ulferts (2015) study than it was found to be in the Davis (2002) study. Additionally, both the Davis (2002) and Ulferts (2015) studies supported the findings of Boylan et al. (1993) on the importance of the community sphere in teacher retention. Further, Ulferts (2015) reinforced the critical role schools can play in increasing teacher retention by fostering involvement in the community. Ulferts (2015) suggested districts must recognize what attracts a teacher to accept a position in a rural district is different from the factors that influence teachers to remain.

Ulferts (2015) shared, "By recognizing what attracts teachers to teach in rural schools is not necessarily what motivates them to stay, rural leaders should be able to increase retention of their teachers by facilitating more community support for them" (p. 22). The implications for practitioners noted by Ulferts (2015) include the assertion recruitment factors differ significantly from retention factors. Recruitment of teachers was reported as one of the factors districts considering the four-day school week find attractive (Heyward, 2017).

## History

The first record of a school implementing a four-day school week dates back to the 1930s in South Dakota (Hewitt \& Denny, 2011; Heyward, 2017). A more contemporary example of the four-day schedule was adopted by the Cimarron School District in New Mexico in 1973 (Heyward, 2017). Numerous unanticipated academic outcomes have been reported by schools adopting the four-day school week who did so, originally, for the expected financial savings (Alves, 2017; Davy \& Hall, 2015; Hadfield, n.d.; Heyward, 2017). The WACO Community School District in Iowa is pursuing the four-day school week for different reasons (Morones, 2013). The WACO district's superintendent said he "hopes to squeeze more time out of the school calendar for student enrichment and teachers' professional development" (Morones, 2013, p. 10).

Heyward (2017) interviewed 21 school administrators from multiple states with experience with a four-day school week. The administrators reported six primary reasons districts evaluate and consider transitioning to a four-day school week (Heyward, 2017). Those reasons include the following: 1) cost savings; 2) improving quality of life; 3) attracting teachers and students; 4) increasing time for teacher collaboration and
planning; 5) improving school culture and reducing absences; and 6) providing students with additional learning opportunities (Heyward, 2017).

In Missouri, through Missouri Revised Statutes §160.041, §171.029, and $\S 171.031$ (2016), legislators provided the guidelines for school districts interested in the four-day school week calendar (Rowland, 2014). Annual Performance Report data monitoring requirements were included in Missouri Revised Statute §171.029 (2016). Missouri Revised Statute $\S 171.029$ (2016) specified:

If a school district that attends less than one hundred seventy-four days meets at least two fewer performance standards on two successive annual performance reports than it met on its last annual performance report received prior to implementing a calendar year of less than one hundred seventy-four days, it shall be required to revert to a one hundred seventy-four-days school year in the school year following the report of the drop in the number of performance standards met. When the number of performance standards met reaches the earlier number, the district may return to the four-day week or other calendar consisting of less than one hundred seventy-four days in the next school year. (para. 2)

Schools can meet requirements for 1,044 hours of instruction in four lengthened days each week (Rowland, 2014). School districts utilizing this option are required to schedule at least 142 instructional days (Rowland, 2014).

According to Alves (2017) when reporting for the Columbia Missourian, schools have made the transition to a four-day calendar out of financial desperation. Superintendent Todd McCracken from the East Newton School District, interviewed by Alves (2017), said his district was heavily dependent on state revenue. McCracken went
on to say the rising cost of transportation along with precarious transportation funding put his district "...stuck between a rock and a hard place" (Alves, 2017, para. 9). The transition to the four-day school week allowed rural districts to allocate funds for the purchase of a needed school bus, to repair a leaking roof, or to replace a broken elevator (Newman, Pavolva, \& Luna, 2016).

Other noted advantages of the four-day school week include more time for students to work outside the home (Alves, 2017; Bradley, 2017). A student from Orearville, Missouri, was interviewed, and the student conveyed the importance of the available fifth day for working on the family farm (Alves, 2017). Bradley (2017) concurred, reporting student morale was improved in districts implementing a four-day school week. Bradley (2017) reported, "The four-day format provides opportunities for an extra work day at an after-school job" (para. 2).

According to Donis-Keller and Silvernail (2009), there are three primary four-day models. The first is a four-day week in winter months only; having school closed on the fifth day provides beneficial energy savings during the cold energy-intensive months (Donis-Keller \& Silvernail, 2009). This framework has been used in some schools in New Mexico, Michigan, and Pennsylvania (Donis-Keller \& Silvernail, 2009). The second model is a four-day week every other week; nine consecutive instructional days are modified to include extra minutes with the 10th day off (Donis-Keller \& Silvernail, 2009). This model was used in Maine in the early 1970s (Donis-Keller \& Silvernail, 2009). The third model is a four-day week throughout the entire school year; each week consists of four lengthened instructional days with a fifth day off (Donis-Keller \& Silvernail, 2009)

Teachers reported positive reactions to the four-day school week (Davy \& Hall, 2015; Gower, 2017; Turner et al, 2017). In a report titled Four-Day School Week Literature Review, Davy and Hall (2015) asserted the four-day school week is popular with classroom teachers. Teachers expressed the extra day off allows for errands, lesson preparation, and family time, which was considered highly desirable (Davy \& Hall, 2015). Other districts reported teachers and staff are encouraged to use the fifth day for medical appointments and personal business in order to reduce teacher absenteeism (Morones, 2013). However, Turner et al. (2017) reported little peer-reviewed research on the perspectives of staff who work in four-day school week districts.

Gower (2017) interviewed eight administrators from districts employing a fourday school week. Six of the eight participants interviewed indicated the four-day school week as a key factor in creating positive change (Gower, 2017). Gower (2017) also reported the four-day school week is vital to attracting new applicants and retaining staff members.

One piece of literature revealed the transition to a four-day school week at a community college (Cardinale, 2013). The reasons behind the decision to transition to a four-day week at the community college included low employee morale coupled with pervasive turnover rates (Cardinale, 2013). Cardinale (2013) reported the new workschool schedule seemed to change the organizational culture due to the introduction of factors that facilitate a better work-life balance.

## Student Achievement

Studies of the four-day school week and student achievement reported no negative consequences on student achievement (Anderson \& Walker, 2015; Davy \& Hall,

2015; Thomason, 2013). Davy and Hall (2015) studied student achievement in schools operating a four-day school calendar. Davy and Hall (2015) specified, "The overwhelming majority of studies indicate little evidence of an overall impact on scores positive or negative" (p. 1). The Association for Education Finance and Policy used school-level data from Colorado to study the correlation between the four-day week and academic achievement of elementary school students (Anderson \& Walker, 2015). Researchers found a positive correlation between the four-day school week and the number of students achieving at the two highest performance indicators in reading and math assessments (Anderson \& Walker, 2015). Anderson and Walker (2015) stated little evidence exists to indicate the four-day week hinders student performance.

Emerson (2015) interviewed Mary Beth Walker, co-author of the aforementioned study. Quoting Walker, Emerson (2015) articulated, "...The idea that the change in the calendar did not have negative effects we thought was an important result" (para. 6). Another researcher examined Algebra I and English II end-of-course exam scores for students in a traditional five-day school week versus students in a four-day school week district (Thomason, 2013). Thomason (2013) concluded no statistically significant differences in end-of-course exam scores of students in the traditional five-day school as compared to students in the four-day school district.

Heitin (2015) emphasized switching to a shorter school week may give students an academic advantage. Heitin (2015) also acknowledged there is anecdotal evidence that suggests the four-day week may improve attendance. Davy and Hall (2015) asserted one of the most notable impacts of the transition to a four-day school week is the decrease in absenteeism.

Reeves (2017) reported the academic merits of the four-day school week, referring to results from New Mexico. Though the transition to the new four-day calendar was undertaken due to tremendous financial pressures, school districts making the switch have noticed unanticipated educational benefits (Reeves, 2017). Joyce Ley, director of the Northwest Regional Educational Laboratory in Portland, Oregon, contributed to the article written by Reeves (2017). Ley (as cited in Reeves, 2017), shared:

The four-day school week was probably one of those few decisions made in education in the name of money that actually ended up having educational benefits in terms of the academic performance of kids. Schools end up operating more efficiently and they can maintain their programs, even when their resources have been reduced. (para. 21)

An improvement in attendance for teachers and students was noted (Reeves, 2017). In addition, prospective teachers were attracted to the four-day week; therefore, recruitment improved (Reeves, 2017).

Contrary to the aforementioned reports, Tharp et al. (2016) discovered the fourday school week had a negative impact on student achievement in reading and mathematics. Researchers compared students in schools with a five-day week to students in schools with a four-day week and reviewed criterion-referenced test scores over a fiveyear period (Tharp et al., 2016). Schools that make the transition to a four-day school week do not often go back to a traditional five-day school week, as the four-day school week quickly becomes a part of each district's culture (Tharp et al., 2016).

Reduced discipline problems. Not related to costs, but worthy of mention, was the reduction of discipline issues (Bradley, 2017; Hadfield, n.d.) One district reported discipline issues were reduced by $40 \%$ (Hadfield, n.d.). Bradley (2017) interviewed Jimmy Linderman, superintendent of the Chattanooga County School District in Georgia. Linderman shared:

Discipline referral frequency of students attending school only four days per week fell $73 \%$. Students are more rested and focused and therefore less likely to disrupt class, be off task or engage in other behaviors requiring discipline. Fewer class disruptions result in more engaged teaching and learning. (as cited in Bradley, 2017, para. 3)

The argument that student discipline incidents decrease simply due to the decreased number of days in school was refuted by Kordosky (2013). Superintendent Kordosky (2013) reminded, "...Student seat time typically increases in the move from a five-day week to a four-day week, so claims that student discipline incidents decrease because they are in school for less time is not a viable argument" (para. 13).

Consistency of schedule. Kordosky (2013), superintendent of Oakridge School District in Oregon, wrote, "With the four-day week, teachers can do their non-teaching activities on the day off, and therefore schools do not have to send children home at awkward and inconsistent times" (para. 7). An explanation of how non-instructional time is converted to instructional time was provided by Kordosky (2013):

The time we pay teachers when they are not teaching includes before school starts (usually about 30 minutes), the time that society pays teachers after school (usually 45 minutes), passing periods (typically six passing periods of five
minutes each equals 30 minutes). All of this "non-instructional time" on Fridays is eliminated and that time can be changed to instructional time on the other remaining four days. Also, the flexibility of the four-day week allows it to work around national holidays, so even if a Monday needs to be taken off - say, for Labor Day - students can still go to school for four days (Monday-Friday). (para. 11)

Consistency of schedule has been reported as one of the key components of the four-day school week (Kordosky, 2013). Traditional five-day calendars often have weeks that include three days, three and a half days, or four days of instruction (Kordosky, 2013).

School day length. The general trend in the United States has been to add to the number of days required in a school year (Turner et al., 2017; Woods, 2015). A trend to replace days-per-year requirements with hours-per-year requirements has also emerged (Woods, 2015). Woods (2015) noted:

Thirty-six states currently measure the school year in hours per year either in addition to or in place of days per year. Using a minimum hour rather than day requirement can give states more flexibility for creative uses of time, such as the four-day school week. (p. 4)

Further, Woods (2015) reported contemporary instructional time research targets the quantity of time devoted to instruction, rather than the quality of time expended during instruction. Turner et al. (2017) related more schools in the United States are considering alternative school schedules similar to compressed work weeks from the business world. Further research is needed on the compressed schedule in an academic setting (Turner et al., 2017).

## Financial Savings

School funding deteriorated following the 2007-2009 recession (Leachman, Masterson, \& Figueroa, 2017). Twenty-nine states provided lower levels of whole school funding per student in 2015 than in 2008 (Leachman et al., 2017). Baker, Luhm, Johnson, and Sciarra (2017) contended funding must be considered in relationship to the regional labor market. Districts compete for teachers within a geographic region, and the ability to compete for teachers is dependent upon funding (Baker et al., 2017). Because the largest cost to a school district is personnel, the ability to recruit and retain teachers in a given labor market is dependent on the salaries a district can pay relative to surrounding school districts (Baker et al., 2017). Dramatic cuts at the state level have caused districts to consider creative and innovative ways to manage meager funds (Ayala, 2017).

Schools transitioning to a four-day school week reported financial savings, as anticipated (Davy \& Hall, 2015; Gower, 2017, Hadfield, n.d.). Davy and Hall (2015) maintained districts must truly close schools that are non-operational on the "off" day and ensure environmental systems are programmed to extract the most net valuable financial dividends. Hadfield (n.d.) described financial savings for small school districts. Peach County, a small district in Georgia, reported substitute teacher costs down 76\%, transportation costs down 35\%, and utility costs down 8\% (Hadfield, n.d.). Gower interviewed eight administrators in his study of the four-day school week (Gower, 2017). All eight administrators reported financial savings as a result of the switch to the four-day school week (Gower, 2017).

Opponents of the four-day school week point out overall savings may be minimal, only two to three percent (Griffith, 2011). Superintendent John Lazenby of Glencoe Public Schools (Oklahoma), when interviewed by Bitton (2016), stated, "It is not
something I think will save a lot of money, maybe $\$ 10,000$, but it will save some money in a time when every dollar counts" (para. 27). However, savings must be examined both in percentages and real dollars, as the example from Duval School District in Florida demonstrates (Griffith, 2011). The Duval School District realized only a $0.7 \%$ savings, yet that translated into $\$ 7$ million, thus allowing the district to continue employment of 70 teachers who had been slated for layoff (Griffith, 2011).

Russ Moreland (personal communication, January 2, 2017), superintendent of the Pierce City R-VI School District in Missouri, has operated a four-day school week since August of 2015. Moreland (personal communication, January 2, 2017) chose not to cut non-certified staff salaries, even though that would have produced greater initial savings. Moreland (personal communication, January 2, 2017) shared the hours of the support staff were reduced to 36 hours per week, and with cost of living increases offered that year, the staff did not realize a net reduction in salary. This was done to protect the earning power of the support staff (R. Moreland, personal communication, January 2, 2017). Not all districts have made the same choices (Plucker et al., 2012). Kordosky (2013) reported decreased compensation for hourly employees as a negative attribute to four-day school implementation. Turner et al. (2017) revealed while instructional staff do not typically lose earnings in the wake of the transition to the four-day schedule, hourly classified staff often do experience a reduction in compensation.

Paul Hill (2017), a research professor at the University of Washington-Bothell and vocal opponent of the four-day school week, suggested, "There are lots of ways to save [one] percent of the budget, none pain-free" (para. 4). Hill (2017) offered options such as eliminating class-size caps for districts that cannot afford them and not filling
positions when natural attrition occurs through retirement. In addition, Hill (2017) recommended states increase funding to rural districts that have lost significant purchasing power due to the 2008 recession. Hill (2017) further argued low-income and minority students are disproportionately impacted by a four-day school week due to the lack of learning resources at home (Hill, 2017). Heyward (2017) referenced the unknown impact of the four-day school week schedule on elementary-aged students, English language learners, and special needs students.

## Increased Planning and Collaboration Time

Increased time for lesson planning and collaboration with colleagues was consistently recounted by teachers (Heyward, 2017; Long, 2016; Picchi, 2017). Long (2016) interviewed teachers from the Apache Junction Unified District in Arizona. Teachers reported superior lesson planning due to the four-day school schedule (Long, 2016). School board member Mike Weaver from the Apache Junction Unified District shared with Long (2016), "I've heard an incredible number of teacher narratives about how they're doing a better job in the classroom today than they ever have" (para. 22). Heyward (2017) referenced reports from interviewees that indicated the quality of instruction improved in four-day school week districts. Improved instruction was attributed to the new focus the revised schedule forced upon teachers and their instruction (Heyward, 2017).

Picchi (2017), reporting for CBS News, revealed the four-day school week helps attract new staff to districts that typically struggle to recruit teachers. Teachers and administrators utilize the fifth day to plan and complete work difficult to do while children are present (Picchi, 2017). The importance of increased collaboration and
professional development time was revealed in the study completed by Turner et al. (2017), as well.

The importance of collaboration was emphasized by Podolsky, Kini, Bishop, and Darling-Hammond (2016) in Solving the Teacher Shortage: How to Attract and Retain Excellent Educators. Podolsky et al. (2016) reported, "Teachers' job satisfaction, and therefore career decisions, are shaped by their [teachers'] connectedness to a team working toward a common shared purpose" (p. 41). Podolsky et al. (2016) further recommended, "Systematic and sustained collaboration among teachers requires changes in scheduling and resource allocation so that they have the time necessary for productive collaboration, which improves teacher efficacy and teacher retention" (p. ix). Hayes (2014), in a report about the experiences of beginning teachers, explained highperforming districts create an organization that allows for structured collaboration.

## Teacher Attrition

Problems with teacher attrition was a reoccurring topic in the literature reviewed (Ingersoll, Merrill, \& Stuckey, 2014; Ingersoll \& Perda, 2017; Podolsky et al., 2016). Ingersoll, Merrill, and Stuckey (2014) reported the reasons teachers give for attrition. The data examined by Ingersoll et al. (2014) on first-year teacher attrition indicated the largest percentage of teachers leave due to dissatisfaction. The reasons cited concerning dissatisfaction included "... a variety of school and working conditions, including salaries, classroom resources, student misbehavior, accountability, opportunities for development, input into decision making and school leadership" (Ingersoll et al., 2014, p. 25). Coleman (2017) found increased accountability and lack of administrative support contributed to higher rates of teacher attrition.

The issue of teacher attrition was encapsulated by Podolsky et al. (2016), who defined the annual loss of teachers as a "leaky bucket" (p. 1). Podolsky et al. (2016) further explained, "[The] teaching workforce loses a continuous stream of educators each year for voluntary reasons other than retirement, creating a steady demand for new teachers" (p. 1). Ingersoll et al. (2014) described teacher turnover as a major factor in the problem of finding highly qualified teachers in the shortage areas of math and science. Gagnon and Mattingly (2015) detailed their synthesis of professional literature pertaining to teacher turnover. They reported factors such as career ladder systems, remuneration, and working conditions can impact a teacher's devotion to remain in a particular school (Gagnon \& Mattingly, 2015).

An additional negative consequence mentioned by Ingersoll et al. (2014) was the loss of new teachers before they had the opportunity to develop. The issue of teacher attrition was conveyed as important to schools, because departures encompass financial implications other negative after-effects for schools and school districts (Ingersoll \& Perda, 2017). Teacher shortages in low-income schools were attributed to two functions: a decline in the number of adults entering the field of education and high rates of teacher attrition (Podolsky et al., 2016). Podolsky et al. (2016) linked high turnover to concerns about student achievement and school improvement.

The issue of teacher attrition is important particularly in relationship to the connection between teacher attrition and student achievement (Kini \& Podolsky, 2016). Kini and Podolsky's (2016) review of 30 studies included analysis of the effect of teaching experience on student outcomes. Kini and Podolsky (2016) found four important outcomes related to retaining experienced teachers. First, teaching experience
is positively associated with student achievement (Kini \& Podolsky, 2016). Further, as teachers become more experienced, their students improve in measures of success, such as improved school attendance (Kini \& Podolsky, 2016). Additionally, experienced teachers support student learning for their colleagues, and teacher effectiveness increases when working in a supportive collegial work environment (Kini \& Podolsky, 2016).

## Teacher Recruitment

Fowles, Butler, Cowen, Streams, and Toma (2013) explored the issue of recruitment of public sector employees, specifically teachers. Fowles et al. (2013) explained public elementary and secondary schools represented $36 \%$ of the total national labor pool in the United States. Fowles et al. (2013) posited, "...Human resource strategies for increasing the attractiveness of geographically and culturally isolated regions for high quality teachers are needed" (p. 504). Effective recruitment and selection of new employees was regarded as one of the most crucial assignments given to human resource managers (Fowles et al., 2013). The study undertaken by Fowles et al. (2013) focused on teachers from Appalachia. Researchers found teachers from Appalachia exhibit a strong attachment to place and local culture (Fowles et al., 2013). Fowles et al. (2013) concluded, "...Geography exerts a powerful and direct influence over labor market outcomes" (p. 517).

Effective teacher recruitment strategies for rural and geographically isolated areas differed from effective teacher recruitment strategies in urban areas (Fowles et al. 2013; Gagnon \& Mattingly, 2015). Fowles et al. (2013) recommended the development of strategies to attract teachers to geographically and culturally isolated regions.

Researchers further warned recruitment strategies require different characteristics than
those used to attract teachers to urban areas (Fowles et al., 2013). Gagnon and Mattingly (2015) concurred with Fowles et al. (2013), reporting effective rural recruitment and retention strategies differ from effective recruitment and retention strategies in urban areas.

Leachman, Albares, Masterson, and Wallace (2016) related, "Teacher quality is the most important school-based determinant of student success. So recruiting, developing, and retaining high-quality teachers is essential to improving student achievement" (p. 1). The United States is joined by Sri Lanka, Eastern Europe, China, Togo, and others in facing a rural teacher shortage (Behrstock-Sherratt, 2016). Aragon (2016) reported 11 states have created teacher shortage task forces since 2015. Further, Aragon (2016) reported rural schools have persistent staffing problems and often are challenged to attract highly qualified teachers. Hindrances to recruitment were delineated to include a finite local teacher supply, the dearth of rigorous preparation and certification options, and geographic and social isolation (Aragon, 2016).

Teacher shortages have been presented as policy concerns for quite some time (Behrstock-Sherratt, 2016). Ulferts (2015) conveyed, "Teacher recruitment efforts and retention woes add to the economic distress of rural schools" (p. 14). In the report prepared by the Learning Policy Institute titled A Coming Crisis in Teaching? Teacher Supply, Demand and Shortages in the U.S., researchers reported, "Each time a teacher leaves a district, it not only increases demand but also imposes replacement costs on districts" (Sutcher, Darling-Hammond, \& Carver-Thomas, 2016, p. 42). Significantly, the aforementioned report also indicated teacher turnover is nearly $50 \%$ greater in Title I schools than in non-Title I schools (Sutcher et al., 2016).

Allegretto and Mishel (2016) described the teacher supply as dwindling at every phase of the career ladder. Fewer students are entering the teaching profession (Allegretto \& Mishel, 2016). Behrstock-Sherratt (2016) published recommendations on the teacher shortage debate. Policymakers recommended districts "consider innovative approaches to looking across the policy spectrum and addressing the multiple critical policies, from recruitment and preparation to evaluation and retention" (p. 16). A growing instability in the teaching profession was detailed as a result of the increasing rates of teacher attrition (Allegretto \& Mishel, 2016).

Teacher recruitment and the four-day school week. Newman et al. (2016) interviewed school administrators in Missouri regarding the four-day school week. One administrator reported receiving twice as many teacher applications as in previous years (Newman et al., 2016). This administrator also noted the district typically struggled to find applicants for vacant positions (Newman et al., 2016). Another administrator interviewed by Newman et al. (2016) indicated many rural school districts face insufficient numbers of certificated applicants for vacant positions.

## Teacher Retention

In view of the fact teacher turnover has an impact on student achievement, improvement in teacher retention and the reduction of teacher turnover are significant factors to be explored (Aragon, 2016; Ronfeldt, Loeb, \& Wyckoff, 2013). The U.S. Department of Education published results of a longitudinal study on teacher attrition that indicated the current percentage of teacher attrition within the first five years of employment is $17 \%$ (Gray \& Taie, 2015). Gray and Taie (2015) identified, "Among all beginning teachers in 2007-08, 10 percent did not teach in 2008-09, 12 percent did not
teach in 2009-10, 15 percent did not teach in 2010-11, and 17 percent did not teach in 2011-12" (p. 3).

Aragon (2016), in Teacher Shortages: What We Know, asserted, "Urban, rural, high-poverty, high-minority, and low achieving schools face persistent staffing challenges" (p. 5). Ronfeldt et al. (2013) stated, "Turnover has a broad disruptive organizational influence. Even when leaving teachers are equally as effective as those who replace them, turnover can still impact students' achievement" (p. 7). Perrachione, Rosser, and Peterson (2008) posited rather than spending money on teacher replacement and hiring, money could be more wisely spent on keeping teachers in schools. Perrachione et al. (2008) suggested educational leaders, who guide the climate and work environment for teachers, could advance teacher retention by providing teachers with access to a positive school climate, sufficient assistance, and small class sizes.

Teacher turnover rates have been historically high in small rural school districts (Behrstock-Sherratt, 2016; Burton, Brown \& Johnson, 2013). In a review of literature on rural teachers, Burton, Brown, and Johnson (2013) portrayed rurality as a problem to overcome rather than a setting to understand. Burton et al. (2013) delineated four central themes emerging from the professional literature regarding rural teachers. Those themes included professional isolation of rural teachers, marked differences between rural and urban or suburban teachers, deficits in professional knowledge and teaching credentials, and resistance to change (Burton et al., 2013).

Santoro (2017), a researcher for the National Education Policy Center, reviewed the report Tackling Gaps in Access to Strong Teachers: What State Leaders Can Do, prepared by the Education Trust in October 2017. Santoro's (2017) review stated,
"...Current concerns about the teacher shortage would be better understood as a problem of retention and uneven human resource allocation" (p. 4). Also illustrated were the issues of recruitment and retention in relationship to building leadership, namely principals and superintendents (Santoro, 2017). Turnover and lack of continuity in building leadership positions was noted as "...even more disruptive to building a culture of learning for students, as well as staff" (Santoro, 2017, p. 4).

The problems facing rural school administrators are complex (Preston, Jakubiec, \& Kooymans, 2013; Wood, Finch, \& Mirecki, 2013). Noted by Pendola and Fuller (2017) was the body of research linking the influence of principals to student and teacher outcomes. Wood, Finch, and Mirecki (2013) reported on the difficulty of recruiting and retaining rural administrators in the Midwest. Participants in the study conducted by Wood et al. (2013) indicated personal ties to the area as a significant factor in remaining at a rural school district. Wood et al. (2013) described responses from 16 of 28 participants who indicated close family ties to the location as important to staying within a rural district. Salaries were designated as impactful to both recruitment and retention in this study (Wood et al., 2013).

As reported by Preston, Jakubiec, and Kooymans (2013), rural principals face hiring constraints and have a difficult time acquiring teachers in specialized areas of certification. Preston et al. (2013) conveyed, "We appreciate that rural life creates unconventional circumstances for rural principals and that effective rural leadership is about adopting strategies that are responsive to realities of each individual rural community" (p. 8). Preston et al. (2013) acknowledged the difficulties faced by leaders of rural schools. The set of leadership skills needed to succeed in rural schools includes
the ability to balance the needs of rural stakeholders while still adhering to educational best practices (Preston et al., 2013).

Teacher retention and the four-day school week. The four-day school proposal has been favored by classroom teachers (Davy \& Hall, 2015; Koki, 1992). Longer hours are inconsequential, given many teachers typically work 10-hour days (Davy \& Hall, 2015). Koki (1992) asserted rural Hawaiian districts employ the four-day school week as a teacher retention enhancement.

Glatter (2017) interviewed Paul Hill, professor at the University of Washington Bothell and vocal opponent of the four-day school week. Glatter (2017) shared Hill's thoughts about the four-day school week and teacher retention:

The explanation given to me by superintendents is that now they're having to offer four-day weeks in order to hire any teachers at all. Teachers are saying, 'Why would I go to a five-day-a-week, rural district, if I can come to you?' So the explanation we were getting was a teacher labor-market issue. (para. 10) Glatter (2017) further reported concern the four-day school week is an adult benefit that would be difficult to roll back.

Turner et al. (2017) conducted a study of staff perceptions on the four-day school week. Results of the study revealed, "Ninety-one percent of the participants preferred to work in schools with a four-day work week" (Turner et al., 2017, p. 15). This study revealed improved staff morale, as well (Turner et al., 2017). A significant difference noted in this study is that both classified and unclassified staff strongly supported the shift to the four-day school week, regardless of changes in compensation for the hourly employees (Turner et al., 2017).

## Teacher Job Satisfaction

According to the Metlife Survey of the American Teacher, "Teacher satisfaction has declined to its lowest point in twenty-five years" (Markow, Macia, \& Lee, 2013, p. 45). Only $39 \%$ of teachers described themselves as very satisfied (McCarthy, Lambert, \& Reiser, 2014). In a study of the spheres of influence that compel teachers to assume rural teaching assignments, Ulferts (2015) theorized, "If factors contributing to rural teacher job satisfaction can be identified, recruitment efforts may attract better qualified teachers and reduce teacher attrition, resulting in increased student achievement and economic savings for rural districts" (p. 14). In addition, Ulferts (2015) asserted the factors that attract teachers to accept rural teaching assignments are not the same that determine whether they remain. A key finding in the area of job satisfaction is that employee fulfillment is a verified indicator of retention (Perrachione et al., 2008; Struyven \& Vanthournout, 2014; Ulferts, 2015).

Struyven and Vanthournout (2014) conducted an examination of newly qualified teachers and why they do not enter the teacher labor market. They also investigated the reasons why newly qualified teachers who do enter the teacher labor market do not persist in the profession (Struyven \& Vanthournout, 2014). Out of 66 possible reasons for attrition, five enveloping justifications for exit attrition were identified (Struyven \& Vanthournout, 2014). Those were categorized as job satisfaction and relations with students, school organizational structure and support, workload, future prospects, and relationships with parents (Struyven \& Vanthournout, 2014).

Teaching conditions, as reported by Podolsky et al. (2016), frame learning conditions for students. Podolsky et al. (2016) suggested, "Teaching conditions - which
also define learning conditions for students - are a strong predictor of teachers' decisions about where to teach and whether to stay" (p. vii). Further, Podolsky et al. (2016) found, "Working conditions are one of three factors most frequently contributing to teachers" decisions to enter, remain, or leave the teaching workforce" (p. 7). These findings revealed the value of considering working conditions when aligning policy decisions focused on the retention of qualified teachers (Podolsky et al., 2016). Dee and Goldhaber (2017) found a lack of evidence on how to design teacher working conditions. They acknowledged experimenting with teacher working condition interventions could have value (Dee \& Goldhaber, 2017).

The four-day school week represents a flexibility of work schedule teachers have not previously enjoyed (Michel \& Michel, 2015). Teachers who work in districts with a four-day school week have an opportunity to make the fifth day, traditionally a work day, into something beneficial for their families (Michel \& Michel, 2015). Perrachione et al. (2008) indicated, "Intrinsic factors or motivators relating to one's job content and the extrinsic factors or hygienes relating to the situation in which they work have a positive influence on teachers' satisfaction, and subsequently, their intent to remain in teaching" (p. 11). Work schedule flexibility has been shown to positively moderate the relationship between work-family enrichment and job satisfaction (Michel \& Michel, 2015). In Understanding and Addressing Teacher Shortages in the United States, Dee and Goldhaber (2017) addressed the question of improving teacher working conditions as a way of addressing targeted teacher shortages. Dee and Goldhaber (2017) suggested, "It makes sense to experiment with working-conditions interventions" (p. 16). Kini and Podolsky (2016) recommended school administrators and policymakers consider creating
conditions for strong collegial relationships and a positive working environment, as these conditions are linked to gains in teacher effectiveness.

Millennials. Richard Fry (2017), from Pew Research Center, announced, "Millennials are the largest living generation by population size: 79.8 million in 2016" (para. 1). Labor projections by the Bureau of Labor Statistics indicated, "The 16-24 and 25 to 34 age groups will make up $34 \%$ of the labor force in 2024; these two groups correspond roughly to the millennial generation" (Toossi, 2015, p. 22). O'Connor and Raile (2015), in a study designed to test the definition of a real job within the millennial generation, determined, "Our findings suggest that salary alone might not motivate millennial employees" (p. 14). O'Connor and Raile (2015) further reported dissatisfaction among millennials in the organizational structures between senior management and lower-level employees. This finding was viewed as positive for organization management, in that millennials may provide new ideas for organizational structure (O'Connor \& Raile, 2015). In addition, millennials were noted to place a utilitarian value on salary, rather than denoting salary as a status symbol (O'Connor \& Raile, 2015). Finally, O'Connor and Raile (2015) recognized the value millennials place on benefits and fulfillment.

## Teacher Salaries

The issue of teacher salaries is relevant in context of the discussion of teacher attrition, teacher retention and job satisfaction (Behrstock-Sherratt, 2016; Leachman et al., 2017; Perrachione et al., 2008). Leachman et al. (2017) reported, "Low teacher pay is a key factor behind shortages of qualified teachers in many schools" (p.12). Baker,

Sciarra, and Farrie (2016) communicated a review of literature substantiating the conclusion overall wages affect the quality of those who join the teaching profession. Rickman, Wang, and Winters (2015) prepared a study titled Adjusted State Teacher Salaries and the Decision to Teach. Rickman et al. (2015) reported: State differences in teacher salaries and educational funding could be further examined for their effects on state educational and economic outcomes. In addition to increasing class sizes and creating teacher shortages, the effects of low educational funding on teacher salaries may have adverse effects on teacher quality. (p. 23)

Hanushek (2016) wrote about teacher salary policies and reported, "Teacher salaries have fallen relative to salaries for other college-educated workers, particularly female college educated workers" (p. 23). Hanushek (2016) emphasized the importance of this finding by reinforcing the effect teachers and principals have on student performance.

As delineated by Allegretto and Mishel (2016), "Average weekly wages, inflation adjusted, of public-sector teachers decreased $\$ 30$ per week from 1996 to 2015, from $\$ 1,122$ to $\$ 1,092$ in 2015 dollars" (p. 4). The relative wage gap for all public-sector teachers has gone from $-1.8 \%$ in 1994 to $-17 \%$ in 2015 (Allegretto \& Mishel, 2016). Rickman et al. (2015) reported on adjusted state teacher salaries. An argument encountered by Rickman et al. (2015) was that low public school teacher remuneration in some states are relative to the lower cost of living and wages in general in those states. Disparities in teacher characteristics, working conditions, and area household amenities were also noted by state (Rickman et al., 2015). Allegretto and Mishel (2016) explained
teachers' compensation, meaning wages and benefits, was $11.1 \%$ lower than that of comparably educated workers in 2015.

Gray and Taie (2015) completed a longitudinal study of public school teacher attrition and mobility in the first five years of teaching. According to Gray and Taie (2015):

The percentage of beginning teachers who continued to teach after the first year varied by first-year salary level. For example, 97 percent of beginning teachers whose first-year base salary was $\$ 40,000$ or more were teaching in 2008-2009, whereas 87 percent of those with a first-year salary less than $\$ 40,000$ were teaching in 2008-09. Also, 89 percent of beginning teachers who first-year base salary was $\$ 40,000$ or more were teaching in 2011-12, whereas 80 percent of those with a first-year salary less than $\$ 40,000$ were teaching in 2011-12. (p. 3) Findings from the study are significant in understanding the role of salary upon teacher retention (Gray \& Taie, 2015).

Rural school administrators interviewed by Ayala (2017) indicated that when teachers leave, they leave for more money. Brian Strohman, Superintendent of Bloomburg School District near Texarkana, Texas, and interviewed by Ayala (2017), said, "We can give them the best working environment. I even cook for our teachers once a month. But 9 times out of 10 , when they start here and leave, it's always for the money" (para. 5). Teacher recruitment and retention has, therefore, become a top priority for Texas Commissioner Mike Morath (Ayala, 2017).

Missouri has an average teacher salary of $\$ 47,849$ (Murphy, 2017). Teachers in Missouri earn, on average, only $67.8 \%$ of the salaries of other college graduates in the
state (Murphy, 2017). Murphy (2017) reported, "This is the seventh-worst ratio in the nation" (para. 20). Missouri has remained in the 10th-worst position for all states for the past three years (Murphy, 2017). Allegretto and Mishel (2016) shared, "Simply put, improving overall teacher quality requires correcting the teacher compensation disadvantage" (p. 19). Adequate wages and benefits are critical for the recruitment and retention of teachers (Allegretto \& Mishel, 2016; Gray \& Taie, 2015; Rickman et al., 2015).

## Rural Schools

Definitions of rural vary (Culbertson \& Billig, 2016). The definitions range from statistical definition to subjective descriptions (Culbertson \& Billig, 2016). The issues facing rural schools merit careful consideration when the number of students attending rural schools is considered (Walker, 2017; Wang, 2014). Nine million students, representing $18.7 \%$ of the U.S. student population, attend rural schools (Wang, 2014). The American Association of School Administrators (AASA) (2017) reported 53\% of school districts are rural. Nearly half ( $48 \%$ ) of rural students are from low-income families (Wang, 2014). The AASA (2017) remarked, "Despite higher costs in rural and small schools, only $17 \%$ of state funds on average go to rural districts" (p. 3).

Wang (2014) posed this question about rural schools, "So how does one create a rural teacher pipeline, overcoming the disincentive of a two-hour drive to Starbucks and a low salary?" (para. 6). Providing quality education to rural students continues to be a difficult task due to financial constraints (Wang, 2014). As resources diminish, funds for salaries are constrained and reduce the quality of the labor supply (Baker et al., 2016). Resources utilized to improve teacher quality make a difference (Baker et al., 2016).

The national discussion about improving schools often misses the mark in relationship to rural schools and their unique situations (Wang, 2014). Three possible incentives were suggested by Wang (2014): 1) provide rural districts with more financial resources so teacher salaries can be improved; 2) offer student loan forgiveness for teachers accepting positions in rural schools; and 3) provide a compensation package that includes housing. Rural schools face challenges that are comparably as difficult as those faced by inner-city urban schools, even though those challenges are quite different (Wang, 2014).

The importance of an emphasis on rural education and continued research was mentioned by Barratt et al. (2015):

The absence of emphasis on rural locales in the educational policy literature generally, and in the teacher quality literature specifically, is especially glaring given the possibility that improvements to the teaching workforce are among the more direct ways in which policymakers may plausibly influence student achievement in these areas. (p. 1)

Dee and Goldhaber (2017), with support of The Hamilton Project, concluded, "Rural schools and, to a lesser extent, schools in towns, are more likely to employ teachers lacking conventional licensure" (p. 9). Dee and Goldhaber (2017) synthesized literature regarding teacher labor markets and a school's ability to recruit and retain teachers. They concluded student-teaching assignments and the proximity to where a teacher grew up are both powerful influences (Dee \& Goldhaber, 2017).

## Summary

In Chapter Two, a review of relevant and related literature revealed few examples of research on the specific topic of this study: the impact of the four-day school week on rural teacher recruitment, retention, and job satisfaction. The work of Boylan et al. (1993), Davis (2002), and Ulferts (2015) provided the conceptual framework for the study. The related literature on rural teacher recruitment and retention illuminated the difficulty in attracting teachers to rural districts and the importance of retaining teachers in rural districts. Additionally, the academic discussion of school day length, the impact of teacher salaries on decisions to enter and remain in the profession, and the impact of millennials in the workplace rounded out the discussion. Finally, the reminder that rural school practices and innovations often go underreported emphasizes the potential significance of this study for rural school leaders.

A qualitative collective case study design was selected for this study. The specific methods utilized are described in detail in Chapter Three. Further, detailed procedures of the study are outlined.

## Chapter Three: Methodology

Interest in the four-day school week in Missouri continues to grow (Heyward, 2017). Most districts consider implementing the four-day school week out of financial desperation (Heyward, 2017). However, an increasing number of schools are beginning to see other outcomes from the four-day school week apart from simple financial savings (Alves, 2017; Morones, 2013). This study was designed to capture the perceptions of teachers, school counselors, building administrators, and superintendents regarding the impact of the four-day school week on other important and relevant outcomes, namely teacher recruitment, retention, and job satisfaction. The findings from this study will provide additional information for school boards and administrators to consider when discussing the transition to a four-day school week, particularly in the arena of maintaining a highly qualified instructional workforce.

Chapter Three includes a description of the research methodology and procedures utilized in this study to elicit the perceptions of teachers, school counselors, building administrators, and superintendents regarding the four-day school week and teacher recruitment, retention, and job satisfaction in rural Missouri school districts. This chapter includes specific details of the problem and purpose, research questions, design, population, methods, instruments, data collection methods, and data analysis techniques utilized in the study. It also includes ethical considerations.

## Problem and Purpose Overview

Teachers, together with principals, are the single-most important in-school factor affecting student achievement (U.S. Department of Education, 2013). School districts must be able to keep their most effective teachers in the classroom (U.S. Department of

Education, 2013). Asodike and Sergeant-Awuse (2014) declared, "As the most significant resource in schools, teachers are central to school improvement efforts" (p. 571).

According to Boylan et al. (1993), "It is likely that the way in which teachers perceive the community in which they work exerts an influence - possibly considerable upon their preparedness to stay" (p.11). Wiliam (2014) conveyed:

Teacher quality can be improved by replacing teachers with better ones, but this is slow and of limited impact. This suggests that the future economic prosperity of each country requires improving the quality of the teachers already working in its schools. (p. 2)

Resources utilized to improve teacher quality matter (Baker et al., 2016). This study was designed to add to the limited research on schools operating a four-day school week calendar (Plucker et al., 2012). Specifically, the goal of this study was to add to the body of existing knowledge of the four-day school week regarding teacher recruitment, job satisfaction, and retention.

Research questions. The following research questions guided the study:

1. What are the perceptions of teachers, counselors, building principals, and superintendents related to teacher retention within rural schools implementing a four-day school week?
2. What are the perceptions of rural school administrators regarding the quality of applicants for professional teaching positions since transitioning to a four-day school calendar?
3. What are the perceptions of teachers, counselors, building principals, and superintendents working in a rural four-day school week districts regarding job satisfaction and positive working conditions?

## Rationale for Qualitative Research

While there are several opinions on the value of different approaches to research in the social sciences, the decision to conduct either quantitative, qualitative, mixed method, or multimethod research should hinge on the research questions, purpose, and context (Venkatesh, Brown, \& Bala, 2013). Fraenkel, Wallen, and Hyun (2015) stated, "Qualitative researchers are not putting together a puzzle whose picture they already know. They are constructing a picture that takes shape as they collect and examine the parts" (p. 425). Given the desire of the investigator to explore the perceptions of participants regarding the impact of the four-day school week on teacher recruitment, retention, and job satisfaction in rural schools, a qualitative design was selected (Merriam \& Tisdell, 2016). Investigator-created interview questions were the primary instrument for data collection (Merriam \& Tisdell, 2016).

This study was organized as a collective case study (Merriam \& Tisdell, 2016). This design framework was selected to enhance the precision, validity, and stability of any generalizations made as a result of the data analysis (Fraenkel et al., 2015; Merriam \& Tisdell, 2016). Each of the three participating school districts represented one case. Each of the research questions was examined by analyzing the central themes and trends found in responses provided by participants to interview questions. The data collected in this study will provide a research base schools can draw from when considering policy changes.

## Consent and Access

This research was conducted in Missouri during the fall of 2017 and the spring of 2018. This study involved teachers, counselors, building principals, and superintendents of three rural Missouri school districts who began implementation of a four-day school calendar during the 2015-2016 school year. Consent to participate in the study was obtained from the superintendent of each school district. Each superintendent selected two to five teachers, one counselor, and one building administrator to participate in the study. Each district's superintendent participated in the study as well.

## Instrumentation

A careful review of relevant and related literature was conducted to expand understanding of the topic. The formative work on teacher recruitment and retention completed by Boylan et al. (1993) and Davis (2002) contributed to the foundational underpinnings of the study. Boylan et al. (1993) identified four spheres of influence that impact teacher decisions to select a school district and remain there. Davis (2002) sought to duplicate Boylan et al.'s (1993) work in light of the four spheres of influence which include family factors, within-class factors, whole-school factors, and community factors.

Interviewing is a recommended technique when conducting a case study with a limited number of individuals (Merriam \& Tisdell, 2016). Interview questions were designed to elicit responses from participants regarding the influence of the four-day school week on teacher recruitment, retention and job satisfaction. Questions were aligned to the three guiding research questions for the study. The information shared by participants was analyzed using the framework of the four spheres of influence developed by Boylan et al. (1993) and duplicated by Davis (2002), and Ulferts (2015). Interview
questions were written to elicit information from the participants' point of view (Yin, 2016). In an effort to avoid leading questions, the four spheres of influence were not discussed or described during the interview process. The goal was to obtain an unrestrained exchange of information. Then, participant responses were sifted through the sieve of the four spheres of influence (Boylan et al., 1993; Davis, 2002; Ulferts, 2015).

Interview questions were field-tested by a small group of teachers and administrators familiar with the four-day school week who were not included in the study. Reviewers were asked to reflect on the clarity of questions. Feedback from the reviewers was incorporated into the final versions of the interview questions.

Demographic questions were selected for specific purposes. Question one was included to collect data regarding each respondent's gender. Responses were then coded by gender. It was speculated the importance of the four-day school week would differ due to the cultural differences of child-rearing responsibilities based upon gender. Question two was included to collect data regarding each respondent's highest level of formal education. Information regarding formal education was asked specifically in relation to research question two.

Question three was included to collect and code data based upon each respondent's years of experience. Question four was included to collect data to determine which participants have tenure and which are probationary. Finally, question five was included to determine participants' current school-level assignments. This information was coded in the analysis of data. The survey instrument included eight questions for teachers and counselors. Building administrators and superintendents were
asked the same eight questions, with additional questions that required an administrative perspective.

Data collected in support of research question one was examined to determine perceptions regarding teacher and counselor retention and the four-day school week. Following the demographic questions, the first interview question related to research question one asked participants to rate the impact of the four-day school week on the desire to remain in the district. The perceptions of participants were analyzed on the impact of the four-day school week on the applicant pool by studying the data collected in support of research question two. Information was elicited about participants' perceptions of the four-day school week on job satisfaction and working conditions with research question three.

Eight interview questions were prepared for teachers and counselors. Building principals and superintendents were asked the same eight questions. In addition, they were asked to respond to specific questions about teacher retention and the applicant pool. Building principals and superintendents were asked to respond to a total of 15 questions.

Fraenkel et al. (2015) recommended using a number of techniques to check the conclusions made by qualitative researchers. One of the recommended techniques, peer debriefing, was utilized to determine reliability (Fraenkel et al., 2015). A colleague outside of the study was asked to review and evaluate the findings following the data collection and analysis process (Fraenkel et al., 2015).

## Population and Sample

The population for this study included the 15 schools operating a four-day school week calendar during the 2015-2016 school year in Missouri (Missouri Department of Elementary and Secondary Education [MODESE], 2017). This study was based upon a purposive sample within the collective case study framework. In purposive sampling, researchers use personal judgment to select a sample they believe, based on prior information, will provide the data needed (Fraenkel et al., 2015). There are two levels of purposive sampling within a collective case study (Merriam \& Tisdell, 2016). This first level was to determine which school districts would represent each case. The school districts selected for inclusion in this study were identified from the list of public schools in Missouri that began operating a four-day school calendar during the 2015-2016 school year (MODESE, 2017). Each school district that began implementing the four-day school week calendar during the 2015-2016 school year was invited to participate. Three districts accepted the invitation to participate.

The second level of the purposive sample included identifying within each case, which participants to interview. The three district superintendents were each asked to identify two to five teachers for inclusion in the interview process. The sample size for the collective case study of six to 15 teachers was the target for sufficient information to identify themes and trends in the data. The actual number of teacher participants was 11 . While all counselors, building principals, and superintendents were invited to participate, only one counselor, building principal, and superintendent participated from each of the three districts. The district superintendent was given a selection of dates to schedule
interviews. Each district superintendent also determined the schedule of interviews at each location.

District One had an approximate enrollment of 1,000 students and an operating levy close to $\$ 2.90$ (MODESE, 2017a). The free and reduced price meal participation rate was close to $60 \%$ (MODESE, 2017a). A little over 50\% of professional staff had advanced degrees (MODESE, 2017a). The average regular-term teacher's salary was approximately $\$ 36,500$, with the average administrator salary nearing $\$ 74,000$ (MODESE, 2017a). The assessed valuation of the district was slightly over $\$ 89$ million (MODESE, 2017a). The percentage of courses not taught by highly qualified teachers was slightly over 8\% (MODESE, 2017a).

District Two had an approximate enrollment of 575 students and an operating levy near $\$ 3.60$ (MODESE, 2017b). The free and reduced meal price participation rate was close to 70\% (MODESE, 2017b). Almost 25\% of professional staff had advanced degrees (MODESE, 2017b). The average regular-term teacher's salary was approximately $\$ 33,000$, with the average administrator salary nearing $\$ 80,000$ (MODESE, 2017b). The assessed valuation of the district was slightly more than $\$ 46$ million (MODESE, 2017b). The percentage of courses not taught by highly qualified teachers was less than 10\% (MODESE, 2017b).

District Three had an approximate enrollment of 350 students and an operating levy just over \$4.00 (MODESE, 2017c). The free and reduced price meal participation rate was close to $60 \%$ (MODESE, 2017c). Over $50 \%$ of professional staff had advanced degrees (MODESE, 2017c). The average regular-term teacher's salary was just over $\$ 37,000$, with the average administrator salary just over $\$ 63,000$ (MODESE, 2017c).

The assessed valuation of the district was close to $\$ 29.5$ million (MODESE, 2017c). The percentage of courses not taught by highly qualified teachers was $0 \%$ (MODESE, 2017c).

## Data Collection

After approval from the Institutional Review Board of Lindenwood University (see Appendix A) and receipt of site permission forms (see Appendix B), an official letter of invitation to participate in the study was sent to each of the three superintendents (see Appendix C). The invitation to participate in the study was emailed to each district superintendent for dissemination to the identified participants (see Appendix D). In addition, the superintendent was forwarded the informed consent form (see Appendix E) and interview questions to preview (see Appendices F \& G). Those items were also disseminated to the participants in the study. Each participant was given the opportunity to preview the interview questions prior to the interview process.

Interviews were conducted either in person or by phone. All interviews, with the exception of one, were conducted in person. One interview was conducted by phone to accommodate the schedule of the participant. Interviews were audio-recorded and transcribed verbatim by the investigator. Email addresses were obtained from the participants at the time interviews were conducted to allow for clarification of interview transcripts, if necessary.

The semi-structured interview strategy was selected for this study. Merriam and Tisdell (2016) described this process as more open-ended and less structured. The beginning of each interview was more structured, as participants were asked to answer the exact same set of demographic questions. Following the demographic questions, interviewees were asked the same list of interview questions, but the wording may have
been adjusted based upon previous responses or in order to seek more specific information.

The use of this strategy allowed the investigator to develop rapport with each interviewee and conduct the interview in a relaxed, casual atmosphere. Responses were compared and coded. The data obtained from interviews were compiled into a coherent description of what was discovered. Data analysis relied heavily on a description of emerging trends and themes. Similarities and differences in the responses were identified and reported.

## Data Analysis

Analysis of the data by the investigator based on emerging trends and themes was completed within 30 days of the conclusion of the interviews. Similarities and differences in the responses were identified and described. Coding was utilized as the study moved from the data collection phase to the data analysis phase. Strauss and Corbin (as cited in Fraenkel et al., 2015) described coding as "...the analytic process through which data are fractured, conceptualized and integrated to form theory" (p. 434). As the transcripts of interviews were reviewed and analyzed, the investigator developed a list of trends and themes. This list had multiple iterations as the process of analysis progressed (Fraenkel et al., 2015). Fraenkel et al. (2015) offered, "Codes and subcodes are often refined iteratively by qualitative researchers as they strive to make sense of their data through categorization, thematic analysis, and advanced theory building" (p. 434). Based on this information, it was expected the identification of trends and themes would continue throughout the data analysis phase of the study.

In addition to the verbatim transcription of interview responses, the investigator compiled field notes during each interview. These notes served two purposes. First, the
notes assisted the investigator in the formulation of new or follow-up questions as the interviews progressed. Second, the notes were useful to facilitate analysis of the transcribed interview responses (Fraenkel et al., 2015).

Additional strategies included writing down questions posed by the interviewees (Fraenkel et al., 2015). Those questions were recorded to determine their usefulness in the data analysis process (Fraenkel et al., 2015). The notetaking process also included research reflexivity, which is a record of the interviewer's personal thoughts (Fraenkel et al., 2015). This was recommended as a strategy to strengthen validity and reliability (Fraenkel et al., 2015). The complete compilation of the case study record represented a comprehensive primary resource package (Merriam \& Tisdell, 2016). The case study database was systematically archived both in print format and digitally.

## Summary

In summary, the purpose of this study was to investigate the impact of the fourday school week on teacher recruitment, retention, and job satisfaction in rural schools. Qualitative methodologies were employed to ascertain trends and themes from participants interviewed as part of the study. The investigation will add to a body of research about teacher retention, recruitment, and job satisfaction in rural school districts operating a four-day school week calendar.

In Chapter Four, qualitative data involving the perceptions of teachers, school counselors, building principals, and superintendents are presented and analyzed. These data include transcribed interviews from 22 participants representing three separate school districts in rural Missouri. Chapter Five includes a summary of the findings, conclusions, and recommendations for future studies related to the four-day school week.

## Chapter Four: Analysis of Data

Existing research on the four-day school week has been limited, particularly in the exploration of the impact the four-day schedule has on teachers (Turner et al., 2017). Turner et al. (2017) published the results of their research, which included strong staff support for the four-day school week. In fact, results from this study indicated school leaders are selecting the four-day school week for reasons other than financial savings (Turner et al., 2017). This study was designed to capture the perceptions of teachers, school counselors, building administrators, and superintendents on the impact of the fourday school week on teachers in rural school districts, particularly in the areas of recruitment, retention, and job satisfaction.

## Interview Demographics

All Missouri school districts that began operating a four-day school week during the 2015-2016 school year were invited to participate in the study. Three school districts agreed to participate in the study. Each school's superintendent was asked to identify participants for the study from four categories: superintendent, building principal, school counselor, and teacher. The primary data collection method for this study was personal interviews. Each interview was audio-recorded. To protect anonymity, each participant was assigned a participant code. Twenty-one interviews were conducted. Three superintendents, three building administrators, three school counselors, and 12 teachers participated in the study. Twelve of the 21 participants (57.1\%) were female, and nine ( $42.9 \%$ ) of the 21 participants were male.

Each participant was asked to identify his or her highest level of formal education. A bachelor's degree was the highest degree held by five participants (24\%). Nine
participants (43\%) indicated the highest degree held was a master's degree. An educational specialist's degree was the highest degree held by five participants (24\%). Two participants (9\%) had an educational doctorate degree as their highest degree earned (see Figure 1).


Figure 1. Formal education levels of participants.

Two participants were first-year teachers. Six were represented in the 2-5 years of experience range. Six were represented in the 6-10 years of experience range. Three were represented in the 11-20 years of experience range, and four had 20 or more years of experience. The number of years participants had been working in their respective districts ranged from one year to 28 years (see Figure 2).


Figure 2. Participants' number of years of experience.

Eight of the participants were currently working at the elementary level. Two participants were currently assigned to middle school teaching positions. Four participants identified their assignments as high school level positions. Four indicated their teaching assignments included both middle school and high school teaching. Three represented central office assignments (see Figure 3).


Figure 3. The current teaching or administrative assignments for participants.

Fifteen of the participants (71\%) were working in their respective districts during the transition from the five-day school week to the four-day school week. Six of the participants (29\%) were not employed by their respective school districts during the transition from the five-day school week to the four-day school week.

## Superintendent and Building Administrator Responses

Each of the three participating districts was represented in the study by one superintendent. The genders of the superintendents were two males and one female. Two of the three superintendents held a doctoral degree; one held an educational specialist degree. The range of experience for the three superintendent participants was three to 13 years. Two of the three superintendents were working in their respective districts at the time of transition to the four-day school week.

Each district was also represented by three building administrators. All three levels were represented, with one elementary principal, one junior high principal, and one high school principal. There were two male and one female participants. All had completed an educational specialist degree. The number of years of experience ranged from one to 12 years. Two of the three building administrators were working in their respective districts at the time of transition to the four-day school week.

The following information is organized by interview question. Responses from the superintendent participants are included first, followed by responses from the building administrators. Next, a matrix outlining the connections to the conceptual framework is included. To conclude, the relationship of the responses to the three research questions is explained. The first two questions were applicable only to one superintendent and one building principal, as these two were not working at their districts during the transition from five-day calendar to four-day calendar. The remaining questions included responses from the three superintendent participants and all three building administrators.

Interview question one. Was the four-day school week a factor in your decision to apply for a position at this district?

The one superintendent not working in the district prior to the transition to the four-day school week indicated the four-day week definitely factored into the decision to apply. Participant D2S1 indicated, "It didn't hurt that they were going to the four-day school week." The building administrator who had not been working in the district prior to the transition to the four-day school week explained the four-day school week was a factor due to the number of days in the contract. This administrator remarked, "I looked at the numbers and more time with my family meant a lot to me."

Interview question two. Was the four-day school week a factor in your decision to accept a position at this district? Why?

The same superintendent indicated the four-day school week did factor into the decision to accept a position. This participant shared:

I definitely saw it as an opportunity. I think that was a big thing for me, as a new person coming in, I could get a lot of work done on Mondays and get to know people without having the stress of school going on.

Superintendent D2S1 also mentioned being responsible for implementation of the fourday school week was daunting. The district had already made the decision to implement that four-day school week, but the implementation became the responsibility of the new superintendent.

The building administrator (D2B1) not working for the district at the time of transition responded more time with family and fewer days in general in the contract influenced the decision to accept a position with the district. This administrator referred to the number of days in the contract compared to the number of days in a contract for an administrator in a traditional five-day school week district. The fewer number of days allowed more time for family.

Interview question three. Has the four-day school week influenced your desire to remain at this school district, either positively or negatively? How? In what way?

All three superintendent participants indicated the four-day school week was a positive factor in their desire to remain at their respective districts. Participant D3S1 explained the benefits were twofold: professional and personal. The personal benefits revolved around more time for family. The professional benefits included the extra day
to work without interruption. Participant D1S1 provided information about the benefit of the four-day school week for students. This participant also believed the district's approach to professional development for teachers was "cutting edge." Participant D2S1 gave details about other opportunities that had been presented to consider other positions. Those opportunities were not enough to entice the participant from the district and the four-day school week.

The three building administrators responded positively to the influence of the four-day school week on the desire to remain in the districts. Two specifically mentioned family time from the perspective of a parent. Participant D2B1 said, "I would really have to consider applying elsewhere after being at a four-day school week." These responses reflected the importance of work-life balance (Davy \& Hall, 2015).

Interview question four. What is your overall opinion of the four-day school week? Please explain.

Opinions shared in response to this question appeared in opposition to each other. One participant said, "I hope no one else does it." This participant went on to explain the four-day school week had placed the district in a position to be more competitive with the recruitment and hiring of staff. Superintendent D2S1 went on to say, "When we have an opening we have many people wanting to come here now."

In opposition to the first response, Participant D1S1 said, "I think it's great. I would like to see more districts try it." The third participant agreed the four-day school week was a good thing. A positive response from the community, students, and teachers was cited as the reason.

Building administrators responded to this including a variety of topics. Participant D3B1 replied, "The students come back recharged, refreshed, having an extra day. Teacher attendance has been better because they schedule doctor's appointments on Mondays. And, maybe don't need as many mental health days in March because they have that extra day."

An additional topic mentioned was the ability to keep better teachers and the ability to obtain better applicants. Participant D1B1 shared the views of D3B1, indicating a gain in overall positive student attitude. Also noted was consistent academic student performance. Personal reasons such as more family time were added to the discussion. Responses to the interview question confirmed five of the six reasons districts undertake the transition to a four-day school week as reported by Heyward (2017). Those included cost savings, improved quality of life, attracting teachers and students, increased collaboration and planning, improved school culture and reducing absenteeism, and additional learning opportunities (Heyward, 2017).

Interview question five. Do you believe the four-day school week has an effect on your working conditions?

Two of the superintendent participants responded to this question. One participant (D1S1) indicated the working conditions for the general population of the school were better. Another participant (D3S1) explained working conditions were impacted due to the one less day of the "stressful grind."

Building administrators reported being more refreshed from week-to-week. Participants also noted a more positive culture. Improved teacher morale and improved student morale were also mentioned. Participant D3B1 felt the four-day school week and
the extra personal time had been a big selling point in hiring new teachers. Reeves (2017), Picchi (2017), and Newman et al. (2016) all remarked about the benefits of the four-day week in the recruitment of teachers, which aligned with the perceptions of principals involved in the study.

Interview question six. If you were working here before the transition to the four-day school week, do you think your job satisfaction is different now than before? If so, how?

The two superintendent participants who responded to this question indicated job satisfaction is better now than before the transition to the four-day school week. However, one participant (D3S1) shared the four-day week was not the sole reason for improved job satisfaction. An improved financial situation for the district also played a large part in improved job satisfaction. Participant D1S1 related job satisfaction to climate of the district. As the climate improved, this participant's job satisfaction improved. This was attributed to the four-day schedule.

Two building administrators responded to this question. One indicated job satisfaction was probably about the same. The other (D3B1) said, "I wouldn't consider looking for another district because the four-day hits the balance having the extra time."

Interview question seven. What challenges do you have in hiring experienced, qualified, and effective teachers for all of your students (at all grades, levels, and in all content areas)?

All superintendent participants mentioned lower salary schedules in comparison to larger school districts as a significant challenge in hiring. This was noted by Baker et al. (2016), Hanushek (2016), Gray and Taie (2015), and Murphy (2017) as an important
factor for rural districts trying to attract teachers. One participant (D1S1) felt lack of affordable housing in the district was a significant problem in hiring. Wang (2014) suggested providing housing as a possible solution for the problems related to housing and hiring new teachers in rural areas. Hiring new, experienced teachers who commuted to the district for a few years, then moved on, was also a universal issue according to the superintendent participants.

Building administrators also referred to the challenges of a low salary schedule for teachers. Participant D3B1 explained teachers can travel 10 to 20 miles in any direction and earn $\$ 5,000$ to $\$ 6,000$ more annually. Remote location was also mentioned as a challenge in hiring new staff.

Interview question eight. What challenges do you have in retaining experienced, qualified, and effective teachers for all your students (at all grades, levels, and in all content areas)?

Lack of affordable housing and low salary schedules were both mentioned under recruitment and retention. Participant D3S1 illustrated:

A teacher that is focused strictly on the bottom line will go to a bigger district if they're qualified for it. The four-day school week has helped us with teachers who are sort of weighing the difference in how much money they're making and how much free time they have for family. So, we usually win that discussion. Participant D2S1 believed the four-day school week had leveled the playing field. This participant went on to share that the quality of instruction had improved because of the people who had been retained in the district.

Building administrators D2B1 and D1B1 acknowledged the distance some teachers commute as a challenge in teacher retention. Both remarked they had lost quality teachers who were offered positions closer to where they lived. Participant D3B1 reiterated the lower salary schedule as a problem in teacher retention. This participant did note many teachers in the district had family ties to the area, so they were more inclined to remain. This finding validated the reports of Fowles et al. (2013) and Wood et al. (2013) regarding the importance of family and cultural ties to the geographic region in the retention of rural teachers and administrators.

Interview question nine. Do you think the four-day school week has improved teacher retention? How so?

All three superintendent participants shared the belief the four-day school week had improved teacher retention. Participant D2S1 said, "Absolutely. Without a doubt." Another participant (D1S1) clarified, "People are more vested in staying here because of the schedule."

One building administrator felt it was too early to identify a trend in teacher retention. The remaining two building administrators indicated the four-day school week had improved teacher retention. Participant D3B1 stated, "The ones I've hired since we made the transition to the four-day week don't have any real serious thoughts of leaving." These responses aligned with the findings of Turner et al. (2017).

Interview question 10. Have you noticed a change in the quality of teacher applicants since you transitioned to the four-day school week? What sort of change? Please describe.

Two of the three superintendent participants shared similar stories about the quality of applicants. Participant D2S1 gave details about having large numbers of qualified applicants and applicants with experience, compared to the years before the transition to the four-day school week. Participant D1S1 indicated more options to choose the best candidate, saying, "We can take our pick of the best candidates that are attracted to come here." The third participant had not noticed a change in the quality of teacher applicants to the district. This confirmed reports by Reeves (2017) and the reported reasons for implementation found in Heyward's (2017) implementation guide.

Building administrators had differing perspectives on the quality of teacher applicants. Participant D1B1 acknowledged a few experienced teachers had applied due to interest in the four-day school week. However, participant D3B1 had not seen a change in the quality of teacher applicants. This was related to the uniquely rural situation of the district.

Interview question 11. When evaluating applications for certificated positions, have you noticed a change in the number of years of experience your applicants have? Please describe.

Participant D3S1 had not seen an increase in the number of years of experience within the applicant pool since the transition to the four-day school week. Participant D1S1 noted some who were hired after the transition did have experience. Finally, participant D2S1 provided details about the previous year and the number of applicants hired with experience. This district hired seven teachers, and only two of the seven did not have experience. This participant declared, "That's unheard of."

Participant D1B1 described the ebb and flow of openings and the lack of sufficient data to indicate a pattern of hiring. Participant D2B1 indicated only one recently hired teacher was not fully certificated at the time of employment. Participant D3B1 indicated highly qualified teachers were being employed, but they were highly qualified first-year applicants.

Interview question 12. When evaluating applications for certificated positions, have you noticed a change in the level of education your applicants have? Please explain.

Two of the three superintendents indicated they had not seen a change in the level of education held by applicants. Of those two, one participant indicated the level of education was something that had not been purposefully observed. Unlike the others, participant D2S1 explained the candidate pool for his district had improved. Candidates had higher levels of education than previously observed.

Interview question 13. Have you been able to hire teachers who are more highly qualified (experienced, certificated, and degreed) to fill vacancies than in previous years under the traditional school calendar? To what extent?

Participant D2S1 provided a detailed response to this question. He illustrated: This past year we had two math positions. We had two math positions and we were able to hire two math people with experience from other districts that were highly recommended. In previous years we had to hire people who were uncertified to teach math. It has definitely changed the type of applicants we have been able to attract.

Participants from the other two districts also agreed they had been able to hire more highly qualified teachers than before the transition to the four-day school week.

Building administrators were not as certain the levels of education had changed since the transition to the four-day school week. One indicated the level of education had not changed in applicants. One did not have enough experience to respond. The third felt it was too soon to make an assumption about the trend.

Interview question 14. In the role of superintendent, what is your overall impression of the four-day school week and teacher recruitment? Please elaborate.

Responses to this question were all positive. One superintendent (D2S1) said, "We feel like it has been a positive change for our kids, for our school, for our teachers, and for our community." Participant D1S1 shared, "The new teachers we've hired in the last couple of years are phenomenal. Great hires."

Building administrator D3B1 remarked:
If we could break that $\$ 30,000$ mark for a first-year teacher or paid more on our steps, I absolutely think it would increase the number of applicants and the quality of applicants. If we could pay more, I absolutely believe it would have a bigger impact on hiring.

The importance of teacher salaries was reiterated by Murphy (2017) in his interviews with rural administrators in Texas. The ability to use the four-day week in the recruitment process was viewed as positive by the building administrators as a whole. One building administrator mentioned having an additional day for planning and collaboration was a strong selling point.

Interview question 15. In the role of superintendent, what is your overall impression of the four-day school week and teacher retention? Please explain.

All participants replied positively about the four-day school week and teacher retention. Superintendent participant D3S1 responded, "The vast number of teachers, once they're here, really appreciate it. I know for a fact, in at least three cases, it has been the determining factor for some of our better teachers staying with us." Participant D1S1 agreed, saying people will stay longer because of the schedule.

Building administrators were universal in the belief the four-day school week improved teacher retention. Administrator D3B1 stated, "Once a teacher has been in a four-day school week, I don't know that they would want to leave. It's very easily something that you get used to, working four days." The "grind" of 175 to 180 days in a school year versus 151 was referred to by D2B1. The fewer number of days in the contract for teachers was seen as positive in teacher retention. These responses reflected the belief expressed by Alves (2017) that districts experience many benefits beyond simply financial savings.

Interview question 16. Is there any comment you would like to make about the four-day school week that you think would be pertinent to this study?

Several topics were raised in response to this question. One participant shared thoughts about the importance of the decision to implement a four-day school week remaining at the local level. He went on to say districts operating in a rural region must consider the number of square miles covered and the amount of time students are riding a school bus. He said, "It makes more sense that once we come to school we are here longer."

Participant D3S1 raised an issue regarding support staff. He explained:

The issue was sort of unintended, if you're in a true cost cutting mode, that's where you're going to save your money. And, of course, your support staff primarily lives in your community. But teachers, at least in our district, come from all over the place because we're a very small community. So we had to kind of thread that needle, so to speak, and fortunately we didn't have to cut as much as we thought we might need to. We weren't as draconian as we could have been. He further explained support staff represented voting taxpayers in the district. So, the issue of what to do with support staff salaries was key in obtaining community support for the four-day school week.

Fewer discipline problems were mentioned in relationship to the four-day school week by participant D1S1. This was noted as important in the way teachers regarded the four-day school week. With fewer discipline problems, more instruction can take place, influencing the satisfaction of teachers.

Lastly, one participant mentioned teachers entering the job market, considered a part of the millennial generation, have an expectation that work schedules should be more flexible. Participant D1S1 said, "The younger generation, you know the flexible kids that are coming out of school are really attracted to that. I think it's normal for them [millennials], and I think that's a benefit to districts as they move forward."

Building administrators offered comments about teaching being a struggling profession producing fewer graduates each year. The extra collaboration time afforded by the four-day school week was seen as appealing in the competitive task of recruiting teachers. One administrator remarked larger school districts could really hurt the recruitment efforts of smaller, rural four-day school week districts if they decided to
adopt the four-day schedule. The four-day districts would lose their competitive edge in recruitment if competing with higher-paying districts with a similar schedule.

Conceptual framework. The four interrelated strands impacting teacher recruitment and retention in this conceptual model are family factors, within-class factors, within-school factors, and community issues (Boylan et al., 1993; Davis, 2002; Ulferts, 2015). The first factor, family issues, was frequently mentioned in responses from both superintendents and building principals. One administrator specifically mentioned the number of contracted days in a four-day schedule versus a five-day schedule as a positive thing for families. The additional time for family was a mitigating factor for improved job satisfaction among this group of participants. The four-day schedule was labeled as the right balance of work and family time.

The next strand of the conceptual model is within-class factors. Superintendents and building principals referred to a refreshed student body with improved student morale. Teacher morale was also noted as significantly improved. The benefits of the four-day schedule to working students was also deemed significant.

Within-school factors shared by this group of participants included improved working conditions for all staff, not just the instructional staff. Personally, the superintendents and administrators discussed the benefits of one day a week of uninterrupted work time. The flexibility to provide more in-depth professional development was also regarded as a strength of the schedule. Most of the superintendents and building administrators also reported an improved applicant pool and a more competitive hiring process than previously observed. Teacher retention was reported as improved across the board.

Superintendents and building administrators related the community at large felt positive about the change to the four-day school week. Most had surveyed parents and received positive responses to surveys regarding the schedule. This was mentioned as an important factor, in that community members are voting patrons, and the support of the community is necessary in the event a tax levy increase or capital project might need voter approval in the future. The connections to the spheres of influence (Boylan et al., 1993; Davis, 2002; Ulferts, 2015) are shown in Figure 4.

| Family Factors | Within-Class Factors |
| :--- | :--- |
| - Balanced time between work and | • Increased teacher attendance |
| family deemed "just right" | • Heightened teacher morale |
| - Improved job satisfaction | • Improved student morale |
| - Improved schedule from the | - Enhanced time management for |
| perspective of being an administrator | working students |
| and a parent | Community Factors |
| Within-School Factors | • Supported by community as seen in |
| - Uninterrupted work day once each | parent surveys |
| week | - Enriched relationship with community |
| - Enhanced and competitive recruitment | at large |
| of teachers |  |
| - Improved retention of teachers |  |

Figure 4. Comparison of superintendent and building administrator responses to strands of conceptual framework (Boylan et al., 1993; Davis, 2002; Ulferts, 2015).

Research question one. What are the perceptions of teachers, counselors, building principals, and superintendents related to teacher retention within rural schools implementing a four-day school week?

In support of research question one regarding teacher retention in rural schools implementing a four-day school week, respondents expressed confidence in the
relationship of the four-day school week to improved teacher retention. Specific instances were related regarding teachers who had been offered positions in other districts operating a traditional five-day school calendar and those teachers' decisions to remain with their current districts due to the benefits of the four-day schedule. While one administrator felt it was still too soon to identify the changes seen as a trend, he did acknowledge the potential impact of the schedule on teacher retention.

Research question two. What are the perceptions of rural school administrators regarding the quality of applicants for professional teaching positions since transitioning to a four-day school calendar?

Observations and opinions on the quality of applicants since the transition to the four-day school week were consistent in two of the three participating school districts. District Three was significantly more remote than the other two. Both the superintendent and the building administrator interviewed at District Three indicated the quality of applicants had not changed since the transition to the four-day school week. However, superintendents and building administrators at District One and District Two all indicated an improved applicant pool since the transition to the four-day school week. This information was included in the analysis of data in support of research question two pertaining to the quality of applicants for professional teaching positions since transitioning to the four-day school week.

Research question three. What are the perceptions of teachers, counselors, building principals, and superintendents working in a rural four-day school week district regarding job satisfaction and positive working conditions?

All superintendents and building administrators shared information about the four-day school week as a positive change in their districts, which provided data for analysis in relation to research question three pertaining to the perceptions of teachers, counselors, building administrators, and superintendents on job satisfaction and working conditions. They described the "just right" balance of work and family time, improved teacher attendance and teacher morale, and a cutting-edge approach to professional development as some of the crucial influences on job satisfaction and improved working conditions.

## Counselor Responses

Each of the three participating districts was represented in the study by one counselor. The genders of the counselors were two males and one female. All three counselors had completed master's degrees. Two of the counselors had worked for more than 20 years. One counselor was in the six to 10 years of experience range. The number of years working at their respective districts ranged from 14 to 18 years. All of the counselors identified their level as middle and high school. All three were working at their districts when the transition to the four-day school week occurred.

The following information is organized first by interview question. The first two questions were not applicable to this group of participants, as they had all been working at their districts at the time of the transition from a traditional five-day school calendar to the four-day school week. The discussion of the responses by the three school counselors begins with interview question three. Following the discussion of each interview question, a matrix outlining the connections to the conceptual framework is included. Finally, the relationship of the responses to the three research questions is discussed.

Interview question three. Has the four-day school week influenced your desire to remain at this school district, either positively or negatively? How? In what way?

Two of the three participants responded the four-day school week was a positive factor in their desire to remain at their respective school districts. Counselor D1C1 also replied in a positive fashion, saying, "It hasn't hurt any." Participant D1C1 also included information that indicated a desire to remain in the position of counselor whether the four-day school week continued or not.

Counselor D2C1 indicated the four-day school week helped with the balance of being a counselor and a working parent. This aligned with findings from Davy and Hall (2015). Counselor D3C1 shared the four-day week had been a factor in the consideration to work a full 30 years, instead of taking the 25 -and-out retirement option available.

Interview question four. What is your overall opinion of the four-day school week? Please explain.

When asked about the overall opinion of the four-day school week, Counselor D1C1 replied that in the role of school counselor, there was not a great deal of difference in the level of preparation. However, in his wife's role as a teacher, the increased amount of preparation time was a significant factor.

Counselor D2C1 answered, "The bottom line is, I like it. There's no more second guessing. We're here Tuesday through Friday, every week." This counselor went on to say the consistency of schedule was a very important benefit to teachers, students, and parents. This was seen as an advantage to the students and their education.

Counselor D3C1 replied initially he was skeptical about the four-day school week; however, after doing research he became more comfortable with giving the
concept a try. He went on to say, "At this point, I think it's a benefit for our school, our community, so I had that transition. I relate that to my time as being a teacher and it took time to get comfortable with something new."

Interview question five. Do you believe the four-day school week has an effect on your working conditions? In what way?

Counselor D3C1 responded that in his dual role as counselor and classroom teacher, it has caused him to work through his curriculum more efficiently. He also mentioned, from the perspective of a teacher, that the extra preparation time was very valuable. Counselor D2C1 explained there was less stress. The day off without students was described as "a bit of a breather." Counselor D1C1 did not describe a significant difference in working conditions. It was mentioned emails still arrived whether school was in session or not, but that was not seen as a negative factor.

Interview question six. If you were working here before the transition to the four-day school week, do you think your job satisfaction is different now than before? How so?

When asked about whether job satisfaction is different now than before the transition to the four-day school week, counselor D1C1 responded anything that makes the job better helps with job satisfaction. He went on to elaborate that things like more money, better hours, and paid health insurance are the things that help with job satisfaction. Counselor D2C1 responded control of balance in life was improved. This counselor also remarked the district had received better teacher candidates. Counselor D3C1 asserted it had been a benefit outside of work at home. This counselor mentioned having less stress and more time to balance things at home. In addition, the extra day to
prepare was seen by this counselor as a positive for all staff. The balance of time for work and family was cited as a positive layer to the school environment.

Interview question seven. Is there any comment you'd like to make about the four-day school week that you think would be pertinent to this study?

Two of the three counselors (D2C1 and D3C1) responded to this question by mentioning they noticed better-quality applicants for teaching positions as a result of the four-day school week. Counselor D3C1 added the extra day counteracted the lower salaries typical of rural school districts. This counselor went on to say the decision to adopt the four-day school week was a financial one, and this demonstrated to their rural community that the school was doing everything it could to reduce tax pressure on the people in the community.

Counselor D2C1 also serves as the professional development chairperson for the district. It was noted there were only two first-year teachers hired in the district this year. Five of their new employees had prior teaching experience. That was noted by the counselor as "remarkable." This counselor went on to say that two of the five teachers with experience took a pay cut to accept a position with the district.

Additionally, the subject of students who work was broached by Counselor D1C1. An example was noted of a student who worked 35 hours a week and attended high school full-time. The four-day week schedule was seen as a huge bonus for those working students, allowing them to better balance a work schedule and the commitment to school and studies.

Conceptual framework. The conceptual framework for this study was built upon the work of Boylan et al. (1993), Davis (2002), and Ulferts (2015). There are four
interrelated strands impacting teacher recruitment and retention in this conceptual model. The first factor, family issues, was characterized in the responses from the counselors. The ability to balance work and home was reported as a positive factor in the four-day school week model. The schedule was seen as a better schedule for staff, reducing stress and allowing for a breather from the work.

Within-class factors is the next strand of the conceptual model. This strand was represented by the references to extra preparation time for teachers and staff. In addition, the ability to work through curriculum more efficiently was also seen as a positive benefit of the four-day school week.

Within-school factors were exemplified by references to a better schedule for students and teachers. The schedule was reported as a positive benefit to the whole school. The balance of work and family time was also reported as a school-wide benefit. The mention of the balance of school and work time for working students was also seen as a school-wide benefit.

Community factors represented in the interviews repeated some of the same reasoning mentioned in the prior strands of the framework. The schedule was viewed as a benefit to the community at large. An important finding mentioned by the counselors was that the school demonstrated its respect for the tax burden carried by patrons. Since the motivation to adopt a four-day school week calendar was financial, according to Counselor D3C1, the result was a lessening of the tax pressure on patrons of the district. Figure 5 provides an overview of the responses as they relate to the conceptual framework.

| Family Factors | Within-Class Factors |
| :--- | :--- |
| - Balanced time between work and | • Increased preparation time for teachers |
| family | - Upgraded efficiency with curriculum |
| - Reduced stress |  |
| - Enhanced schedule for staff | Community Factors |
| Within-School Factors | - Identified as positive change by parents |
| - Helped working students to balance | - Benefited entire community |
| schedule | - Reduced tax burden for patrons due to |
| - Reported school-wide balance of work | cost savings |
| and school |  |
| - Upgraded teacher candidates |  |

Figure 5. Comparison of counselor responses to strands of conceptual framework (Boylan et al., 1993; Davis, 2002; Ulferts, 2015).

Research question one. What are the perceptions of teachers, counselors, building principals, and superintendents related to teacher retention within rural schools implementing a four-day school week?

While these respondents are employed as school counselors, one counselor (D3C1) served in a dual role of counselor and teacher. Counselor D3C1 shared the fourday school week would cause him to consider working 30 years instead of only 25 years. This information was included in the data analyzed to support research question one regarding teacher retention in rural schools implementing a four-day school week.

Research question two. What are the perceptions of rural school administrators regarding the quality of applicants for professional teaching positions since transitioning to a four-day school calendar?

While the counselors do not serve in administrative roles, they did offer their opinions on the quality of applicants since the transition to the four-day school week. Counselor D2C1, who also served as her district's professional development chairperson, mentioned the number of applicants with experience had increased dramatically. In fact, she shared that out of the seven new teachers hired this term, only two did not have experience. Counselor D3C1 also reported an improvement in teacher candidates for open positions. This information was included in the analysis of data in support of research question two pertaining to the quality of applicants for professional teaching positions since transitioning to the four-day school week.

Research question three. What are the perceptions of teachers, counselors, building principals, and superintendents working in a rural four-day school week district regarding job satisfaction and positive working conditions?

All counselors responded the four-day school week was a positive change in their districts, which provided data for analysis in relation to research question three pertaining to the perceptions of teachers, counselors, building administrators, and superintendents on job satisfaction and working conditions. Further, counselors identified the balance of family and work time, reduced stress, a consistent schedule, and more preparation time as some of the key influences of job satisfaction and improved working conditions.

## Teacher Responses

Twelve teachers participated in this study: three from District One, four from District Two, and five from District Three. Three participants (25\%) were male. Nine participants (75\%) were female. The highest level of formal education included a bachelor's degree (five participants), a master's degree (six participants), and one educational specialist degree. Participants had a variety of years of experience including a first-year teacher, several in their early to mid-career years, and one with more than 20 years of experience. The number of years working at their respective districts ranged from one to 28 years. Educational levels were identified by the participants as elementary (seven participants), middle school-junior high (one participant), high school (three participants), and middle-high school (one participant). Four were not working for their respective school districts at the time of transition from a traditional five-day school week calendar to the four-day school week calendar. Eight were working for the school districts at the time of transition.

The following information is organized first by interview question. The first two questions were applicable only to a subset of the teacher participants; those who had not been working at their districts during the transition from five-day calendar to four-day calendar. The remaining questions include responses from the entire group of teacher participants. Following the discussion of each interview question, a matrix outlining the connections to the conceptual framework is included. Finally, the relationship of the responses to the three research questions is discussed.

Interview question one. Was the four-day school week a factor in your decision to apply for a position at this district?

Three of the four teachers who responded to this question indicated the four-day school week was a factor in their decisions to apply for positions at their respective districts. Teacher D3T3 referred to experience with the four-day school week during student teaching that spurred the decision to apply. Another teacher (D2T3) indicated the opportunity to have an extra day of preparation and an extra day for family was a significant factor in the decision to apply. One participant indicated the four-day school week was not a factor in the decision to apply. This participant did go on to say the fourday school week "has been a blessing."

Interview question two. Was the four-day school week a factor in your decision to accept a position at this district? Why?

One teacher participant (D2T1) indicated the four-day school week was a factor in the decision to accept a position. This participant shared the salary per day was higher, when calculating a teacher's salary over the number of contracted days. This teacher felt like the pay difference was a significant factor in the decision to accept a position. Another participant indicated the four-day school week was a bonus in the decisionmaking process. The other two teachers indicated they would have accepted the positions regardless of the calendar type.

Interview question three. Has the four-day school week influenced your desire to remain at this school district, either positively or negatively? How? In what way?

Ten teacher participants (83.3\%) indicated the four-day school week positively influenced their desire to remain at their respective school districts. Teacher D2T1 reported, "There's not a single negative thing to say." Two mentioned they would be disappointed if the decision were made to return to a traditional five-day calendar.

Others reported the extra day was useful for keeping up with grading and planning. Other factors mentioned included improved student attendance, more time to rest throughout the school year, and the schedule being "great" for a working mom. One (D1T1) indicated that while positive about the four-day school week, the issue would not change the desire to remain at the district because the participant lived in the area and planned to remain there.

Two teacher participants were adamant in their responses that the four-day school week had not influenced their thoughts in either a positive or negative way. In fact, participant D3T2 indicated the four-day school week "has not influenced my thoughts at all." It is interesting to note both of these teachers had been in the teaching profession for more than 15 years.

Interview question four. What is your overall opinion of the four-day school week? Please explain.

This question elicited comments from teachers that included many different topics. Two participants were not supportive of the four-day school week. Participant D3T5 said, "It just made things harder." This participant went on to say, "Three days at home is too much time. We have to start over on Tuesdays." Participant D2T2 pointed out, "It's one day our students do not get to come to school."

The remainder of the teacher participants (10) expressed positive comments about the four-day school week. Several commented on the improved scheduling within the school day. The blocks of learning time were reported to be longer and better for instruction. One participant (D1T1) stated, "This is the best schedule I've ever had."

Many cited increased time for professional development, planning, and collaboration. Participant D1T2 said, "We're getting more done. We made it through our entire reading curriculum last year."

Three participants reported an improved outlook. That outlook was described as a "positive vibe," "refreshing," and an "improved quality of life." Another participant described the same sort of thing by saying, "It takes away the overwhelming feeling."

More time with family was a predominant theme. The participants who were parents reported a positive feeling from the perspective of a parent. An appreciation for Mondays for scheduling medical appointments or personal business was expressed. All three of the participating districts attend school on Tuesday, Wednesday, Thursday, and Friday. Mondays are either scheduled for professional development and collaboration, or they are scheduled as days off.

Interview question five. Do you believe the four-day school week has an effect on your working conditions? In what way?

Fifty percent of teacher participants mentioned improved working conditions in the area of teacher morale and attitude. Participant D1T3 noted a more positive environment school-wide. One participant reported, "When you don't have to stay after school - it changes your attitude."

Participant D1T1 believed the biggest improvement was in the day-to-day scheduling, as mentioned by others in responses to a previous question. Three of the participants mentioned the time (Mondays) to take care of personal or family matters as an improvement to working conditions. Others shared the extra time to work and
collaborate either within or outside of their department as an improvement to working conditions.

Two participants did mention it can be difficult to fit curriculum designed for a five-day schedule into a four-day schedule. Teacher D3T2 lamented about "the strain of a longer day" as a factor impacting working conditions. This participant also noted a loss of Tiger Time, which was a student consultation time previously built into the schedule.

Interview question six. If you were working here before the transition to the four-day school week, do you think your job satisfaction is different now than before? How so?

Two participants indicated their job satisfaction was about the same as before the transition. One participant shared a negative change in job satisfaction related to the four-day schedule. Teacher D3T5 revealed, "I am more stressed about getting kids where they need to be." Teacher D2T4 expressed a dissenting opinion in saying, "Nothing gets left out of the daily schedule."

Five teacher participants reported a definite improvement in job satisfaction since the transition to the four-day school week. Teacher D1T2 stated, "I feel better about what I'm doing." Others used the phrases "more satisfied" and "less stress at home." Participant D1T3 disclosed improved health due to less stress.

Interview question seven. Is there any comment that you'd like to make about the four-day school week that you think would be pertinent to this study?

Teacher D1T1 expressed a positive feeling toward the superintendent and local school board for protecting teachers' collaboration time. One participant who had expressed several negative comments about the four-day school week conceded, "For
whatever reason, parents are on board with it [four-day school week]. Most teachers and parents love it." Another participant from the same district shared the community had stepped up to help with childcare.

Representatives from all three districts shared that part of the initial motivation to consider the four-day school week was due to the need to save money. One participant shared the district's savings equaled roughly the cost of a teacher's salary. That amount of savings was seen as important and significant for a small rural district.

Teacher D1T3 presented an argument about the schedule that extolled the importance of the four-day school week for new teachers who are part of the millennial generation. The four-day school week model was viewed as highly desirable for millennials. Teacher D1T3 went on to say that having Mondays off can offset the lower salaries typical of a small rural school district. The desirability of the four-day school week to the millennial generation and the flexibility of having Mondays off, when considered together, were seen as strong recruitment tools for small schools. Participant D3T2 felt the four-day school week schedule was attractive for teachers who live away from the district and commute.

Conceptual framework. The four interrelated strands impacting teacher recruitment and retention in this conceptual model are family factors, within-class factors, within-school factors, and community issues (Boylan et al., 1993; Davis, 2002; Ulferts, 2015). The first factor, family issues, was well-represented in the responses from the teacher participants. The extra time for family and personal matters on Mondays was reported as having a positive impact on teacher retention, job satisfaction, and working conditions. The schedule, while previously referred to as simply the four-day schedule,
was further delineated by the teachers to mean the day-to-day schedule. Greater learning blocks of time were reported as a positive leading to greater student achievement.

The next strand of the conceptual model is within-class factors. Interestingly, the teachers also reported an improved ability to work through curriculum more efficiently, as reported by the counselors. The consistent three-day weekend was viewed as refreshing, having an impact on teacher morale and attitude. The extra day built in for preparation, collaboration, and planning also connects to the within-class factors impacting teachers.

Within-school factors were illustrated in reference to feeling protected by the school board and superintendent. The within-school factors also included the attractiveness of the four-day schedule to teachers who commute. In addition, the fourday school week was viewed as a model that would be attractive to potential applicants who fall into the generational category of "millennials."

Teachers reported the community at large, and parents in particular, were "on board" with the four-day school week. The communities reportedly arranged childcare on Mondays for parents who needed assistance. These items are community factors that support the four-day school week model. A synthesis of these factors is provided in Figure 6.

| Family Factors | Within-Class Factors |
| :--- | :--- |
| - Extended time for family and personal | • Added preparation and collaboration |
| needs | time for teachers |
| - Improved quality of life and positive | - Reported efficiency with curriculum |
| outlook | - Refreshed after three-day weekend |
| - Enhanced schedule for staff | Community Factors |
| Within-School Factors | - Cooperated with new schedule by |
| - Valued by the school board and | working to schedule appointments on |
| superintendent due to protected | Mondays |
| collaboration time | - Supported by parents; on board with the |
| - Identified as attractive schedule to | change |
| teachers who commute | - Provided childcare within community |
| - Perceived as attractive schedule to | resources |
| teachers from the millennial generation |  |

Figure 6. Comparison of teacher responses to strands of conceptual framework (Boylan et al., 1993; Davis, 2002; Ulferts, 2015).

Research question one. What are the perceptions of teachers, counselors, building principals, and superintendents related to teacher retention within rural schools implementing a four-day school week?

Teachers provided comments in their responses to interview questions that supported each of the three research questions. Participants shared information indicating
they did not want to return to the traditional five-day week. A few mentioned they could not imagine going back and would be disappointed if the scheduled changed. This information was included in the data analyzed to support research question one regarding teacher retention in rural schools implementing a four-day school week.

Research question two. What are the perceptions of rural school administrators regarding the quality of applicants for professional teaching positions since transitioning to a four-day school calendar?

Teachers offered insight on the four-day school week and teacher recruitment. The appeal of the schedule to teachers in the millennial generation was noted. In addition, the appeal of the schedule to teachers who commute was also important. This information was added to the examination of data in support of research question two pertaining to the quality of applicants for professional teaching positions since transitioning to the four-day school week.

Research question three. What are the perceptions of teachers, counselors, building principals, and superintendents working in a rural four-day school week district regarding job satisfaction and positive working conditions?

Teachers were divided in their opinions of the four-day school week and improved job satisfaction and working conditions. Eighty-three percent felt positive about the four-day school week, while $17 \%$ did not. Even those who did not express positive comments about the four-day school week indicated the extra day off was nice. The majority of teacher participants felt the added time for personal and family needs was valuable. Additional important factors in job satisfaction and working conditions included improved blocks of instructional time. These data were evaluated and explored
in relation to research question three pertaining to the perceptions of teachers, counselors, building administrators, and superintendents on job satisfaction and working conditions.

## Summary

This qualitative study was undertaken to investigate the impact of the four-day school week on teacher recruitment, teacher retention, and job satisfaction in rural school districts. By carefully analyzing responses from superintendents, building administrators, school counselors, and teachers, insight and understanding of the impact of the four-day school week on school personnel was obtained.

All participants interviewed for this study acknowledged the benefit of the fourday school week for personal and family time, whether they agreed with the decision to make the transition or not. Administrators, both superintendents and building principals, were universally supportive of the four-day school week and its importance in teacher recruitment and retention. School counselors also reported favorably regarding the transition to the four-day school week, more specifically for the benefits to family and work-life balance. Teachers differed somewhat, in that $17 \%$ did not find the four-day school week to be altogether positive, citing more stress and perceived difficulties for students. Conversely, $83 \%$ of teachers interviewed felt the four-day school week was an overall positive change for teachers, students, and the community at large.

This chapter included the perceptions of three superintendents, three building administrators, three school counselors, and 12 teachers working within rural school districts implementing the four-day school week calendar. Seventy-five percent of these individuals experienced the transition from a traditional five-day school calendar to the four-day school calendar. Twenty-five percent joined the districts following the
transition to the four-day school week. Responses were transcribed verbatim and then analyzed to establish commonalities and differences within each group of respondents and within the existing literature.

Chapter Five includes the findings of this study. Each of the three research questions are examined with assumptions and conclusions provided. Responses that differ from the existing literature are reported and discussed. Implications for educational leaders considering the four-day school week and its implementation are included, along with recommendations for further research.

## Chapter Five: Summary and Conclusions

The four-day school week has been growing in popularity with Missouri rural school districts in recent years (Turner et al., 2017). The existing literature on the fourday school week is dominated by discussions of student achievement (Anderson \& Walker, 2015) and anticipated financial benefits (Griffith, 2011). The impact of the fourday school week on teachers and administrators is not well-represented in the literature (Turner et al., 2017).

This study was designed to capture the perceptions of rural teachers, school counselors, building principals, and superintendents regarding the impact of the four-day school on teacher recruitment, retention, and job satisfaction. Twenty-two educators were interviewed from three rural Missouri school districts, each of which began implementation of the four-day school week during the 2015-2016 school year. The findings of this study are presented within this chapter. This chapter also includes conclusions, implications for practice, and recommendations for future research on the four-day school week.

## Findings

This qualitative study was organized to capture the perceptions of teachers, school counselors, building principals, and superintendents regarding the impact of the four-day school week on teacher recruitment, retention, and job satisfaction. To accomplish this task, interviews were conducted with 22 participants from three rural Missouri school districts. Twenty-one interviews were conducted in person, and one interview was conducted by phone. Interviews were transcribed verbatim by the investigator in order to gain insight on the topic. The study was designed to answer three research questions.

Data from each interview were analyzed to provide understanding of the impact of the four-day school week on teacher retention, recruitment, and job satisfaction as perceived by the participants in the study. In the following sections, the findings are summarized.

Research question one. What are the perceptions of teachers, counselors, building principals, and superintendents related to teacher retention within rural schools implementing a four-day school week?

Superintendents and building principals responded teacher retention was improved in their districts. One administrator relayed not enough time had passed to establish a clear trend related to teacher retention. Specific narratives were shared about teachers weighing other job offers and turning them down based upon the popularity of the four-day schedule. District Three reported winning the battle for teachers in at least three different scenarios following the transition to the four-day school week.

Administrators also responded personally about retention. While most acknowledged the four-day school week was not the only factor they considered when determining whether to remain at their current districts, it was regarded as a very significant factor. One administrator had studied the number of days administrators typically work in a traditional five-day schedule versus the number of days administrators typically work in a four-day schedule. The benefit of the reduced number of days in the contract was significant.

The significant impact on retention reported by counselors was the impact on longevity. One counselor noted the four-day school week schedule would incentivize the continuation of employment through 30 years, rather than 25 . The two other counselors reported the four-day school week as a favorable factor in regard to remaining at the
district, but both expressed loyalty to the district that would overshadow the impact of the schedule, whether four-day or five-day.

Teachers provided comments that indicated the four-day school week favorably impacted teacher retention. It is important to note many of the teacher participants expressed loyalty to the district stronger than the impact of the four-day school calendar. However, the degree of loyalty expressed by the teachers included expressions of gratitude toward the school administration and local school board for allowing the implementation of the four-day school week.

Research question two. What are the perceptions of rural school administrators regarding the quality of applicants for professional teaching positions since transitioning to a four-day school calendar?

The six rural school administrators (three superintendents and three building principals) interviewed for this study were split regarding the impact of the four-day school week to help attract higher quality applicants. District Three, located in a very remote region of the state, had not observed a difference in the quality of applicants to the district. District Three reported most vacancies resulted in applications from recent graduates with no experience. District Three's administrators did comment the quality of first-year teacher applicants had been good. District Three did not note an improvement in the number of years of experience presented by applicants or higher levels of educational attainment by applicants.

Administrators from District One and District Two reported a different result following the transition to the four-day school week. These administrators reported receiving a larger number of applicants and an increased number of applicants with the
desired certification already in place. Administrators also reported increased applicants with prior experience at other districts. Experienced teachers accepted positions in spite of the fact doing so would result in a reduction in salary. Teachers accepted positions based upon the perceived benefits of the four-day teaching schedule. While District One and District Two are classified as rural, they are not located in a region as remote as District Three. The results of this study indicate the remoteness of the district appeared to have a stronger influence on the candidate pool than the four-day school week.

Research question three. What are the perceptions of teachers, counselors, building principals, and superintendents working in a rural four-day school week district regarding job satisfaction and positive working conditions?

All categories of participants, from superintendents to teachers, reported the benefits of the four-day school week on work-life balance. The benefits to family were reported by each participant, even if the overall impression of the four-day school week was not positive. Participants shared details about the benefits of the fifth day for scheduling appointments, working on curriculum and planning, and collaborating with other staff. Personal stories of improved health outcomes were reported by a few participants. One of the counselors remarked his longevity in the profession had been extended due to the impact of the four-day school week. He had been previously considering retiring after 25 years, but now felt he would be able to contribute effectively and would wait to retire until 30 years had been completed.

Two of the teacher respondents did not find the four-day school week to be factor that improved job satisfaction. In fact, they felt the four-day teaching schedule was more difficult than the traditional five-day schedule. Comments included concerns students
were away from school too many days. Comments from two teacher respondents also indicated students were not retaining information over the three-day weekend. It is interesting to note these two teachers were both highly experienced, with more than 15 years in the classroom. The reticence to accept change may be related to the number of years working under the traditional five-day format before making the transition.

The remaining teacher participants (83\%) responded positively about job satisfaction and working conditions. One teacher commented she felt valued by the school board and administration. Two teachers reported improved health outcomes due to the opportunity to rest over the three-day weekend. One indicated the amount of medication required to manage her condition had been significantly reduced due to the additional day of rest.

Teachers reported an efficiency in the delivery of curriculum. The additional time allocated within the school day in a four-day school schedule was perceived as highly important and very valuable for student achievement outcomes. Several teachers acknowledged the transition to the four-day school week forced them to carefully reevaluate their curriculum. This reevaluation was perceived as positive and contributed to satisfaction with the transition.

High levels of teacher morale were reported by $83 \%$ of teacher respondents. Increased morale was attributed to the fifth day off to schedule personal business, medical appointments, or additional time for preparation, collaboration, or professional development. In addition, teachers reported higher levels of student morale, which contributed to job satisfaction. Higher student morale was related to reduced behavioral problems and associated discipline referrals.

School counselors reported high levels of job satisfaction. The reasons given by school counselors were similar to those given by teachers. Counselors enjoyed utilizing the fifth day for personal business. In addition, counselors appreciated the fifth day for preparation, collaboration, and planning. A good balance of work time and family time was also reported by school counselors.

Building principals and superintendents also reported high levels of job satisfaction. While many of the administrators interviewed remarked the four-day school week was not the most important factor determining their longevity at the school district, it was noted as an important contributor to their job satisfaction. All mentioned the balance of work and family time as very valuable.

## Conclusions

Conclusions were based on analysis of the transcribed interviews collected in this study. This section presents common themes that emerged from the qualitative analysis of data. This section also includes findings unique to this study, based on the review of related and relevant literature.

Family time and work-life balance. Teachers working a four-day school week reported the four-day school week benefited them in the area of increased family time and work-life balance. This was the most consistent finding represented in the study. All participants expressed some degree of enjoyment and satisfaction with the four-day school week in the area of personal time for family and work-life balance. Importantly, even the few teachers who overall did not favor the four-day school week reported personal satisfaction with the schedule including having a day off to conduct personal business or spend time with family. The findings were consistent across genders and
years of experience. No distinctions could be found demographically in the overall appeal of the four-day school week in the area of increased family time and work-life balance. Davy and Hall (2015) and Cardinale (2013) reported the significant contribution of the four-day schedule to perceptions of improved quality of life and work-life balance. Heyward (2017), in her implementation guide for schools considering the four-day school week, listed improved quality of life as one of the six primary reasons school districts undertake the transition to a four-day school week.

Impact on teacher retention. The four-day school week has an impact on the retention of teachers in rural school districts; however, it may not always be the deciding factor when salary differences are factored into the decision-making process. Data analyzed from the interviews conducted with school leadership, including the superintendent and one building principal from each district, resulted in a two-pronged result. First, the four-day school week was seen as a highly significant factor in the area of teacher retention. Specific narratives were shared that indicated teachers had considered other teaching positions but opted to remain in the four-day school districts based upon the benefits of the schedule. This concurs with what Glatter (2017) reported when describing the four-day day school week as a labor market issue. These findings are also consistent with results reported by Turner et al., (2017) which indicated $91 \%$ of participants preferred to work in a four-day school week.

However, the issue of teachers' salaries was regarded as equally important in two of the three districts and more important in one of the three districts studied. In the more remotely located district, participants felt teacher salaries were a bigger factor in teacher retention than the four-day schedule. The building principal at District Three
hypothesized their teacher retention would be improved by raising the base teacher salary above $\$ 30,000$. Salary had a greater impact according to the administrators at this district.

Positive impact on teacher recruitment. School administrators, counselors, and teachers perceived the four-day school week as positive in the arena of teacher recruitment. Two of the three districts participating felt they were attracting a larger quantity of applicants with more experience and more specific and appropriate credentials. This aligns with the information reported by Newman et al. (2016) who interviewed Missouri school administrators and found many reported twice as many teacher applicants after the transition to the four-day school week. The third district expressed the first-year teachers they were attracting were of high caliber in comparison to previous years. The four-day school week was reported to be popular with college graduates at regional college career fairs.

Increased planning and collaboration highly desirable. Teachers, school counselors, building administrators, and superintendents valued the opportunity to collaborate, plan, and participate in professional development afforded by the four-day school week schedule. The schedule followed by the three participating districts varied somewhat. Two of the three districts relayed their contracted teacher days included roughly one Monday per month for professional development, collaboration, or parent conferences. The third district expected teachers to attend to professional development, collaboration, or parent conferences two Mondays per month. It was reported by teachers in the district requiring two Mondays per month that they felt like they were on the cutting edge of four-day school implementation because of the commitment to increased
professional development and collaboration time. Teachers from all districts shared the benefits of time to collaborate with colleagues within grade levels or departments and across grade levels and departments. The additional collaboration time was viewed as valuable for teacher morale and improved school culture. These findings support the findings of Turner et al. (2017) where planning and collaboration time afforded by the four-day school week schedule was reported as positive by participants.

## Improvements in instruction and curriculum delivery added benefit.

Teachers believed the four-day school week had a positive impact on instruction and the efficient delivery of curriculum. Several teachers mentioned the four-day school week had improved their day-to-day schedules, which in turn improved the delivery of instruction. Teachers reported the ability to cover curriculum more efficiently than in previous years under the traditional five-day calendar. Long (2016) shared teacher comments indicating they felt they were doing a better job than before the change to the four-day schedule.

The four-day schedule meant more than just one day off per week to the teachers interviewed. Teachers perceived the day-to-day variation in the instructional schedule as an integral part of the difference the four-day school week calendar makes for students. High school teachers cited the additional minutes per period allowed them to go deeper into topics without interruption. Elementary teachers explained the additional time allowed them to cover all of the subjects daily, instead of having to pick and choose between science and social studies, for example. Additional built-in time for tutoring within the school day was also noted as a benefit.

## Implications for Practice

Decision should remain at local level. The decision to implement a four-day school week should remain a local decision. While there are thousands of districts classified as rural within the United States, each rural community is unique (National Center for Education Statistics, 2013). The local culture and values of the community stakeholders differ from town to town and community to community. The decision about whether the four-day school week makes sense for any rural district must be carefully weighed by school leadership, school board members, and the community. The issue of the number of square miles a rural district covers was mentioned by one of the interviewed superintendents. This person remarked students spent a long time on the bus each morning and evening; therefore, it made sense to spend a little more time at school once they arrived. The demographics of a community, the financial needs of the district, and the need to recruit and retain quality staff should be considered when deciding to adopt a four-day school week calendar.

Consider improving teacher salaries with savings. Districts implementing the four-day school week should consider allocating savings realized by the transition to improve teacher salaries. District Two made a decision to use the financial savings realized by the transition to the four-day school week to improve teacher salaries. They were the only district involved in this study to indicate a specific purpose for the financial savings realized by transitioning to a four-day school week. By raising teacher salaries, the district was able to improve its ranking among conference schools, which improved their ability to more effectively compete in the teacher job market. Another strategy would be to consider teachers' salaries in comparison to the number of contractual days.

Two participants (one teacher and one administrator) mentioned the number of contracted days as an attractive recruitment factor. In fact, one had calculated the salary on a perday basis and found it to be higher than at a competing five-day schedule district. Delineating this difference as part of a marketing tool might prove useful.

Market four-day calendar to millennials. Districts implementing a four-day school week should market the job descriptions and characteristics deemed favorable by the millennial generation. As the teaching workforce ages and begins to retire, teachers recently trained who are part of the millennial generation are entering the teaching workforce. The characteristics millennials find attractive include flexible work schedules (O'Connor \& Raile, 2015). In fact, salary is not the most important factor millennials consider when determining whether to accept a position. Benefits that include a more favorable work schedule are very important to this group. The four-day school week may work nicely with the flexibility desired by the millennial generation.

## Protected collaboration and professional development time is valuable.

Protected and scheduled time for collaboration and professional development should be an aspiration of all school districts, whether implementing a four-day school week calendar or a traditional five-day school calendar. The findings about the value of protected and regularly scheduled collaboration time and professional development time were consistent and emphatic among all participants from all positions. The practice of introducing regularly scheduled and protected work time for teachers could be duplicated in any calendar format. Reflecting on the value assigned to this feature of the four-day school week, school districts would be wise to consider including this feature in the design of future school calendars, whether four-day or five-day.

## Recommendations for Future Research

Throughout the course of the interview process, the investigator was exposed to non-certified staff while waiting to interview certified staff. Strong opinions about the four-day school week from non-certified staff were noted. As one of the superintendents reported in his interview, the non-certified staff are often members of the local community who represent the voting tax base. Further studies to include the voices of non-certified staff members and their perceptions of the four-day school week could add to the narrative about the benefits and challenges of the four-day school week in rural school districts.

Improved teacher attendance was noted as a positive effect of the four-day school week. It would be interesting to know the actual percentage of improvement noted in teacher attendance for districts implementing a four-day school week. Future studies might include a teacher attendance data component to measure the impact of the four-day school week on teacher attendance. However, the attendance rates of teachers can be skewed dramatically by one person's extended medical leave for maternity or other health reasons. That would need to be addressed, or the compiled data might not truly reflect the impact of the four-day school week on teacher attendance.

Several participants remarked about the overall health benefits linked to the fourday school week schedule. Some remarked that their health had improved as evidenced by a reduction in the amount of medication needed to manage chronic health conditions. Others shared the benefits of the four-day school week had allowed them to consider extending the number of working years before deciding to retire. Further research on the
wellness component of the four-day school week for school staff, both certified and noncertified, would add valuable information to the body of knowledge related to this topic.

A missing voice in the research surrounding the four-day school week is the perception of students. Additional research that included a student perception component could provide valuable information for administrators and school boards considering the adoption of a four-day school week. Student attendance data could also be reviewed to add to the measurement of the impact of the four-day school week on students.

The opinion of one district administrator regarding teacher recruitment and retention trends rings true. Not enough time has passed in the identified districts to truly depict a statistical trend indicating significant increase in teacher retention or improvement in teacher recruitment. Future studies that follow four-day school week districts over a longer period of time would add to the body of knowledge regarding the impact of the four-day school week on teacher recruitment and teacher retention.

## Summary

The purpose of this study was to discover the perceptions of rural school administrators, school counselors, and teachers regarding the impact of the four-day school week on teacher recruitment, teacher retention, and job satisfaction. Qualitative data gathered by interviewing 21 participants in three rural school districts were analyzed. This information was scrutinized to gain a greater understanding of the true impacts of the four-day school week on three rural schools. Three superintendents, three building principals, three school counselors, and 12 teachers were interviewed as a part of this study. These interviews were recorded, transcribed verbatim, and analyzed.

Data analysis indicated an overall positive attitude about the four-day school week calendar at all three participating districts. Participants felt the calendar aided them in achieving balance between work pressures and family priorities. This was a consistent finding across all three participating districts and all identified demographic factors. Many participants expressed a strong allegiance to their school districts, indicating they would remain there regardless of whether the four-day school week calendar remained in effect or not. However, they were quick to note they would be disappointed if the decision to revert to the traditional five-day calendar was made.

Two of the three participating districts identified specific instances which demonstrated improved quantity and quality of applicant pools for vacant positions. They noted more qualified and credentialed applicants than previously observed. These two districts also reported receiving applications from experienced teachers, which had rarely occurred in previous years under the traditional five-day calendar.

The most important benefit gained by adopting a four-day school week calendar may be the impact the schedule has in attracting and retaining a highly qualified teacher workforce. Reducing teacher turnover may be the true savings realized by rural districts adopting the four-day school calendar, even though the initial reason most districts consider the four-day school week is to find actual financial savings. Teacher recruitment and teacher retention appear to be value-added features of the transition to a four-day school week.

## Appendix A



DATE:

TO:
FROM:

STUDY TITLE:

IRB REFERENCE \#:
SUBMISSION TYPE:

ACTION:
DECISION DATE:

REVIEW CATEGORY:

August 29, 2017

Kristi Marion
Lindenwood University Institutional Review Board
[1117475-1] The Impact of the Four-day School Week on Teacher Recruitment and Retention

New Project

DETERMINATION OF EXEMPT STATUS
August 29, 2017

Exemption category \# 1

Thank you for your submission of New Project materials for this research study. Lindenwood University Institutional Review Board has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will put a copy of this correspondence on file in our office.
If you have any questions, please send them to IRB@lindenwood.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Lindenwood University Institutional Review Board's records.

## Appendix B

## Site Permission Letter

As superintendent of the $\qquad$ School District,

I, $\qquad$ , grant permission for Kristi Marion to interview five to 10 educators within the district to investigate the impact of the four-day school week on teacher recruitment and retention.

By signing this form, I understand the following safeguards are in place to protect the participants:

1. Participants may withdraw consent at any time without penalty.
2. The identity of the participants will remain confidential and anonymous in the dissertation and any future publications of this study.

I have read the information above, and any questions I have posed have been answered to my satisfaction. Permission, as explained, is granted.

## Appendix C

## Letter to Superintendents

Dear Mr./Mrs. Superintendent:
Thank you for agreeing to allow your school to be included in my dissertation research. As you may remember, my topic relates to the impact of the four-day school week on teacher recruitment, retention, and job satisfaction. My study has received IRB approval from Lindenwood University, so I am ready to move forward.

Four attachments are included with this message. Included are an invitation to participate and an adult consent form. Those items are for each potential interviewee. I will review the consent form with each participant at the time of the interview. Signatures on the adult consent form can be obtained at the time of interview, provided the interview is conducted in person. If a phone interview is scheduled, then the consent form would need to be either emailed or faxed prior to the interview. The other two attachments are the approved interview questions for the study.

My research plan includes interviewing two to five teachers, one counselor, at least one building administrator, and the district superintendent. I would ask you to select teachers for inclusion in the study. It would be best if a representative from elementary, middle school, and high school could be included. I anticipate each interview will take 20-30 minutes.

At this point, I would like to schedule a day to conduct interviews in your district. Included below is a list of possible dates. Please let me know if any of the suggested dates would be convenient for your district. If these dates are not convenient, please feel free to suggest an alternative date. My preference is to conduct these interviews in person. However, if you would prefer, it is permissible to conduct them by phone.

Friday, September 22, 2017
Thursday, September 28, 2017
Friday, September 29, 2017
Tuesday, October 3, 2017
Tuesday, October 10, 2017
Thursday, October 12, 2017
Monday, October 16, 2017
Please feel free to contact me by phone should you have any questions or concerns. I look forward to working with you on this project.

Kristi Marion

## Appendix D

## Participation Letter

As a doctoral candidate at Lindenwood University, I am extending an invitation to you to participate in a study.

I am conducting a research study titled, The Impact of the Four-Day School Week on Teacher Recruitment and Retention, to fulfill part of the requirements for a doctoral degree in Educational Administration at Lindenwood University. The research should assist school administrators and elected school officials in determining whether the fourday school week could impact their ability to attract and retain qualified educators.

This qualitative study will consist of interviews to determine the beliefs of teachers, counselors, building administrators, and superintendents on the impact of the four-day school week related to teacher recruitment and retention. Participation in this study is voluntary. Teacher and counselor interviews will consist of 13 semi-structured questions. Each building administrator and superintendent interview will consist of 20 semistructured questions. No cost will be incurred other than the time the interview will take, approximately 30 minutes. The interview will be arranged at your convenience. Each participant will be given the opportunity to review the transcript of his or her interview to ensure accuracy of the transcription. Participants may withdraw their consent at any time without penalty. The identity of school districts and participants will remain confidential and anonymous in the dissertation and any future publication of this study.

I have obtained permission from the superintendent of your district to interview staff for this study. If you are interested in participating, please see the attached informed consent. You can email () or fax this informed consent to me at $\square$ Please do not hesitate to contact me with any questions or concerns about participating in the research. I can be reached at $\square$. You may also contact the dissertation advisor for this research study, Dr. Kathy Grover (email: $\square$. A copy of this letter should be retained for future reference.

Kristi Marion
Doctoral Candidate

## Appendix E



INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES
"The Impact of the Four-Day School Week on Teacher Recruitment and Retention"
Principal Investigator: Kristi Marion
Telephone: $\square$ E-mail:
Participant $\qquad$ Contact info $\qquad$

1. You are invited to participate in a research study conducted by Kristi Marion under the guidance of Dr. Kathy Grover. The purpose of this research is to determine whether the four-day school week impacts a district's ability to recruit and retain teachers.
2. a) Your participation will involve:
> Participating in an interview with Kristi Marion.
> The interview may be conducted in person or by telephone.
b) The amount of time involved in your participation will be 20-30 minutes. Approximately 5-10 participants will be involved in this research in your school district. Two other school districts are also participating in this study. There will be 5-10 participants at each district for a total of 15-30 participants.
3. There are no anticipated risks involved with participation in this study.
4. There are no direct benefits for you participating in this study. However, your participation will contribute to knowledge about the four-day school week and its impact on teacher recruitment and retention.
5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.
6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study, and the information collected will remain in the possession of the investigator in a safe location.
7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Kristi Marion ( ), or the Supervising Faculty, Dr. Kathy Grover (). You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Marilyn Abbott, Provost, at mabbott@lindenwood.edu or 636-949-4912.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

Participant's Printed Name

Investigator Printed Name

## Appendix F

Interview Questions for Building Principals and Superintendents
A. What is your gender?
a. Male
b. Female
c. Prefer not to answer
B. What is the highest level of formal education you have completed?
a. Bachelor's degree
b. Master's degree
c. Educational specialist degree
d. Ed.D. or Ph.D.
C. How long have you been working as a teacher or counselor?
a. This is my first year.
b. 2-5 years
c. 6-10 years
d. 11-20 years
e. 20+ years
D. How long have you been working in this district?
E. Which best describes your current school level?
a. Elementary
b. Middle School/Junior High
c. High School
d. Administration/Central Office

1. Were you working in this school district before the transition to the four-day school week?
2. If not, was the four-day school week a factor in your decision to apply for a position at this district?
3. Was the four-day school week a factor in your decision to accept a position at this district?
4. Has the four-day school week influenced your desire to remain at this school district, either positively or negatively?
5. What is your overall opinion of the four-day school week?
6. Do you believe the four-day school week has an effect on your working conditions?
7. If you were working here before the transition to the four-day school week, do you think your job satisfaction is different now than before? If so, how?
8. Is there any comment you would like to make about the four-day school week that you think would be pertinent to this study?
9. Do you think the four-day school week has improved teacher retention?
10. Have you noticed a change in the quality of teacher applicants since you transitioned to the four-day school week?
11. When evaluating applications for certificated positions, have you noticed a change in the number of years of experience your applicants have?
12. When evaluating applications for certificated positions, have you noticed a change in the level of education your applicants have?
13. Have you been able to hire teachers who are more highly qualified (experienced and certificated/degreed) to fill vacancies than in previous years under the traditional school calendar?
14. In the role of building principal/superintendent, what is your overall impression of the four-day school week and teacher recruitment?
15. In the role of building principal/superintendent, what is your overall impression of the four-day school week and teacher retention?

## Appendix G

Interview Questions for Teachers and Counselors
A. What is your gender?
a. Male
b. Female
c. Prefer not to answer
B. What is the highest level of formal education you have completed?
a. Bachelor's degree
b. Master's degree
c. Educational specialist degree
d. Ed.D. or Ph.D.
C. How long have you been working as a teacher or counselor?
a. This is my first year.
b. 2-5 years
c. 6-10 years
d. 11-20 years
e. 20+ years
D. How long have you been working at this district?
E. Which best describes your current school level?
a. Elementary
b. Middle School/Junior High
c. High School
d. Administration/Central Office

1. Were you working at this school district before the transition to the four-day school week?
2. If not, was the four-day school week a factor in your decision to apply for a position at this district?
3. Was the four-day school week a factor in your decision to accept a position at this district?
4. Has the four-day school week influenced your desire to remain at this school district, either positively or negatively?
5. What is your overall opinion of the four-day school week?
6. Do you believe the four-day school week has an effect on your working conditions?
7. If you were working here before the transition to the four-day school week, do you think your job satisfaction is different now than before? If so, how?
8. Is there any comment you would like to make about the four-day school week that you think would be pertinent to this study?

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## Vita

Kristi S. Marion completed her undergraduate studies at Missouri State University in 1984. She earned a Bachelor of Science degree in Secondary Education with an emphasis in Speech and Theatre and additional certification in French. She continued her education, earning a Master of Science degree in Education in 1996 from Southwest Baptist University. In addition, she earned an Educational Specialist in the Superintendency from Southwest Baptist University in 2008.

Kristi began her career in public education as a high school speech, theatre, and French teacher at El Dorado Springs High School in El Dorado Springs, Missouri. She taught there for two years and then moved to Pierce City where she taught high school speech and theatre for an additional year. Following a five-year period as a stay-at-home parent, Kristi began working at Crowder College as a director of various grant programs. In 2004, Kristi joined Ozarks Technical Community College as the Director of Grants Development.

In 2006, Kristi returned to K-12 public education at North Middle School in Joplin, Missouri, where she taught eighth grade communication arts. Following a year as an instructional coach at Joplin High School, Kristi began working as the principal of a PK-8 building in Lockwood, Missouri. For the last eight years, Kristi has been the elementary principal at Central Elementary School in Pierce City, Missouri. Kristi is a member of the Missouri Association of Elementary School Principals.

