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Support Provided by Administrators for Mathematics Teachers: A Case Study of One North Louisiana High School

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**SUPPORT PROVIDED BY ADMINISTRATORS
FOR MATHEMATICS TEACHERS: A
CASE STUDY OF ONE NORTH
LOUISIANA HIGH SCHOOL**

by

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A Dissertation Presented in Partial Fulfillment
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ABSTRACT

National and International assessment results as well as general student unpreparedness for college and beyond in terms of mathematical abilities indicate a need for increased student achievement in mathematics (Hart, 2005; National Center for Education Statistics, 2017; Peterson, Woessmann, Hanushek, & Lastra-Anadon, 2011). The purpose of the study was to explore effective leadership traits of secondary school administrators that foster and support teachers of mathematics. Research specifically made connections to instructional and transformational leadership practices, actions, and traits. This exploration was investigated through a case study using interviews completed by high school educators, administrators, and district leaders.

A sample of five mathematics teachers, four administrators, and two district personnel were interviewed to gain insight into how administrators support mathematics teachers at one high school in North Louisiana. Qualitative data were gathered through one on one, semi-structured interviews completed by the mathematics teachers, administrators, and district personnel at the case study site. Interview responses were recorded, transcribed, coded, and analyzed based on word frequency and interview group.

Mathematics teachers felt supported by school administrators due to administrators' locating or acquiring classroom materials, approachability and accessibility, organization of professional development, support for tested courses, and access to district support. Administrators supported mathematics teachers by providing

student discipline, greater support for tested subjects and new teachers, instructional observations and feedback, locating or acquiring classroom materials, and organization of PLCs.

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CHAPTER 1

INTRODUCTION

Society holds educational leaders largely responsible for both the well-being and improvement in achievement of students (Zegarac, 2012). Secondary leaders are under increasing pressure to produce academically-proficient high school graduates as a result of not only local, state, and federal mandates, but also at the insistence of institutions of higher education and business employers (Hart, 2005; National Center for Education Statistics, 2017; Peterson, Woessmann, Hanushek, & Lastra-Anadon, 2011).

Student scores in mathematics on national examinations such as the National Assessment of Educational Progress (NAEP) and the Program for International Student Assessment (PISA) have increased over a period of 39 years across the United States, while Louisiana student scores in mathematics are lower than the national average. Louisiana students are 19% proficient in 8th grade mathematics and are significantly outperformed by other countries and states on international assessments (National Center for Education Statistics, 2017; Peterson et al., 2011). Student performance on international assessments may also be related to student preparedness or lack thereof in terms of future employment or college readiness. Approximately 40% of students and non-student employees feel unprepared for either employment or college in terms of mathematical abilities. This feeling of unpreparedness is also confirmed by college professors and employers. Students stated that they would have worked harder and taken

more advanced, rigorous mathematics courses in high school had high school teachers expected and demanded more (Hart, 2005).

While student achievement is largely the responsibility of educational leaders, classroom educators are also held accountable for student growth and achievement (Lohman, 2010; Powell, Higgins, Aran, & Freed, 2009; U.S. Department of Education, 2009; U.S. Department of Education, 2015; Zegarac, 2012). Teachers currently engage in many strategies known to increase student achievement within the classroom. Strategies include teacher-student concern, student motivation, engagement in critical thinking processes, classroom questioning involving Higher-Order Thinking Strategies (HOTS), and real-world experiences related to problem solving (Bruce-Davis et al., 2014; Chen, 2005; Cotton, 2001; Juarez, 2001; Rugutt & Chemosit, 2009). However, these strategies are just one component of a successful classroom educator. Effective teachers use varied strategies and teaching styles (Cruz, 2003; Lineburg, 2010). Teacher commitment, resilience, professional identity, and phases of professional life influence teacher effectiveness. Effectiveness can be improved through professional development, improved working conditions, quality of school leadership, professional outlook, teacher content knowledge, and teacher pedagogy (Bonner, 2006; Day et al., 2006; Fong-Yee & Normore, 2013; Hill, Rowan, & Ball, 2005; Neuberger, 2010; Rockoff, 2004). Torff and Sessions (2009) stressed that principals view content specific pedagogy as the most important teacher quality related to effectiveness.

Statement of the Problem

National and International assessment results as well as general student unpreparedness for college and beyond in terms of mathematical abilities indicate a need

for increased student achievement in mathematics (Hart, 2005; National Center for Education Statistics, 2017; Peterson et al., 2011). The 2015 Trends in International Mathematics and Science Study (TIMSS) assessment report listed no significant change in mathematics average scores from 2011 to 2014 for 4th grade students and only a 9-point increase for 8th grade students in mathematics across the United States. In the future, an increase in student achievement in mathematics might increase gross domestic product and productivity in the United States and as well as prepare students for success in college and beyond (Peterson et al., 2011). Student success and achievement in core subjects such as mathematics and language arts is linked to teacher instruction and principal effectiveness (Bartlett, 2008; Hallinger & Heck, 2010; Leithwood & Riehl, 2003; Robinson, Lloyd, & Rowe, 2008). According to Rowland (2008), principal actions and leadership styles affect teacher effectiveness. Principal leadership traits influence how principals create and maintain professional relationships with mathematics teachers (Robinson et al., 2008; Schoen, 2010). Effective principal leadership traits that support mathematics teachers could encourage innovation and creativity to support multiple teaching strategies known to increase student achievement in the classroom (Bruce-Davis et al., 2014; Chen, 2005; Cotton, 2001; Juarez, 2001; Rugutt & Chemosit, 2009).

Purpose of the Study

The purpose of the study was to explore effective leadership traits of secondary school administrators that foster and support teachers of mathematics. Research specifically made connections to instructional and transformational leadership practices, actions, and traits. This exploration was investigated through a case study using interviews completed by high school educators, administrators, and district leaders.

Research Questions

A case study analysis was performed at a North Louisiana high school.

Administrators, district leaders, and mathematics teachers were interviewed to determine what characteristics or actions of administrators support mathematics teachers to increase student achievement. The following questions were examined and explored using the semi-structured interviews completed by secondary administrators, district leaders, and mathematics teachers at the case study location:

- (1) How do secondary school administrators support mathematics teachers?
- (2) When secondary school administrators support mathematics teachers, do secondary administrators exhibit characteristics or perform leadership actions associated with either the instructional or transformational leadership style?
- (3) How do the perspectives of secondary educational leaders and mathematics teachers differ in regards to administrative support provided to mathematics teachers?

Theoretical Framework

Bandura (1989) triadic reciprocal causation model details the research foundation used within this case study comparison. The triadic reciprocal causation model describes the relationships among behavior, cognition, and environmental factor influences on human behavior as a reciprocal cycle. Each factor contributes and interlinks in a variety of ways to influence human behavior. For example, an educator may be influenced by an external factor such as administrative pressure (Hart, 2005) to increase student achievement as well as an internal cognitive desire to increase instructional performance in the classroom as a result to improve teacher self-efficacy (Hoy & Smith, 2007). This

body of qualitative research served to uncover factors of the triadic reciprocal causation model related to teacher instructional practices supported by secondary administrators.

Transformational and instructional leadership models as defined by Leithwood and Riehl (2003), Balyer (2012), and Hallinger (2003) established a leadership protocol for which this research served to reveal through a series of interviews. Behaviors related to the transformational leadership style include working with instructional personnel through inspirational practices to achieve similar goals. Transformational leaders seek to achieve goals through collaborative leadership strategies (Leithwood & Riehl, 2003).

Traits related to the instructional leadership style include utilizing and coordinating effective classroom instruction to achieve common academic-based goals. Instructional leaders are typically more involved in daily instructional practices versus transformational leaders (Hallinger, 2003). External factors such as transformational and instructional leadership practices of administrators might influence or support mathematics teacher instruction aimed to increase student achievement.

Figure 1 demonstrates how characteristics of transformational and/or instructional leadership models demonstrated by administrators might affect teacher behavior in the classroom. External factors such as stakeholders and professional development experienced on behalf of the administrator through the triadic reciprocal causation model could influence an administrator's approach to instructional and transformational leadership. Instructional or transformational leadership characteristics held by administrators might influence secondary mathematics teachers' behavior through the triadic reciprocal causation model as well.

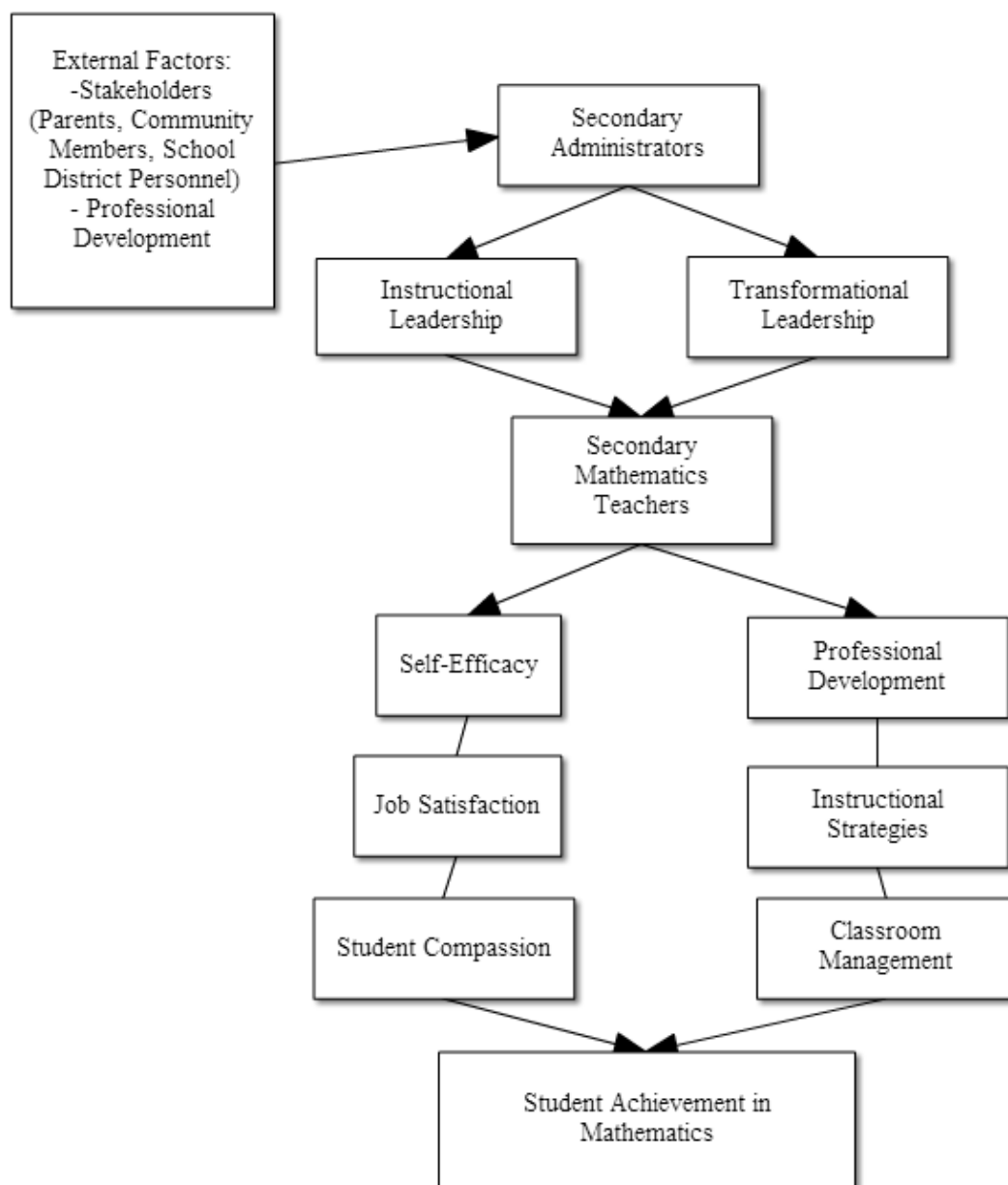


Figure 1. Theoretical Framework for How Instructional and Transformational Leadership Influences Secondary Mathematics Teachers and Indirectly Student Achievement in Mathematics

A combination of instructional and transformational leadership characteristics held by administrators may also support mathematics educators. While factors such as classroom management, content knowledge, student compassion, self-efficacy, job satisfaction, and instructional strategies used effectively and efficiently by the teacher

may correspond to increased classroom instruction and student achievement in mathematics. This researcher-generated model of how administrators potentially indirectly influence student achievement in mathematics will be compared with models contained in the reviewed literature.

Significance of the Study

Current studies link principal leadership to math achievement (Bartlett, 2008; Davis, 2011; Hallinger & Heck, 2010; Hardman, 2011; Leithwood & Riehl, 2003). Several studies also link educational leadership to overall student achievement in high school, such as graduation rate or collegiate achievement (Hart, 2005; Hoyte & Sorensen, 2013; Melguizo, Kosiewicz, Prather, & Bos; 2014). The following factors are associated with student achievement: student motivation (Juarez, 2011), teacher content knowledge (Fong-Yee & Normore, 2013; Hill et al., 2005; Rockoff, 2004; Neuberger, 2010), and professional development (Desimone, Porter, Garet, Suk Yoon, & Birman, 2002; Smith, 2015). Specifically, research relating secondary school administration and support for secondary mathematics teachers could support current research related to educational leadership and student achievement, as well as educational leadership and teacher effectiveness.

Limitations and Delimitations

The transferability of the study to other populations will depend on the sample used in relationship to the school systems represented by the interviewees. The study was limited to secondary schools as only one high school participated in the survey. It is assumed that results from the study are generalizable to similar populations of

participants. Teacher relationships may vary from individual to individual and therefore it is also assumed that teacher/principal relationships within the same school should have similar professional relationships.

Administrative participants lead a public secondary school consisting of grades 9 - 12 as well as hold a licensure in Educational Leadership. The participating secondary school had less than 70% free and reduced lunch student enrollment and minimum student enrollment of 300. Teacher participants taught at least two mathematics courses and held a certification to teach 6-12 mathematics course or were on the path to earn a certification in mathematics. District leader participants were identified by administrative and teacher participants during the interview process. District leaders provided support to teachers either indirectly or directly. The delimitations of this study are participants were from only one high school in one parish of the state of Louisiana. A small purposeful sample of only five teachers, four administrators, and two district leaders participated in the study.

Definitions

Instructional Leadership is defined by an administrator's actions and characteristics that support or affect the learning and development of teachers with a goal of increasing and enhancing instruction (Dumay, 2009; Robinson et al., 2008; Seashore Louis, Dretze, & Wahlstrom, 2010).

Secondary administrators or teachers are teachers or administrators who teach or lead in secondary schools.

Secondary schools can encompass any combination of grades sixth through twelfth.

Student Achievement is often defined by success on given standardized assessments. International assessments can include PISA, TIMSS, and NAEP. Domestic assessments can include state specific end-of-course assessments, ACT, SAT or other consortium tests. Student achievement can also be determined by teacher given assessments and class grades.

CHAPTER 2

REVIEW OF LITERATURE

In this chapter, literature related to the most current thinking about leadership theories, leadership and its connection to student achievement, and leadership and its connection to teacher relationships is reviewed. Two theories, triadic reciprocal determinism, and transformational and instructional leadership models, are presented to relate and provide context for the relationships among leadership, teacher perspectives, and student achievement. The results of prior studies relating instructional leadership, transformational leadership, leadership characteristics, teacher characteristics, and student achievement are examined for relationship to theoretical framework and methodology of the current study. An overview of reasoning for the research design is also presented.

Theoretical Framework

This study relied on two theories. The first theory involves human behavior as a whole and specifically how administration influences the behavior of educators. Bandura (1989) modeled human behavior as a causation of social cognitive theory using triadic reciprocal determinism. In the triadic reciprocal causation model, behavior, cognition, and environmental factors influence each other in a reciprocal fashion, as all factors exert influence upon the others. However, not all factors in triadic reciprocal determinism

contribute equal influences upon human behavior. Human emotions, beliefs, and thinking are influenced by social aspects such as social modeling, instruction, and persuasion (p. 3). Therefore, in turn, a teacher's behavior in the classroom may be influenced by a variety of factors.

One specific factor this study examined is the influence of secondary administration and district leaders on secondary mathematics teachers' behavior in order to improve instruction to increase student understanding and achievement. The triadic reciprocal causation model developed by Bandura (1986) displays the inherent connections among behavior, personal factors, and environmental factors. The triadic reciprocal causation model provides the background for an individual's internal motivation system. Use of this model helped to provide an explanation about how human behavior related to instruction and revealed how educators are influenced by an external factor such as school administration.

The second theory associates two specific models of leadership, transformational and instructional leadership, with administrative influence on educator behavior within the classroom. Leaders who engage in the transformational leadership model collaborate with their peers to create an environment conducive to achieving similar goals. Transformational leaders consider the position to be more than a role, but rather an opportunity to inspire others to work together to achieve goals (Leithwood & Riehl, 2003). Balyer (2012) used qualitative teacher interviews to conclude that teachers trust principals and the principal's efforts to move the school forward. Teachers described principals as considerate, professional, and motivational towards school outcomes. Balyer (2012) described these results as characteristics of the transformational leadership model.

Transformational leaders aim to set high academic standards and provide motivation by promoting goals of a collaborative school environment, helping with teacher professional development, and school-wide problem solving. Transformational leaders also talk frequently with teachers, express academic interest, and are highly visible within the school while motivating others to perform more effectively (p. 585-586). This motivation could increase the self-efficacy of mathematics teachers through the triadic reciprocal causation model by way of reinforcement (Williams, 2012). In terms of accountability, transformational leaders encourage their peers to achieve similar goals. Therefore, leaders invite teachers to share leadership responsibilities by encouraging innovation, commitment to achieving goals, and supporting teachers through involvement. Transformational leadership often supports the commitment of teachers (Hallinger, 2003).

Hallinger (2003) indicated the instructional leadership model could also play a pivotal role in teacher motivation and instruction. Leaders who demonstrate characteristics of the instructional leadership model also move organizations forward using common goals. However, unlike the transformational model, instructional leaders set timely, academic-based goals and focus intensely on improving and coordinating instruction. Instructional leaders are focused on teaching and learning. Instructional leaders are also active participants in the learning and development of teachers.

Theories of Leadership

Educational leaders fill a variety of roles and as a result different types and styles of leadership characteristics can be defined as models. Bush (2003) states that leadership should involve values and a purpose versus implementation and issues related to

management processes. The eight leadership models according to Bush and Glover (2002) are managerial, participative, transformational, interpersonal, transactional, post-modern, contingency, moral, and instructional. Bush (2003) describes each management and leadership model. The eight leadership models and corresponding management models are essential in understanding potential leadership styles of principals in K-12 schools.

The first of the models described by Bush (2003) include the formal managerial leadership style. Formal managerial models describe administrators who use hierarchical systems and rational means to move up within an organization and to meet goals. Organizations under management of a formal management style are generally focused on goal-seeking and bureaucratic, highly-structured hierarchies. The managerial leadership style is associated with formal management models. Leaders of the managerial leadership style strive to manage existing school functions through identifying needs, setting goals and priorities, planning, budgeting, implementing, and evaluating.

Collegial management models as described by Bush (2003) typically involve all stakeholders working towards common goals to move an organization forward. Transformational, participative, and interpersonal leadership models are associated with collegial management models. Transformational leaders utilize participative decision-making processes as the main focus of the organization. Interpersonal leaders focus on creating and fostering working relationships among organization members to increase collaboration.

Political management models as described by Bush (2003) emphasize that policy and decisions are created by using negotiation and bargaining. Power within political

management models is given to dominate groups rather than selected leaders.

Transactional leadership is most closely associated with the political management model.

Transactional leaders feature relationships where transactions between members involve something of value. Power exists and is exchanged through an informal reward system given by leaders in exchange for job performance.

Subjective management model as described by Bush (2003) identifies that participants in an organization are individuals with different ideas and backgrounds. Each participant is treated differently according to their uniqueness. The postmodern leadership model is associated with subjective management models. While the postmodern leadership model can be defined in many ways, key features include multiple interpretations of situations as diversity of members must be considered during decision-making.

Ambiguity management models as described by Bush (2003) assume chaotic organizational atmospheres. Organizational goals, processes, and participants are often unidentified or misaligned. The Garbage Can model is the most recognized ambiguity model as participants of an organization place all ideas and problems in a “garbage can” and withdraw these ideas or problems randomly. The contingency leadership model is associated with ambiguity management models. Leaders who utilize the contingency leadership style adapt a variety of leadership styles to any given situation as needed.

Cultural management models emphasize traditions and values within organizations. Moral and instructional leadership styles are associated with cultural management models. The moral leadership model revolves around implementing a

school's purpose and goals within every aspect of the organization. Instructional leaders focus on improving learning and teaching within schools (Bush, 2003).

Transformational Leadership

Transformational leaders consider the position to be more than a role, but rather an opportunity to inspire others to work together to achieve goals (Leithwood & Riehl, 2003). By 1990, school leadership models were more aligned with characteristics of shared leadership and organizational learning than previous models (Hallinger, 2003). Transformational leaders aim to set high academic standards and provide motivation by promoting goals of a collaborative school environment, helping with teacher professional development, and school-wide problem solving (Balyer, 2012). Administrative leadership styles are related to teacher perceived administrator effectiveness. Use of the Multifactor Leadership Questionnaire (MLQ) given to 490 teachers in reference to effectiveness and leadership style revealed the more aligned a leader's style is to transformational leadership the more teachers perceive a principal to be effective (Ibrahim & Al-Taneiji, 2012).

Ross and Gray (2006) surveyed over 3000 teachers in Canadian school districts in regards to transformational leadership, teacher efficacy, and commitment to their school's mission, professional community, and community partnerships. Administrators engaged in the transformational leadership style, experience on average higher school-wide teacher efficacy and teacher commitment to the mission and community of the school (p. 808). Hoy and Smith (2007) also determined effective transformational leadership on behalf of principals contributed to increased teacher efficacy. Williams (2015) explained that a teacher's self-efficacy matters as it provides motivation and learning. Positive

reinforcement or modeling by that of an administrator may encourage a teacher to perform better in the classroom to enhance instruction, while the opposite may be true of negative reinforcement and modeling. Teacher self-efficacy is linked to student achievement on standardized tests in mathematics (Eberle, 2011; Mojavezi & Tamiz, 2012; Rushton, Morgan, & Richard, 2007). Transformational leaders contribute to teachers' perceptions of their self-efficacy. Student achievement is indirectly affected by transformational leaders as teacher efficacy directly influences and increases student achievement (Eyal & Roth, 2011; Hallinger & Heck, 1998; Waters, Marzano, & McNulty, 2003).

Transformational leaders also tend to focus on school culture such as structure in terms of participant decision making and distributed leadership. Transformational leaders also share visions and goals with entire school staffs. Transformational leaders encourage their peers to achieve similar goals as a means to increase accountability. These similar goals may be achieved through organizational learning initiated by successful transformational leaders. A successful principalship involves and influences many stakeholders in an ever evolving process. This process often influences and is changed by the environment in which leadership exists (Mulford & Edmunds, 2009). Leaders invite teachers to share leadership responsibilities by encouraging innovation, commitment to achieving goals, and supporting teachers through involvement. Transformational leadership often supports the commitment of teachers (Hallinger, 2003).

Collaborative school leadership between leaders and teachers is positively related to school improvement changes. School leaders that strive to build academic capacity through collaborative leadership positively impact growth in student achievement

(Hallinger & Heck, 2010, p. 670). Leaders set outcomes such as improved student achievement, high expectations, professional development, school culture, and a consistent school vision. Stakeholders that practice collaborative leadership use similar terminology and strive to improve student learning through a variety of engaging activities, multiple teaching strategies, tools, and processes. Collaborative leadership stakeholders also focus on content as well as pedagogical knowledge (Vale et al., 2010).

Instructional Leadership

Administrators can influence staff satisfaction and staff satisfaction can lead to increased academic student outcomes. Instructional leadership has a greater impact on student outcomes than transformational leadership. The impact on student achievement in terms of instructional leadership is three to four times that of transformational leadership. Instructional leaders are focused on teaching and learning. Instructional leaders are also more active participants in the learning and development of teachers (Dumay, 2009; Robinson et al., 2008, p. 657).

Seashore Louis, Dretzke, and Wahlstrom (2010) based research on the premise that administrators indirectly influence student achievement through educator classroom instruction and environments. However, United States national surveys of teachers by the Wallace Foundation contributed to the finding that instructional leadership has direct and indirect effects on instruction. Instructional leadership has a significant positive effect on teachers' working relationships with principals. Shared leadership had an indirect effect on the professional community within a school and the professional community directly affected student achievement. In summary, shared leadership indirectly affects student achievement.

Wahlstrom and Louis (2008) detailed a theoretical framework in which both teacher-to-teacher interactions as well as principal-to-teacher interactions affected classroom instructional practices. Leadership impacts classroom strategies that emphasize academic learning. This is supported by consensus among administration and teachers regarding the responsibility for student achievement and shared school values. Shared responsibility and leadership influences self-efficacy of teachers to implement better classroom instructional practices. Shared leadership leads a more significant role in leadership at the high school level. Instructional leaders inspire teachers through shared leadership and responsibility to use classroom practices that use engaging focused instruction according to the results of surveys administered to Minnesotan teachers. Limitations to the study and future research indicate a need to interview and survey teachers and principals for perspective comparisons regarding shared leadership and instructional practices.

Alternatively, a survey of Tennessean teachers by Loudermilk (2015) revealed no significant correlation between a teacher's perception of school leadership in regards to a school's climate, shared leadership, data driven initiatives, and student growth in math. A positive correlation did however exist between a teacher's perception of leadership regarding teacher collaboration and student growth in mathematics. Recommendations for future research suggest a need to perform a qualitative study to explore teacher perceptions of administrative focus and leadership (p. 88). The current study probed teachers and principals for qualitative responses related to principal leadership style and support for mathematics teachers.

Pyo (2013) used Hallinger's Principles of Instructional Management Rating Scale (PIMRS) to determine that instructional leaders tended to frame school goals, promote professional development, and supervise and evaluate instruction over other instructional leader characteristics. In the qualitative portion of the study, high school administrators believed shared leadership to be the most important aspect of instructional leadership and created opportunities for teachers to lead within the school site. These administrators also implemented principles that support teacher empowerment, professional learning communities, and an evolving school climate that promoted and created opportunities for students to be successful (p. 115). According to students and teachers, leaders should also support a school culture that promotes innovation and collaboration (Bruce-Davis et. al., 2014).

Barfield (2011) randomly sampled Louisiana teachers and administrators using a quantitative study to determine how teacher and principal perceptions of teacher leadership roles influence school improvement. Results suggested that principals perceived teacher leadership at higher levels than teachers perceived their own leadership responsibilities. Teachers also indicated a desire to be more involved in leadership roles than current levels of involvement. Principals believe that teacher leadership has a greater impact on school improvement versus teachers' own perception of the impact of teacher leadership. Principals and teachers both agreed that extra time outside of the classroom and additional training for teacher leaders are factors that are most needed from administrators to become better teacher leaders. Akert (2009) found similar results in regards to teacher perceptions of leadership roles as indicated by Barfield (2011).

Blase and Kirby (2000) state that an effective leadership relationship must involve both principals and teachers working together towards a common goal of achievement. Principals should provide opportunities to teachers for professional development and growth. Teachers must in turn take advantage of these opportunities to increase their own expertise. Marks and Printy (2003) survey results from teachers across the United States as well as interviews and observations of school staff members who previously participated in a school restructuring study indicate schools that lack a collaborate effort on the behalf of teachers and leaders centered around instruction, curriculum, and assessment tend to have less successful leadership. Recommendations for practice suggest leveraging teacher leadership opportunities to increase school performance.

Integrated Leadership

Successful leadership qualities consist of transformational and instructional characteristics which include creating and transmitting a vision, common performance expectations, group goals, monitoring school performance, communication, intellectual stimulation, supporting through individual modeling, strengthening and modifying school culture, building collaborative processes, and managing the environment (Leithwood & Riehl, 2003). Marks and Printy (2003) also found that instructional and transformational leadership tended to be less successful in smaller schools that contained a majority of students who were poor, minority, and low-achieving. Higher student achievement was found in schools where principals used integrated (both instructional and transformational) leadership practices. Schools that lack transformational leadership generally do not have shared instructional leadership. Integrated leadership produces

substantiation of support for expert pedagogy in teachers and students who perform at higher levels on assessments (p. 392).

Both transactional and transformational leadership styles are significant factors related to student achievement based on a survey of teacher perceptions and leadership styles in relationship to Florida standardized test scores in mathematics from two testing years (Hardman, 2011). Hardman's theoretical framework revolved around how teacher perceptions of leadership styles influence teacher perceptions of school capacity, teacher-focused leadership, and teacher capacity. These factors directly relate to student learning gains. This framework mimics the theoretical framework in the current study in that teacher perceptions of leadership style relate to teacher efficacy and teacher job satisfaction. Implications for future research indicate a need to gather administrator perceptions of their own leadership styles for comparison to teacher responses as well as investigate previous teacher evaluations to determine teacher and principal personal bias. The current study mimicked a similar comparison of teacher and principal responses based on leadership style and specific principal support from descriptive interview questions.

Educational Leadership in Relationship to Student Achievement

Aspects of school administrative leadership affect student achievement second to teacher instruction and curriculum (Leithwood & Riehl, 2003). Conclusions drawn from a longitudinal survey given to elementary school staff, 5th grade students, and parents indicated changes in school administration positively affected mathematics achievement and growth. Student outcomes improved regardless of initial student achievement with changes in school administration and organizational processes. Student achievement in

mathematics also corresponds to teacher perceptions of principals regarding school growth, collaboration, school decisions and accountability in regards to student learning (Hallinger & Heck, 2010).

Davis (2011) compared principal leadership styles and student achievement in Louisiana. Davis used a sample of high school principals from the top and bottom 20 schools according to socioeconomic status. School Performance Scores (SPS) were used to measure achievement and the Leadership Orientations Survey to gauge leadership styles. The structural frame leadership style emphasizes goals, similar to transformational leadership, but also focuses on specialized roles and formal relationships. The structural frame leadership style has a significant relationship to SPS. Administrators who use the human resource frame leadership style treat the school environment as one big family that works together emphasizing individual aspects of stakeholders. The human resource frame leadership also has a significant relationship to SPS according to the study. Davis used a similar conceptual framework as Fullan (2001). Fullan stated that effective leaders respond accordingly when understanding the change process, building strong relationships, understanding moral purpose, sharing knowledge, and connecting learned knowledge to previous content.

Alternatively, multiple characteristics of principals and schools have been found to have no correlation to student achievement. Mulford and Edmunds (2009) determined that an administrator's teaching experience, education, gender, sex, nor age were aspects which affect successful school leadership. Schools with large student populations are not as conducive in promoting school leadership as is school with a small student population. Crain (2010) surveyed principals and a systematic sample of teachers in Title I schools in

Louisiana to determine the effect of various administrative leadership styles on student achievement as indicated by SPS. Crain determined that both teacher and principal perceived effectiveness, leadership styles, and flexibility did not affect student achievement.

Bartlett (2008) suggested that not enough research is available to determine a relationship between student academic achievement and individual principal practices (p. 92). Maeyer, Rymenans, Van Petegem, Van der Bergh, and Rijlaarsdam (2007) explored four different conceptual models to compare how leadership affects student achievement. Results generated depended heavily on the conceptual model used in each case. Therefore, no conclusions about leadership and achievement could be made using the data from the study. Suggestions for further research include an examination of school, class, and pupil level practices in search of leadership qualities that could influence class practices and learning processes.

Administrator Practices Designed to Improve Instructional Routines

Administrators perform observations of teachers in their classrooms for evaluation purposes. During teacher observations, administrators generally look for student engagement and overall student atmosphere. Administrators look for clues during observations that detail student communication of content and teacher facilitation of the classroom atmosphere (Johnson, Uline, & Perez, 2011, p. 25). Keruskin (2005) interviewed high school principals and teachers and determined that high school principals believe the walkthrough observation process increased student achievement. Furthermore, principals and teachers indicated that walkthroughs provided opportunities

for collaboration around best practices. Protheroe (2009) also detailed that classroom walkthroughs provided administrators with an overview of the climate of the school, the ability to promote approachability, and a way to gauge instructional and curriculum effectiveness. Schoen (2010) found using a mixed methods approach with principals in Florida that during observations and evaluations, principals preferred classrooms in which students were engaged in student-oriented discussion. However, student engagement doesn't necessarily mean cognitive engagement and principals should look for multiple methods of problem solving when observing mathematics classrooms.

Warner (2010) noted two mindsets of principals. In one mindset, principals thought everything was related to instruction and in the other mindset only certain behaviors were related to instruction. Principals aspire to learn more about specific content to support teachers and guide instruction (p. 100). According to principals, test scores are not the only indicator of student success in schools. Principals should not only cultivate a school culture of positive relationships among teacher and leaders, but actually know what is happening in each classroom. Principals should perhaps focus less on generalized leadership skills and know content specific strategies (Lochmiller, Huggins, Acker-Hocevar, 2012). Administrative discussions with teachers about instructional strategies produce significant effects on student achievement, while administrative supervision alone had little significance on student achievement. In the same study, Eze (2011) defined supervision as how well administrators discussed and helped teachers identify and determine low performing students, differentiate instruction, use flexible grouping, and implement higher-order thinking skills. The theoretical framework suggests that teacher perceptions of administrative supervision and post-observation

conferences affects teacher perceptions of student performance. Recommendations for principals include providing professional development based on post-observation conferences, evaluation results, and teacher recommendations as well as emphasize previously mentioned instructional strategies.

Principal knowledge of how mathematics works and should be taught and learned matters. Nelson (2010) surveyed over 450 principals in eight different states using the Leadership Content Knowledge survey. The survey specifically targeted principal content knowledge and how principals believe students learn mathematics. Selected principals participated in case studies related to the survey content. The study discussion indicated that principals could improve their mathematical content knowledge by working on mathematics skills through observation, working with mathematics coaches, and professional development. As noted by Carver (2010), principal professional development with the assistance of a math coach allows principals the ability to see what to expect in mathematics classes through student mathematical discussions. Professional development allows principals insight on how to support teachers and students through discussions about mathematical content and pedagogy. Professional development can give principals more confidence to talk with teachers about mathematical content. Leaders can use content knowledge along with knowledge of leadership to increase leadership potential. Administrators should have in depth content knowledge pedagogy of at least one subject and develop awareness of other subjects as time progresses.

Leaders can utilize their peers to increase content knowledge through shared content knowledge in professional learning communities (Stein & Nelson, 2003). Principal knowledge of how mathematics works on the classroom level improves and

strengthens principal knowledge of how mathematics should work across mathematics classrooms on the school level. Perspectives about teaching and classroom environments can change when principals know more about specific content knowledge. The evaluation and observation process could be different for mathematics teachers if principals look for mathematical processes in mathematics classrooms. Through professional development and observation of mathematics, principals also feel more confident about speaking to teachers about mathematical practices (Steele, Johnson, Otten, Herbel-Eisenmann, & Carver, 2015).

Teacher and Principal Relationships

Teachers who promote and use critical thinking in the classroom increase student academic achievement (Rugutt & Chemosit, 2009). Leaders should also promote collaboration, innovation, provide work time, and give autonomy to teachers to make decisions (Bonner, 2006) Bonner participated in action research alongside four fifth-grade teachers in Los Angeles to explore and improve their instructional practices. Interviews and data collected from the teachers participating in the action research revealed that innovation in the classroom resulted in increased understanding about student mathematical reasoning. This understanding allowed teachers the ability to change instruction to better accommodate student understanding. In addition, teacher understanding of student thought processes changed teacher perceptions of math instruction and increased teacher self-efficacy (p. 36). The theoretical framework alongside the method of research for the current study sought to identify how instructional and/or transformational leadership characteristics of administrators

influence mathematics teachers in order to improve mathematics instruction and in turn enhance mathematical performance.

Mackenzie (2007) indicated that teachers favor administrators who create a culture within and outside of the school that casts teachers in a positive light in the eyes of the community as well as provide overall community support for the school. Community support should also be related to positive principal rapport. Rapport among teachers should be positive as well. Principals should model the way, challenge processes as needed, and encourage positive attitudes by enabling others as needed. These principal characteristics have been positively correlated to teacher morale. School leadership impacts teacher morale and teacher morale improves school and classroom environments (Rowland, 2008).

Principals have influence over hiring, evaluation, and setting discipline (Bitterman, Goldring, & Gray, 2013). Therefore, leaders can create working conditions conducive to teacher continued employment by improving teacher morale through improved working conditions. Leaders can promote improved working conditions, better pay, and supportive leadership at all levels. Personal morale, school morale, and professional morale equate to teacher morale (Darling-Hammond, 2003; Mackenzie, 2007).

In 2004, the Southeast Center for Teaching Quality detailed in a report to North Carolina's Governor Mike Easley that teacher working conditions contributed to student achievement. Teachers indicated via survey that when given enough time and power, teachers can create an environment in which students can learn and achieve. However, analyzed data indicated that time was not a factor that contributed to student

achievement. School-wide Annual Yearly Progress (AYP) positively correlated to professional development, facilities and resources, and leadership. A third of surveyed teachers believed school leadership to be a factor in regards to staying employed at a particular school, while only a small percentage of teachers identified professional development as a reason to stay at a school. According to Hirsch and Emerick (2007), professional development is considered to be a significant factor in high schools in regards to teacher retention. While leadership is strongly correlated to professional development, professional development is only as effective as the instructional leader who prioritizes and provides resources for professional development such that teachers can activate their own learning.

Professional Learning Communities (PLCs) involve a group of teachers or school staff with the purpose of developing best practices to increase student achievement. The focus of PLCs should be to develop a teachers' knowledge of pedagogy and content. Studies reviewed by Vescio, Ross, and Adams (2008) indicated work within PLCs have shifted the mindset of teachers to enhanced learning. PLCs are often promoted in schools through common planning periods. Legters, Adams, and Williams (2010) further described common planning as a practice that links structural reforms with collaboration to activate social processes typically associated with higher performing learning environments.

Administrators also view themselves as providing greater degrees of teacher empowerment versus corresponding teacher perspectives. Leadership directly corresponds to teacher empowerment. Teachers who have greater levels of autonomy over their classroom and school work view their school leadership in a positive manner

(Hirsch & Emerick, 2007). Teachers and leaders must collaborate with their peers to create an environment conducive to achieving similar goals such as improving teaching morale through teacher empowerment. Leadership is more than a role, but rather a position to be used to increase teacher morale and student achievement (Leithwood & Riehl, 2003). Ingersoll (2001) listed teacher turnover as the highest amongst all jobs. Schools that provide administrative support have significantly lower teacher turnovers. Teacher morale and dissatisfaction underlying teacher turnover is most often related to low salaries, lack of support from school administrators, student discipline, and lack of teacher influence on decision making (p. 522). Administrative support and school culture is directly linked to teacher morale and principal leadership. Studies indicate a positive relationship between teacher morale and student achievement (Ingersoll, 2011; Mackenzie, 2007; Rowland, 2008). However, Webb (2014) determined that student achievement is not increased by teacher morale. Webb also emphasized that being an effective leader did not create or increase student achievement or teacher morale.

Conclusion

While several previous studies link principal leadership to math achievement (Bartlett, 2008; Davis, 2011; Hallinger & Heck, 2010; Hardman, 2011; Leithwood & Riehl, 2003). Other studies also link leadership to overall student achievement in high school, such as graduation rate or collegiate achievement (Hart, 2005; Hoyte & Sorensen, 2013; Melguizo et al.; 2014). Current studies also address principal leadership and teacher morale (Ingersoll, 2011; Rowland, 2003; Mackenzie, 2007). The following factors have also been linked to student achievement: student motivation (Juarez, 2011),

teacher content knowledge (Fong-Yee & Normore, 2013; Hill et al., 2005; Neuberger, 2010; Rockoff, 2004), and professional development (Desimone et al., 2002; Smith, 2015).

To date, research has centered around how administrators support teachers in general and not a specific content area or grade-level teacher (Crain, 2010; Davis, 2011; Pyo, 2013; Schoen, 2010; Warner, 2010). Teachers have been interviewed or surveyed with scarce regard as to the content in which they teach (Akert, 2009; Barfield, 2011; Hardman, 2011; Loudermilk, 2015; Ross & Gray, 2006; Seashore Louis et al., 2010; Wahlstrom & Louis, 2008; Williams, 2015). However, principal content knowledge regarding mathematics and coaching has been questioned (Nelson, 2010; Steele et al., 2015). Specifically, research relating secondary school administration and support for secondary mathematics teachers could support current research related to educational leadership and student achievement, as well as educational leadership and teacher effectiveness. A comparison of teacher and administrator perspectives regarding support for mathematics teachers could provide further evidence to support previous studies which examined either teacher perspectives or administrator perspectives with no specification as to content area (Bonnor, 2006; Hardman, 2011; Nelson, 2010; Schoen, 2010).

CHAPTER 3

METHOD

Purpose of the Study

National and International assessment results as well as general student unpreparedness for college and beyond in terms of mathematical abilities indicate a need for increased student achievement in mathematics (Hart, 2005; National Center for Education Statistics, 2017; Peterson et al., 2011). The purpose of the study is to explore effective leadership traits of secondary school administrators that foster and support teachers of mathematics, while specifically making connections to instructional and transformational leadership practices, actions, and traits. Comparisons will be made among the perceived support from an administrative perspective and the perspective of mathematics teachers.

Effective leadership practices, actions, and traits were examined using the interview responses of secondary school administrators, district leaders, and mathematics teachers. This exploration was investigated through a qualitative case study comparison of interviews completed by high school educators, administrators, and district leaders. The following questions were used to guide this body of research:

- (1) How do secondary school administrators support mathematics teachers?

(2) When secondary school administrators support mathematics teachers, do secondary administrators exhibit characteristics or perform leadership actions associated with either the instructional or transformational leadership style?

(3) How do the perspectives of secondary educational leaders and mathematics teachers differ in regards to administrative support provided to mathematics teachers?

Research Design

The study used the research questions as a guide to compare the actions and behaviors associated with instructional and/or transformational leadership that support mathematics instructors at one high school. The case study included an embedded two-unit design. One unit will focus on perceived support given to mathematics teachers by administrators from the lens of the teacher, whereas the second unit will focus on administrators' self-perceived support given to mathematics teachers. Each unit was analyzed separately and then compared to determine the overall actions and behaviors by administrators that support mathematics teachers and in turn influence mathematics instruction. Each analysis used interpretational analysis to determine themes that repeatedly occur throughout each interview. In this manner, patterns arose that provided clues about the possible relationships among participants (Gall, Gall, & Borg, 2005).

Setting and Participants

The school system in which the high school for the case study is located within consists of numerous elementary schools, middle schools, high schools, and an alternative school. Grade levels range from PK to 12th. Approximately 8,500 students are enrolled in the school system, while about 68% are economically disadvantaged. The student racial composition of the district is 12% Caucasian, 87% African-American, and 1% other racial designations. The school system has a district operating budget of about 58 million dollars and approximately 1750 employees. Of these employees, approximately 700 are instructors.

The high school in the case study is an inner-city school in the northern portion of Louisiana and consists of approximately 980 students in grades nine through twelfth. Of these students, 36% are enrolled in the free or reduced lunch program. The racial composition of the high school is 34% Caucasian, 61% African-American, and 5% other ethnicities. The high school was rated as a “B” school academically according to the LDOE in 2015 as with an increase in SPS score over the previous year. In 2016, 2017, and 2018, the high school was rated as an “A” school. The high school has over 80 employees. Of those employees, over 60 are instructors.

Of the 60 or more instructors employed by the high school, six teach at least two mathematics classes. These teachers were purposefully chosen to participate in the case study as they were the only teachers of mathematics in this high school. However, participation was voluntary. The high school had one head administrator, two assistant administrators, and an accountability specialist.

Instrumentation

A semi-structured interview design was implemented in the study. A semi-structured interview process allowed participants to answer a series of structured questions followed by subsequent questions and prompts generated by the researcher during the interview in response to interviewee discussion and descriptions (Gall et al., 2005). Interviews conducted during qualitative studies provide the researcher with interviewee rapport, quotes and stories, insight, and detailed “thick” descriptions. Semi-structured interviews allow the researcher to seek further clarification of interviewee responses, whereas structured interviews do not. In this manner, the researcher may discover new concepts or be informed of alternative investigative leads (Doody & Noonan, 2013). The interview responses provided by participants also led the researcher to discover alternative informants such as district leaders to interview. Evidence collected during the case study was derived from a combination of researcher self-discovery and informant suggestions provided during the interview process. The interview process was used to set boundaries for the case in addition to being bound by the setting (Yin, 2014).

The interview instrument for both teachers and administrators was developed by the researcher. A copy of both interview instruments is provided in Appendix A and Appendix B. One additional question is asked of teachers. This question asks teachers if their own classroom instructional routines have been altered based on administrative feedback or support. This question seeks to determine if provided administrative support influences classroom practices.

The rationale behind the interview questions in the interview instrument was as follows: The first question in Appendix A of the interview protocol for teachers asked

participants to describe their teaching career to this point. The purpose of the question is to allow respondents the opportunity to talk more about themselves and to become more comfortable speaking to the researcher. The second question asks participants to provide their overall relationship with their administration. This question aims to uncover bias and insight related to interviewee responses (Creswell, 2013). The third question prompts teachers to describe their administrator's leadership style. This question prompts participants to provide information towards characteristics associated to a type of leadership style such as transformational or instructional to potentially support research question number two. Questions four and five directly question how administrators use transformational and instructional techniques in relation to research question number two. Question six asks participants to describe ways in which administrators support all faculty members whereas question seven specifically asks participants to describe how administrators support mathematics teachers. Question six through nine serve to provide evidence to support research question one. These three questions are specifically asked to interviewees to explore differences provided to all teachers versus mathematics teachers and to provide support for research question number one. Question nine asks participants to describe situations in which they as mathematics teachers have felt supported by administration. This question served to provide details and descriptions related to research question number one. Question ten asks participants to describe how administrative support or feedback has altered their instructional routines. This question served to determine if administrative support changes classroom instruction to increase student achievement. The last question asks participants to describe what administration could do differently to provide further instructional support to the participant as a

mathematics teacher. The questions in Appendix B related to the interview protocol for administrators mirror the questions asked of mathematics teachers in Appendix A. The interview protocol for administrators mirrors the interview protocol for mathematics teachers such that the researcher can compare administrator responses to those of mathematics teachers in response to research question three. The interview protocol in Appendix C for district personnel is similarly designed to question the level of support provided by administrators.

Role of the Researcher

The researcher is a curriculum coordinator at a middle school in a neighboring district. Some of the participants in the case study were familiar with the researcher as the researcher has attended multiple conferences and professional development opportunities as a prior mathematics teacher across the state. When pre-existing relationships exist, the pre-existing relationship with the participant(s) are beneficial to the study as these relationships allow participants the ability to increase rapport and build confidence in participant answers. The researcher also provided a safe and trusting environment for which participants will express their feelings and experiences without the fear of job impact (DiCicco-Bloom & Crabtree, 2006; McConnell-Henry, James, Chapman, & Francis, 2009).

Data Collection Procedures

First, the researcher obtained permission to conduct the study from the university's Institutional Review Board (IRB) Human Use Committee in Appendix D. The researcher scheduled a face to face meeting through email with the superintendent of

the school district in which the study took place. During the face to face meeting the superintendent was provided with a letter detailing the study. The superintendent letter described the study and beta testing process as well as assured the superintendent that all administrator and teacher responses would remain confidential and anonymous. During the face to face meeting, the researcher verbally reassured the superintendent that all interviews will be confidential and anonymous. The superintendent was also assured that interview recordings and transcriptions would be safely password-protected on the researcher's laptop. The superintendent provided approval for the case study research by signing the letter. A copy of the letter is included in Appendix E. Superintendent approval was acquired before any data collection via interviews took place.

The beta testing took place using secondary administrators and teachers at another high school in the district with similar demographics and academic success to determine the effectiveness and efficiency of potential interview questions. Interviews for the beta testing were scheduled via email or telephone call. Beta testing participants selected the interview location of their choosing. During the interview, respondents commented on the wording and precision of each question as well as the amount of time required to complete each interview. Interview questions were improved based on feedback and results gathered in the beta testing (Creswell, 2005). The final list of interview questions is provided in Appendix A. Participants in the beta testing were informed of their participation in the beta testing as well as the purpose of the beta testing. Confidentiality and anonymity were reassured during each interview. Permission for the beta testing can be seen in Appendix F. The beta testing process took

approximately one month to contact individuals at the beta testing site location, arrange interviews, and conduct the interviews.

After the beta testing and interview protocol revision, the principal at the high school for the case study was contacted via email to arrange a meeting to discuss the case study data collection procedures and provide approval of the case study. After the principal approved the case study seen in Appendix G, teachers were contacted via email to arrange the time and location of each interview. Teachers who participated in the case study received and signed a copy of the informed consent letter in Appendix H and Appendix I. The consent letter provided to and signed by participants detailed the case study. Participants were informed of how their responses were to remain confidential and anonymous. Interviewees also consented to a recording of the interview which was conducted using a voice recorder. All recordings were deleted after transcription by the researcher. The transcriptions were kept on the researcher's password-protected laptop.

During an informal meeting before the interview process, teachers were introduced to the researcher and provided a brief overview of the research project. Participants were also asked to sign the informed consent letter found in Appendix H and Appendix I. At the beginning of individual interviews, interviewees were instructed to answer all questions as honestly as possible and reassured that there are no wrong answers to the interview questions. Participants had time to increase rapport with the researcher and become comfortable answering questions. (Creswell, 2007; Doody & Noonan, 2013). During the interview, the researcher asked probing questions as needed following interviewee responses to gain further insight and background information (Doody & Noonan, 2013). The researcher used the interview protocol in Appendix B and

the informed consent letter found in Appendix D for teacher participants. After the interview, participants were thanked for their voluntary participation in the interview. The teacher interview process was completed within a three-week period.

Approximately two weeks after all teachers participating in the case study were interviewed, participating administrators were interviewed. Administrators were interviewed using a similar protocol as teachers. Modifications were made to the teacher interview protocol for administrators based on feedback and responses obtained during the beta testing. The researcher used the interview protocol in Appendix B and the informed consent letter found in Appendix H and Appendix I. Administrators were also assured that any provided information would be confidential, and information coded using pseudonyms (Doody & Noonan, 2013)

The case study consisted of two embedded units of analysis. The first embedded unit for analysis for each case study focused on mathematics teachers. Each teacher was individually interviewed regarding their perceptions of support provided to mathematics instructors by administrators in terms of mathematics instruction. The interview protocol and structure is provided in Appendix B. After all mathematics teachers were interviewed, responses were reviewed to indicate a need to interview additional school or district staff.

The second embedded unit for analysis in each case study will focus on administrators. Each administrator was individually interviewed regarding their perceptions of support provided to mathematics instructors by administrators in terms of mathematics instruction. The interview protocol and structure are provided in Appendix A.

The researcher expanded upon information gathered during the interviews by interviewing district staff. Additional district personnel identified during interviews administrators and mathematics teachers were interviewed to further determine how administrators support mathematics teachers. The interview protocol for school district personnel is provided in Appendix C. Additional details and descriptions provided by district personnel were considered and analyzed alongside administrator and teacher qualitative responses. District staff were interviewed approximately two months after the interviews conducted of the mathematics teachers and administrators. This interview process was completed within a week's time. These interviews were conducted after the data analysis of the mathematics teacher and administrator interviews.

Data Analysis Procedures

All interview recordings were downloaded to the researcher's password protected laptop. Recordings were deleted from the researcher's voice recorder as soon as the recordings are downloaded to the laptop. Recordings were transcribed using an online program called Sonix.ai (2018). After the recordings were transcribed, the recordings were transferred to a flash drive stored in a locked container in the researcher's home. The transcribed recording documents were then uploaded to Atlas.ti (Version 8.3.17, 2018) for further analysis and comparisons. After analysis, all transcriptions were downloaded to the same flash drive as the voice recordings.

The mathematics teacher embedded unit was the first focus of the case study. Individual interviews were coded using computer-assisted qualitative data analysis software, Atlas.ti (Version 8.3.17, 2018), to produce outputs related to the number of times certain words or phrases were used during the interviews. Each interview was

coded using codes referenced in Appendix J. Each interview answer was initially examined using direct interpretation to code individual selected quotes. Answers related to each question were also coded with the question number. This allowed the researcher to select all text related to each research question and analyze the codes and the associated quotes. These outputs were then analyzed for patterns to determine topics and themes most discussed to achieve categorical aggregation (Stake, 1995). Question numbers and their associated codes were written down in a notebook with the themed-codes that appeared under the question number as well as a number to represent the interviewee who gave the response. This was done for each question and in this manner, the researcher determined if a respondent re-emphasized a response or another respondent provided a similar response. Next, the administrative interviews were coded in a similar fashion. Additional interviews from district leaders were also examined in a similar fashion. The two embedded subunits were then compared to determine actions and behaviors of administrators that support mathematics instructors according to both administrators and instructors (Salañda, 2009; Yin 2013).

Conclusion

This study sought to determine how administrators support mathematics teachers as well as if characteristics of either the instructional or transformational leadership style are evident in the provided support. Multiple types of evidence such as interviews from different perspectives were examined to provide descriptive details linked to the research questions. Chapter 3 detailed the research design, participants, setting of the study, instrumentation, and data collection procedures. The chapter also reiterated the purpose of the study. Chapter 4 will describe the results of the study.

CHAPTER 4

RESULTS

This chapter contains results of data analysis conducted on two embedded subunits that describe the perspectives of administrators and mathematics teachers. After each subunit analysis a comparison was presented between the two subunits. The case study was designed to address the following research questions about how administrators support mathematics teachers:

- (1) How do secondary school administrators support mathematics teachers?
- (2) When secondary school administrators support mathematics teachers, do secondary administrators exhibit characteristics or perform leadership actions associated with either the instructional or transformational leadership style?
- (3) How do the perspectives of secondary educational leaders and mathematics teachers differ in regards to administrative support provided to mathematics teachers?

Responses to the interview questions asked of each subunit were first coded based on ideas and overarching topics found in each response. Next, interview responses were coded by question number and explored by the codes that appeared in each question response. In this manner, responses to the same question were grouped to determine common themes that appeared in each question. As each question asked during

interviews provided insight to one of the research questions, conclusions related to each research question could be drawn. All interview questions were designed by the researcher and piloted by a sample of teachers and administrators at another high school within the same district as the high school used for the case study. Interviews were completed individually in-person with each interviewee. Interviews were transcribed using a combination of computer assistance via Sonix.ai (2018) and human transcription by the researcher. All analysis and coding were completed by the researcher.

The mathematics teacher embedded unit was subunit one of the case study. Individual interviews were coded using computer-assisted qualitative data analysis software, Atlas.ti (Version 8.3.17, 2018), to produce outputs related to the number of times certain words or phrases were used during the interviews. Each interview was coded using codes referenced in Appendix J. Each interview answer was initially examined using direct interpretation to code individual selected quotes. Answers related to each question were also coded with the question number. This allowed the researcher to select all text related to each research question and analyze the codes and the associated quotes. These outputs were then analyzed for patterns to determine topics and themes most discussed to achieve categorical aggregation (Stake, 1995). Question numbers and their associated codes were written down in a notebook with the themed-codes that appeared under the question number as well as a number to represent the interviewee who gave the response. This was done for each question and in this manner, the researcher determined if a respondent re-emphasized a response or another respondent provided a similar response.

Subunit two, the administrator embedded unit, was coded in the same manner using the administrator interview protocol questions found in Appendix B as reference. Additional interviews from district leaders were also examined in a similar fashion. The two embedded subunits were then compared to determine actions and behaviors of administrators that support mathematics instructors according to both administrators and instructors (Salañda, 2009; Yin 2013). The researcher completed this comparison by examining the frequency of codes present in the administrator interviews against codes present in the mathematics teacher interviews as well as the emphasis placed on the theme by the individual respondents.

Analysis Subunit One

While the school in the case study employed six mathematics teachers, five of these teachers agreed to be interviewed by the researcher. Two of the teachers were female and three of the teachers were male. The number of years teaching ranged from two years to 45 years among the mathematics teachers. The mathematics teachers taught variety of mathematical subjects from integrated mathematics to calculus. All teachers were certified in mathematics with the exception of one teacher enrolled in the alternative certification program from the local university. This information was gathered from responses provided in response to question one of the teacher interview protocol. For descriptive purposes, henceforth the mathematics teacher interviewees will be referred to by the pseudonyms Albert, Bob, Cade, Diane, and Ellen.

Research Question One

Question numbers six, seven, eight, and nine of the teacher interview protocol found in Appendix A support research question one. These four questions seek information regarding the support provided by administrators for mathematics teachers. The researcher asked interviewees in question six to “Please describe how your administration supports all faculty members to enhance student achievement.” Responses to the question varied by participant with few co-occurrences. However, these responses were mirrored in questions seven, eight, and nine by participants. Two out of the five mathematics teacher interviewees responded in reference to administrative feedback, professional learning communities (PLCs), administrative goal orientation, and administrative moral support. Ellen stated, “They always talk to me and they try to give suggestions on things that would help improve that area on the evaluation” in regards to administrative feedback. Albert further explained that prior to providing feedback, administrators “identify the teachers who need help and identify the needs of those teachers.” Albert also summarized that administration had identified him as a teacher who did not need assistance and therefore left him alone to do his job. Bob shared the sentiment, “We are a family here, so it really is everybody's got everybody's back here.” Ellen furthered the sentiment of administrative moral support as she expressed that administrators always encouraged staff.

Administrators appeared to be goal oriented. Cade reflected, “We're highly motivated to keep our 'A' rating so we are highly motivated to encourage teachers to encourage kids to achieve.” Cade specifically noted how administration was “especially encouraging” to the “tested-type folks” who are responsible for Louisiana End of Course

exams known as LEAP 2025 assessments and ACT to increase student achievement. Albert stressed, “The number one goal at this school is student achievement and that ought to be the case at every school.”

Professional Learning Communities (PLCs) were also mentioned by two of the five mathematics teachers as an activity in which teachers participated. These PLCs were made possible by administrative planning and organization. Dianne mentioned PLCs, “We have time during our planning periods. So they have it like all day long, but it's always like some topic like ACT or whatever, trying to meet a certain student goal, and supporting us like once every six weeks.” Ellen mentioned that the mathematics teachers shared material and ideas with one another frequently. PLCs regularly encourage teacher collaboration and sharing of ideas to support subject-level and vertical planning.

The approachability and accessibility of administration, distributed leadership qualities, district office support, administrative support for tested subjects, administrative observations, professional development, and resource support were all ways in which mathematics teachers felt that administrators supported all faculty members. Bob emphasized the approachability and accessibility of administration in their ability to offer assistance and locate materials. Cade felt that administration provided support for tested subjects but did not specify in what manner. Dianne identified administrative characteristics of distributed leadership while Albert noted the number of observations completed by administration.

Question seven of the interview protocol for teachers (Appendix A) was “What actions do you believe administrators specifically perform to support mathematics teachers to enhance student achievement?” Two of the five teachers noted administrative

approachability and accessibility, ease of requesting materials, administrative concern with regard to the usability of purchased materials for more than one faculty member, and administrative support for teachers of tested subjects. While Bob mentioned the approachability and accessibility of administration in question six, Cade and Albert both reaffirmed the access to administration in question seven. Cade specifically mentioned, “I talked to most of them yesterday. It was quick and easy. Of course right now is kind of down time for them, but it's usually... it's in the morning that I can get a question answered no problem.” Cade and Albert also reaffirmed Bob's assertion that materials were easy to obtain. Albert stressed that whatever was necessary for students, principals provided. Both Cade and Albert mentioned that before any materials were purchased administration wanted to know if the requested materials would be of benefit to others. While Cade originally mentioned administrative support for tested subjects such as Algebra I and Geometry in question six, Bob and Albert referred to similar administrative support for tested courses in terms of amount of feedback and observations by administration.

Bob reaffirmed Albert's comments in terms of professional development support by administrators in question seven. Dianne reiterated Ellen's comments in regards to the amount of support given to new teachers, “We did try to support the teachers that are brand-new to teaching in Algebra 1. One of them is in the MAT program and he's never even taught or did student teaching, so we have, for those math teachers, specially supported them more than, I think, a new English teacher would be coming in.” Bob discussed the amount of professional development given similarly to Albert's description in question six. Distributed leadership was reemphasized by Dianne. Other talking points

referred to in question seven by individual teachers were administrative content knowledge, student mathematical understanding, the experience of certain teachers, and the use of teacher leaders by administration. Dianne noted how administrators supported her less by her elevation into a teacher leader role based on her experience, “at this point in my career here I am not getting as much support, but I am being the one who is supporting others because I have done the Algebra 1 thing for so long.”

“Is there a difference between how mathematics teachers are provided instructional support by administration versus all faculty?” was the eighth question of the interview protocol for teachers (Appendix A). Two of the five teachers felt as if no difference in support was provided to mathematics teachers versus all faculty. However, these same two teachers later stated along with two additional teachers that they were unsure of the level of support provided to other teachers. Dianne added, “They will do what is necessary to get whatever the teacher asks for. So I can't say there's more, but it might be for math. I don't know.”

While question eight specifically addressed the perceived difference in support between mathematics teachers and all faculty, several teachers took the opportunity to offer further references to administrative support. Cade and Albert re-emphasized the approachability and accessibility of administration. Ellen referred to professional development provided or offered by administration. Cade and Albert re-mentioned the ease of purchase of materials. When further probed by the researcher about the level of support for tested subjects such as mathematics and English language arts, four of the five teachers mentioned more support for teachers of these subjects. Ellen stated, “You know when I look at the schedule of PD and stuff, I do see that math and English are hit

very hard. I don't know if 'hit hard' is the right word, but there are a lot for them to attend." Cade mentioned, "I would say math and ELA are probably supported more than, I mean the difference, we probably have more support than your histories or your arts."

When asked to describe a specific scenario or situation in which administration has provided support, Dianne noted the approachability and accessibility of administration and professional development opportunities. Bob described a scenario in which he was previously supported by district staff. Ellen re-emphasized administrative moral support. Four of the five teachers' statements addressed a scenario in which either administration or district personnel purchased, provided, or requested materials on their behalf. Bob described district staff as being "really supportive with helping find materials and stuff." Albert believed, "that any time I went to an administrator and said this is what I need, I would get it, no hesitation." In describing school administration, Dianne detailed how she "can always just go to them and say this is what I need for my class, and they will make it happen, even if it's something like, you know, software, whatever, they're more than willing to do what needs to be done to make it happen."

While responses to questions six through nine of the interview protocol for teachers (Appendix A) varied, many descriptions of administrative support surfaced. All teachers at some point mentioned the ease of asking for and acquiring necessary classroom materials from administration. Two teachers stated that materials were more likely to be purchased by the district versus the school as the district had more funding resources. Four out of the five teachers stated that administration was approachable, accessible, and provided more support to tested courses such as mathematics and English language arts. Four of the five teachers described teacher participation in professional

development opportunities offered or provided by school administration. Support from district content staff was noted by three of the five teachers. Two mathematics teachers out of the five interviewed described support related to professional learning communities, administrative feedback, administrative observations, goal orientation, moral support, new teachers support and usability of purchased materials by others. Aspects of support related to student choice, student understanding, teacher leaders, low interference, and experienced-teacher support were mentioned with no co-occurrence.

Four of the five mathematics teachers indicated adjustments were made to their instructional routines as a result of administrative feedback or support in response to question ten of the teacher interview protocol in Appendix A. Dianne added more opportunities for student choice in how students completed their math work based on feedback from observations. Ellen increased the amount of student participation in her daily instruction. Ellen also redesigned her classroom management routines based on administrative feedback. Through administrator data analysis of Louisiana Interim and Diagnostic assessments and debriefing, both Cade and Bob added varied question formats more aligned to the Louisiana LEAP 2025 to their classroom assessments. Albert asserted his lack of change in instructional routines despite administrative feedback or support due to his belief that he hadn't "...found anyone, ever, who was evaluating me who knew more about it than I did...knew more about the math or the pedagogy."

Four of five mathematics teachers interviewed provided responses that indicate that no additional support is needed beyond what is currently provided by administrators in response to question eleven of the teacher interview protocol in Appendix A. These same teachers also provided responses that seemed to reaffirm their comfortability with

the support currently provided by administrators. Ellen claimed, “I mean they really do provide support.” Dianne stated in regards to administration she didn’t “know if there’s anything different that they can do.” Cade further implied, “I mean generally speaking if I ask for it...it happens.” Bob felt that administrators could use extra staff. “We could always use more people. That’s one thing; administration has a lot on their plate here. They could definitely each use a personal assistant.” Bob further acknowledged that additional staff may not be possible due to budgetary restraints.

Research Question Two

Question numbers two, three, four, and five of the teacher interview protocol found in Appendix A support research question two. The mathematics teachers described their professional relationship with administration within the school in question two. This question served to determine any pre-existing bias. All mathematics teachers described their professional relationships in a positive manner. Four of the five teachers noted that administrators were approachable and accessible. One teacher described the school culture as laid back. Cade said, “I’d certainly say it, but we’re a little bit more laid back here than other places.” Bob described the relationship between administrators as collaborative, “They both work off each other. I mean, they do vastly different things separately and they come together for a lot of stuff as well.” Bob further explained, “They are really easy to work with.”

When teachers were asked about administrative leadership style in question three of the teacher interview protocol in Appendix A, three of the five teachers indicated administrators engaged in some form of distributed leadership between administrators and amongst the staff by using teacher leaders. Cade noted that the principal “kinda flops

between...you know, like a centralized leadership style to a team leadership or shared leadership.” Two of the five teachers detailed how two particular teachers were administrative-assigned teacher leaders for the math department and redelivered professional development to the math department on multiple occasions. Ellen confirmed administration’s use of distributed leadership, “They have trust in me, and they come to me to do things, but they also are willing to let me take the lead on things when I want to.” Two of the five teachers reaffirmed the approachability and accessibility of administration. One teacher described the principal as a rule follower and the assistant principal as a little more flexible in leadership style. Dianne said, “Our principal is, I guess, more of a rule follower. She wants you to follow the rules, very black and white. Our assistant principal is maybe a little more flexible.” The assistant principal’s role involves more of the day-to-day instructional responsibilities than the principal. Bob detailed that as far as math was concerned the assistant principal, “is really good with the scope and sequence and rigor; pulling material for you, she really knows a lot about the state and standardized aspects of it.” The assistant principal was also described as goal-oriented and focused on student test scores. The dean of students is authoritarian at times but maintains all discipline with the students as described by one teacher.

In question four, interviewees were provided with a simplified definition of transformational leadership and asked if any members of their administration exhibited characteristics of transformational leadership. Three of the five teachers described evidence of distributed leadership. Cade explained the assistant principal “leaned on” him for assistance with the lower math courses. Ellen described the assistant principal’s use of

PLCs to establish collaboration among the math department and insert teacher leaders as redeliverers of material. Diane described this process as administrators

have goals, especially with the EOC classes, and they get other teachers to support those teachers. We had a small group and a team, and I was included in that even though I don't teach an EOC class, and then we all went and worked on a specific standard where we created practice test questions because there is no practice, you know, really there's not a whole lot to go by on the state website, so we worked just for those teachers, you know, that makes a huge impact on our students' school score.

Three of the five teachers described administration as concerned with school and student performance in terms of goal-orientation. Dianne said, "Well they definitely have goals, especially with the EOC classes, and they get other teachers to support those teachers." Albert stated the assistant principal's main goal was to raise test scores and one of the ways she did this was by checking the teachers' digital gradebooks. Three of the five teachers also mentioned PLCs as a portion of how administrators focus on instructional goals. Ellen stated that the assistant principal is "very proactive in bringing others in and bringing the department together with department skills and that sort of thing." At least one teacher of the five interviewed referred to administration as flexible, approachable, accessible, focused on student-centered classrooms, professional development driven and aimed to promote teachers as leaders. Two teachers surmised that administrative behavior was based on district requirements and policies. Cade stated, "They have their bosses too. It's kinda the way we run things; it kinda rolls downhill."

In question five, interviewees were provided with a simplified definition of instructional leadership and asked if any members of their administration exhibited characteristics of instructional leadership. Three of the five teachers immediately referred to professional development opportunities provided or suggested by administration. Ellen noted administrator encouragement of, “professional development and bringing things to people... I mean we have pretty extensive professional development days before we come back to school, and then we have them throughout the year, and they are not just fluff days.” Cade mentioned that he received emails from the assistant principal frequently with opportunities for professional development. For example, “I just got an email today about a LEAP 360 focus group.” No other co-occurrences existed among descriptions of instructional leadership. Teachers individually mentioned administrator-handled discipline, district expectations and support, provision of resources and materials, moral support, and emphasis on student-centered classrooms as characteristics of instructional leadership exhibited by school administration.

Analysis Subunit Two

All four of the administrators at the case study location were interviewed. Three of the administrators were female and one administrator was male. The number of years in administration ranged from two years to over 30 years among administrators. Only one of the administrators taught mathematics previously. All administrators are certified educational leaders. This information was gathered from responses provided in response to question one of the administrator interview protocol. For descriptive purposes, henceforth the administrator interviewees will be referred to by the pseudonyms Roy, Annie, Claire, and Rose.

Research Question One

Question numbers five, six, seven, and eight of the administrator interview protocol found in Appendix B support research question one. These four questions seek information regarding the support provided by administrators for mathematics teachers in different ways. The researcher asked interviewees in question five “What actions do you intentionally perform to support classroom teachers to enhance student achievement?” Responses to the question varied by participant with few co-occurrences. However, these responses were mirrored in questions six, seven, and eight by participants as well. Three of the four administrators referenced observations as a way to support classroom teachers. Whereas, only two of those same administrators mentioned feedback typically associated with observations. After completing an observation, Annie mentioned that she likes to ask teachers how they would feel as a student in their own class:

Would you want to sit through your lessons? And if it's not engaging to you then maybe you need to think about being on the other side of this sage on a stage process because that can be really fun for you, but it can be very painful for the person involved or just not engaging.

Claire noted that she often completed observations alongside other administrators so that administration could decide how to best support a struggling teacher as a team.

Roy and Rose both noted how teachers were supported through the discipline of students. As an administrator, Roy specifically deals with discipline. He noted his support for teachers was primarily based on how he handled problematic students. Annie stated she felt as if supporting all teachers trickled “back to keeping kids in class” through discipline and attendance. Two of the administrators indicated a desire to promote student

achievement in order to increase school performance scores and remain “on top.” Two of the administrators described how PLCs conducted by teachers provided an element of support. Additional supports such as attendance, material location, and scheduling were mentioned by at least one administrator.

Question six of the interview protocol for administrators asked administration, “What actions do you specifically perform to support mathematics teachers to enhance student achievement?” Three of the four administrators mentioned purchasing, locating, or requesting material resources as a means of supporting mathematics teachers. Claire didn’t specifically purchase resources, but she detailed how she helped “them get calculators and make sure that they’re working.” Annie and Rose both described how anything that teachers wanted as administrators, they attempted to acquire it.

The district also supported mathematics teachers according to Rose. Rose mentioned that she often relied on Annie to assist her during observations and pulled in district personnel as needed to further assist. Professional development was a method by which administrators such as Annie used to support mathematics teachers. Annie stated, “What we do is we try to, you know, we have professional development and all that to actually help them know what kind of testing is being done, what is being focused on with the testing and that kind of thing.”

Administrators were asked to “Please describe a specific scenario or situation in which you have supported math teachers at your school specifically to increase student achievement” in question seven of the interview protocol for administrators found in Appendix B. Rose detailed an instance when she asked her teachers to work backwards to provide more aligned questions for the end of year assessment. Rose provided access

to the materials and found time for teachers to meet. “We've got to work backwards from there and build to that, so we sat down, and we took all of what we could see going forward with these LEAP 360s and the assessment guide, and we pulled questions.” Rose also described how by doing this she took advantage of the PLCs currently in place.

Annie described how she worked with a teacher who was struggling with his student learning targets (SLTs). Annie knew this teacher produced high levels of student achievement previously and thus allowed him to work without the restrictions given to most of the other teachers, such as required professional development training. Annie said, “So I said set two SLTs and go on and do what you gonna do because I know whatever you do is going to be successful anyway.” Claire reiterated her support for mathematics teachers and all teachers through the scheduling and test administration that she completes throughout the year. Roy also confirmed his support for all teachers by providing consistent discipline and student rewards for both academically and behaviorally successful students.

As a follow-up question during the interview, administrators were asked if they felt the support provided to mathematics teachers was different than the support provided to all teachers. Three of the four administrators felt like the support they provided to mathematics teachers was no different than the support provided to all teachers. However, three of the four administrators indicated a difference in the amount of support provided to tested subjects, particularly English, Algebra 1, and Geometry. Annie particularly stated that, “we're going to be concentrating on math because our algebra scores weren't what we want.” Two of the four administrators indicated that support for

new teachers held a high priority. Annie emphasized that excellence should be expected from all subjects.

Question eight of the interview protocol for administrators asked administrators “What could you do differently to provide further instructional support to mathematics teachers?” Annie and Rose suggested providing teachers with more time to engage in PLCs. Rose felt that effective PLCs were key. Rose stated, “I know people don't like to meet collaboratively sometimes, but really kind of pushing that collaboration and what's working for you what's not.” Annie mentioned asking teachers to teach different mathematics courses; courses that better suited their style and preference. Annie stated, “We're going to be concentrating on that. We move teachers around what they were teaching last year was not quite what they needed... where they needed to be. So we've actually talked to them.” More consistent student discipline, access to better materials, and more administrative collaboration was mentioned by at least one administrator.

While responses to questions five through six varied, a combination of three of the four administrators responded with descriptions of support centered on student discipline, teacher observations, and teacher access to materials and resources. Through these questions, three of the four administrators also described aspirations to meet or exceed goals set by the school in terms of student achievement and behavior. Roy simply remarked that without discipline, no learning occurs. Annie noted, “We made changes this summer that we hope is going to strengthen support. What we want, we're doing to actually increase our scores but actually what we actually want is student learning.”

Research Question Two

Question numbers two, three, and four of the administrator interview protocol found in Appendix B support research question two. Question two asks administrators to describe their leadership style. Rose described herself as approachable, focused on goals, and allowing others to complete their jobs with little interference. Rose stated, “I think my leadership role always comes down to how can I help you. You know, if you don't know something, ask. And I try to be approachable.” She also added, “My other leadership side is, you know, making sure that kids are getting what they're needing.” Annie described herself as “You know, when I was the assistant principal, my leadership style was probably authoritarian because I wanted to get things done, and I found that when I told them what I wanted done, they did it.” Annie continued, “As a principal, it's different because now I have to be more diplomatic.” Annie further detailed how she delegated tasks such that she can accomplish more.

Roy described himself as authoritarian, due to his relationship with students. Roy described his position as one dealing with students which meant often times dealing with parents. He also emphasized that he believed parents were the number one problem in schools. Roy stated that with no student home support, no leadership existed within the community other than that which derived from the school. Claire did not describe her leadership style but rather detailed her job which centered on student scheduling, student standardized testing, and student data.

In question three, interviewees were provided with a simplified definition of transformational leadership and asked in what ways they exhibited characteristics of transformational leadership. All administrators mentioned raising student achievement.

Roy mentioned that he encouraged students to perform to the best of their ability.

Students that met their goals would be provided a limo ride to a catered breakfast as an incentive offered by Roy. Roy said, “I want to be where the action is. I often roam the halls looking for ways to support teachers and students. I have even swept the floors.”

Annie mentioned how the school followed district goals for student achievement. She added:

In this school, I don't know about other settings, but in this school you have to collaborate with the teachers and the staff and the parents and the kids. If they don't all buy into what you're trying to do, it's not going to work here because we've got people who have ideas, and they have dreams, and they know what they want to accomplish, and they have certain ways they want to accomplish something.

Rose noted that goal setting for student achievement should not only happen at the school level but also at the teacher and student level:

I just think from a goal setting perspective, I think, you have to be realistic, but you also have to look at those teachers who are teaching your really, really weak kids and I want you to grow them. What does that look like? Let's talk about what that looks like by kid and then having kids also set those goals.

Two of the administrators mentioned teacher engagement in PLCs as a part of how transformational leadership is used at the school level. At least one administrator mentioned sharing the workload among staff, support for new teachers, teacher professional development, stakeholder involvement, administrator collaboration, student discipline, earning teacher trust, and leveraging teachers as leaders. Rose said that in

order to make significant change within a school, trust must be gained. Rose explained that teachers often asked, “Why are you trying to change things? And so you have to build trust.” Annie described how she leveraged teachers as leaders, “We have once a month what we call department head meetings where the department head brings from their department concerns and problems that their teachers have.”

In question four, interviewees were provided with a simplified definition of instructional leadership and asked in what ways they exhibited characteristics of instructional leadership. All administrators re-emphasized a desire to increase student achievement through goal setting. Two of the administrators mentioned how they encouraged teachers to participate in professional development. Rose mentioned that back-to-school professional development was strategic to provide teachers with what the district and administration determined to be of most importance. Annie said, “We have two teachers who went to a professional development yesterday; they do it on their own during the summertime.” Annie continued, “They are actually receiving instruction on how and what they are going to do next year and how they’re going to do it and how to make it better with the mathematics.”

Student discipline, support for new teachers, teacher trust, leverage of teachers as leaders, PLCs, and student-centered classrooms were also mentioned in response to question four. Annie described how teachers went to a particular professional development opportunity, “And they went off to those meetings. They came back. They said ‘oh gosh we're excited and the kids are going to be excited.’ You know kids are discovering and exploring more now, and I think that's going to be a way, but I have to be in a position where I let people do what works.”

District Staff Perspective

During the course of the teacher and administrator interviews, the names of two district staff members were mentioned by interviewees. As a result, an interview protocol was developed for district staff as seen in Appendix C. Both district personnel identified by interviewees are female and have been employed at the district level for less than five years. Both staff members had been previously employed within the district as mathematics teachers. According to teacher and administrator interviewees, these staff members directly support mathematics teachers throughout the year. One of the staff members specifically supports only mathematics teachers. These district staff members were asked similar questions related to the leadership style and support provided to teachers by the school's administrators as well as the support provided by them as district staff. The district staff members will be referenced using the pseudonyms, Sharon and Bessie.

Question three of the district personnel interview protocol asks about the leadership style of administrators at the case study site from the district staff viewpoint. Sharon thought that administration engaged in distributed leadership practices, Goal orientation related to student achievement, and teacher freedom to teach their classes as desired with little intervention by administration. Sharon noted the principal hired good people and "turned it over to them." Sharon also noted that the assistant principal liked to sit down with teachers and complete goal-setting and collaboration, whereas Sharon described the principal as knowing "that there are high school math teachers that don't want to listen to that."

Bessie commented on the observations completed by administration, feedback, and student-centered classrooms. Bessie thought that the principal's mathematical content knowledge played a role in her observations of mathematics teachers and thus the feedback given. Bessie stated, "So I think her observations of math teachers are probably different from her observations of others." The assistant principal looked for more student-centered classrooms and questioning techniques versus content according to Bessie.

In question four, district staff were asked if, in their opinion, mathematics teachers were supported differently at the case study site. While Bessie thought there existed no difference in the support given to mathematics teachers, Sharon noticed a difference in how new teachers were supported. Sharon also noted that administration was focused on student achievement, and both Sharon and Bessie agreed that teachers of courses subject to a yearly standardized test were better supported than non-tested course teachers. Bessie detailed, "So definitely we pay attention more to the EOC classes. We definitely dig into the data more because there is data to dig into. So I have to say, yeah, they get more time and attention." Bessie continued, "But, I don't know if that's really the nature of the course, or it is the fact that they are EOC."

District staff were asked what actions administrators performed to support mathematics teachers at the case study site in question five. District staff described teacher observation and feedback, access to district support, curation of materials, support for new teachers, and professional development as ways in which administration supported mathematics teachers. Sharon specifically described the assistant principal's work with mathematics teachers as "primarily working with them instructionally. She

observed. She gave feedback. She called me and when she saw needs, she and I worked with them on making sure that they understood the lessons the materials.”

Question numbers two and six through nine ask about the leadership style of district staff and how they support mathematics teachers. Question number two asked district staff to describe their leadership style. Both staff members described their leadership style using characteristics of distributed leadership, while Bessie also described her leadership style as empowerment. Bessie stated that it is her “role to empower others to do, what they need to do and so that ideal is more from the empowerment stance.” Sharon described good leaders as leaders who gather good people around them. Sharon has hired several good people who are strong in their content areas to assist her.

District staff were asked to describe how they supported all teachers in question six. Bessie noted that she only supports mathematics teachers. However, Sharon stated that she provided feedback through observations, procurement of material resources, and creation of teacher professional development and PLCs. District staff were asked to describe how they supported mathematics teachers in question seven and to describe a scenario in which a mathematics teacher was supported by them in question eight. At least one staff member described feedback and observation, procurement of material resources, and professional development planning as ways in which mathematics teachers were supported. Sharon described a situation in which she was called to the case study site by the assistant principal to discuss LEAP 360 data and scores with teachers. Sharon described that, “We went though not only because they already had their data pulled, but we began to look at it by the content of items and the domain of the standards of the

items that they were looking at. So really getting in the nitty gritty as far as where their students are succeeding and where, you know, where the holes were.” Bessie described a scenario in which she worked with teachers to “make sure that they have the available resources, the stuff that they need in terms of curriculum, providing time, space, and stipends if necessary for training and for them to meet to work on scope and sequence documents or common assessments or whatever.”

In question nine, district staff were asked what they could do differently to provide further instructional support to mathematics teachers. Sharon mentioned that she wished she could provide more training such as PARCC training or becoming a mathematics content leader for current mathematics teachers. Bessie wished that she could provide more support and observations to less experienced math teachers as those are the teachers that traditionally have the EOC classes and weaker students.

Research Question Three

Research question three asks how the viewpoints of administrators and teachers differ in regards to administrative support for mathematics teachers. Based on the responses to questions six through eleven, one hundred percent of teachers interviewed at some point mentioned the ease of asking and acquiring necessary classroom materials from administration. Forty percent of teachers stated that materials were more likely to be purchased by the district versus the school as the district had more funding resources. Eighty percent of teachers stated that administration was approachable, accessible, and provided more support to tested courses such as mathematics and English language arts. Eighty percent of teachers described teacher participation in professional development opportunities offered or provided by school administration. Support from district content

staff was noted by sixty percent of teachers. Forty percent of teachers interviewed described support related to professional learning communities, administrative feedback, administrative observations, goal orientation, moral support, new teachers support and usability of purchased materials by others. Aspects of support related to student choice, student understanding, teacher leaders, low interference, and experienced teacher support were mentioned with no co-occurrence.

Based on questions five through eight of the interview protocol for administrators, one hundred percent of administrators mentioned how their actions were to increase student achievement. Seventy-five percent of administrators described supporting mathematics teachers through student discipline, locating or acquiring classroom materials or resources, classroom observations, and organization of teacher PLCs. Greater support of tested courses, instructional feedback, and greater support for new teachers was mentioned by fifty percent of administrators interviewed. Student and course scheduling, professional development for teachers, encouraging student attendance, and low interference by administrators in teacher classrooms were described by at least one administrator.

Limitations

This study is limited by the location and size of the case study conducted. One high school in one parish within North Louisiana was selected for this case study, as such this study is limited to the mathematics teachers and administrators available within this particular high school setting. Expanding this study beyond a case study to include all the high schools within the district or within a certain region of the state may provide more insight into how administrators support mathematics teachers.

This study is also limited in that only high school mathematics teachers participated in the study. Expanding the sample size to include middle school mathematics teachers may also provide more insight into how administrators support mathematics teachers. It is assumed that results from the study are generalizable to similar populations of participants. Teacher relationships may vary from individual to individual and therefore it is also assumed that teacher-principal relationships within the same school should have similar professional relationships.

Summary

At least sixty percent of mathematics teachers felt supported by school administrators due to administrators' locating or acquiring classroom materials, approachability and accessibility, organization of professional development, support for tested courses, and access to district support. At least fifty percent of administrators felt they supported mathematics teachers by providing student discipline, greater support for tested subjects and new teachers, instructional observations and feedback, locating or acquiring classroom materials, and organization of PLCs. District personnel interviewed believed that administrators in the case study supported mathematics teachers through instructional observations and feedback, material acquisition, and organization of professional development.

At least forty percent of mathematics teachers described their administrators' leadership style as approachable, goal-oriented, encouraging of teacher collaboration through PLCs and professional development, interested in student-centered classrooms, and using distributed leadership to leverage teachers as leaders. At least fifty percent of administrators described their own leadership style as goal-oriented, encouraging of

teacher collaboration through PLCs, and using distributed leadership to leverage teachers as leaders. District personnel felt that the leadership style of administrators at the case study site was goal-oriented and supportive of tested courses and new teachers.

CHAPTER 5

DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

The purpose of the study was to explore effective leadership traits of secondary school administrators that foster and support teachers of mathematics. This study was important because secondary leaders are under increasing pressure to produce academically-proficient high school graduates as a result of not only local, state, and federal mandates, but also at the insistence of institutions of higher education and business employers (Hart, 2005; National Center for Education Statistics, 2013; Peterson et al., 2011).

The study was limited to teacher and administrator participants at one high school in one parish in North Louisiana. The school was chosen because of the academic success of the school and its student population. The school was also chosen because the location and school were easily accessible to the researcher. Permission was obtained to conduct the research from the university's Institutional Review Board. Permission was also granted by the superintendent of the district and principal of the beta testing and case study locations. These permissions are provided in Appendices D, E, F, and G. This chapter contains the discussion, conclusions, and recommendations based on the results of this case study.

To date, much research has centered on how administrators support teachers in general and not a specific content area or grade-level teacher (Crain, 2010; Davis, 2011;

Pyo, 2013; Schoen, 2010; Warner, 2010). Teachers have been interviewed or surveyed with limited focus as to the content in which they teach (Akert, 2009; Barfield, 2011; Hardman, 2011; Loudermilk, 2015; Ross & Gray, 2006; Seashore Louis et al., 2010; Wahlstrom & Louis, 2008; Williams, 2015;). However, principal content knowledge regarding mathematics and coaching has been studied (Nelson, 2010; Steele et al., 2015). Research relating secondary school administration and support for secondary mathematics teachers supports current research related to educational leadership and student achievement, as well as educational leadership and teacher effectiveness. A comparison of teacher and administrator perspectives regarding support for mathematics teachers provides further evidence to support previous studies which examined either teacher perspectives or administrator perspectives with no specification as to content area (Bonnor, 2006; Hardman, 2011; Nelson, 2010; Schoen, 2010).

In this chapter, findings are summarized to provide an overview of the results in comparison to the research questions. These findings are discussed in relation to the research questions and then recommendations based on the results are provided for practice. Recommendations for future research are given followed by a conclusion of the chapter.

Summary of Findings

Research Question One

Mathematics teachers noted that they were supported by secondary school administrators in the following ways: (a) location or acquisition of classroom materials, (b) approachability and accessibility, (c) organization of professional development, (d) support for tested courses, (e) access to district support, (f) development and organization

of professional learning communities, (g) administrative feedback, (h) administrative observations, (i) goal orientation, (j) moral support, (k) new teacher support, (l) usability of purchased materials by others, (m) classroom incorporation of student choice and student understanding, (n) leverage of teacher leaders, (o) low interference in classrooms, and (p) less support for experienced teachers. Administrators felt they supported mathematics teachers by providing (a) student discipline, (b) greater support for tested subjects and new teachers, (c) instructional observations and feedback, (d) location and acquisition of classroom materials, and (e) organization of PLCs. District personnel interviewed believed that administrators in the case study supported mathematics teachers through instructional observations and feedback, material acquisition, and organization of professional development. The most emphasized aspects of support provided to mathematics teachers by administrators as noted by mathematics teachers, administrator, and district personnel were procurement of instructional materials and organization of collaboration through either professional development or PLCs.

Research Question Two

When administrators supported mathematics teachers, administrators exhibited characteristics of transformational and instructional leadership. Mathematics teachers described their administrators' leadership style as (a) approachable, (b) goal-oriented, (c) encouraging of teacher collaboration through professional development, (d) interested in student-centered classrooms, and (e) leveraging teachers as leaders through distributed leadership. Transformational leaders consider administrative positions as an opportunity to inspire others to work together to achieve goals (Leithwood & Riehl, 2003). This is

evident as administrators at the case study site frequently focused on school and district goals by encouraging teachers in ways to raise student achievement.

Transformational leaders also provide motivation by promoting goals of a collaborative school environment and helping with teacher professional development (Balyer, 2012). These characteristics were mentioned by mathematics teachers, administrators, and district personnel as collaboration via professional development and PLCs. Administrators described their own leadership style as goal-oriented, encouraging of teacher collaboration through PLCs, and incorporating teacher leaders through distributed leadership. District personnel felt that the leadership style of administrators at the case study site was goal-oriented and supportive of tested courses and new teachers.

Instructional leaders are more active participants in the learning and development of teachers (Dumay, 2009; Robinson et al., 2008, p. 657). Teacher observations and feedback are characteristics of instructional leadership described by administrators and district personnel in response to how administrators support mathematics teachers. Teacher-to-teacher interactions and principal-to-teacher interactions through feedback and support affected classroom instructional practices and indirectly student achievement (Wahlstrom & Louis, 2008).

Research Question Three

The perspectives of secondary school administrators and mathematics teachers differed in relationship to administrative support provided to mathematics teachers. Teachers' opinions differed in that support provided by administrators was related to professional development and district support. Administrators' opinions differed in that they believed administrators supported mathematics teachers by maintaining student

discipline, instructional observations and feedback, and usage of PLCs. Mathematics teachers and administrators agreed that tested courses such as Algebra 1 and Geometry were supported more than non-tested courses. Administrators and mathematics teachers also agreed that an administrator's ability to locate and/or acquire classroom materials was supportive of mathematics teachers. Mathematics teachers associated this acquisition of classroom materials with the ease in which administration could be approached and accessed by teachers.

Discussion

In response to research question one and three, mathematics teachers revealed they felt supported by administrators when administrators located and purchased classroom materials, provided opportunities for professional development, provided access to district support personnel, and were accessible and approachable. Administrators felt that they supported mathematics teachers through handling of student discipline, providing instructional observations and feedback, accessing classroom materials, and providing time for PLCs. Both administrators and teachers felt that tested subjects such as Geometry and Algebra 1 were supported more than non-tested subjects.

Teachers felt that administrators were approachable and accessible. This approachability lends itself to a mathematics teachers' confidence in asking administrators for classroom materials. Only one administrator identified herself as approachable. Few administrators discussed personal characteristics of leaderships, such as approachability and accessibility, but rather discussed physical actions or events created or provided by administrators.

In response to research question two, mathematics teachers described their administrators' leadership style as approachable, goal-oriented, encouraging of teacher collaboration through PLCs and professional development, interested in student-centered classrooms, and using distributed leadership to leverage teachers as leaders.

Administrators described their own leadership style as goal-oriented, encouraging of teacher collaboration through PLCs, and using distributed leadership to leverage teachers as leaders. District personnel felt that administrators were goal-oriented and supportive of tested courses and new teachers.

The emphasis placed on student achievement, a characteristic of both instructional and transformation leadership, at the case study site was evident throughout the interviews. Most interviewees responded that administrators completed activities and used data to determine how to best support teachers with a goal to increase student achievement. The assistant principal described how she used data from the LEAP 360 diagnostic and interim assessments to determine how to prepare students for the end of year standardized tests. One teacher felt that high school administrators in general were concerned with student achievement or at least they should be concerned with student achievement.

Findings are consistent with the theoretical framework outlined in Chapter I, Figure 1. External factors, such as district support and district expectations as referenced by both administrators and teachers, cause administrators to act accordingly to meet the expectations and support expected by district staff. These external factors may have contributed to administrative use of transformational and instructional characteristics such as collaboration through professional development and PLCs and goal-orientation

towards increased student achievement. In this regard, administrators are also expected to offer changes for practice in a continuing cycle like that of the triadic reciprocal causation model which describes the relationships among behavior, cognition, and environmental factor influences on human behavior as a reciprocal cycle (Bandura, 1989).

Bush (2003) described instructional leaders as focused on improving learning and teaching within schools. Instructional leadership impacts student achievement. The impact on student achievement by instructional leadership characteristics is three to four times more powerful than those characteristics associated with transformational leadership (Dumay, 2009; Robinson et al., 2008). Administrators indirectly influence student achievement through educator classroom instruction (Seashore Louis et al., 2008). Classroom observations and instructional feedback are characteristics of instructional leadership and are ways in which administrators can offer changes for classroom practice. Administrators can look for clues regarding teacher pedagogy and content mastery during classroom observations. (Johnson et al., 2011; Warner, 2010).

Administrators felt they supported teachers through observations and instructional feedback; however, when questioned about the number of times teachers were observed by administrators, most teachers said rarely. No teacher noted observations and/or instructional feedback as a means of support provided by administrators. When directly questioned about instructional observations, several teachers noted that they were only observed for the formal and informal Louisiana COMPASS Teacher Evaluation observations. One teacher stressed what he liked most about administration at the school was that he was left alone to do his job. Two other teachers noted that they were provided less support likely due to their experience in pedagogy and content. District personnel

also indicated that administrators completed instructional observations and provided feedback to mathematics teachers but did not mention the frequency of such observations.

The idea of completing instructional observations and feedback may be important to administrators and district personnel. Administrators may consider themselves instructional leaders by providing instructional observations and feedback. Administrators and district personnel may believe that instructional observations and feedback are provided at a greater rate to mathematics teachers than what occur. However, teachers did not indicate observations or feedback as a means of instructional support.

This lack of indication may in part be due to the teachers' confidence in administrative knowledge concerning mathematical content or best practices associated with mathematical pedagogy. Teachers may not view administrators as instructional leaders of mathematics. Student achievement in mathematics corresponds to teacher perceptions of principals regarding decisions and accountability in regard to student learning (Hallinger & Heck, 2010). Teachers noted general instructional strategies as means of improvement based on administrative feedback when directly prompted during the interview protocol. No teacher indicated support by administrators in terms of mathematical content or mathematical pedagogy.

All mathematics teachers described one administrator's mathematical content knowledge as superior to the other administrators' mathematical content knowledge based on their knowledge of each administrators' prior teaching experience. However, one teacher alluded that although one administrator previously taught math, mathematics content has evolved in the last ten years. The same teacher also stated that the

administrators may say they know the mathematics standards, but the administrators may not know how it applies to the actual content. The administrator, who was once a mathematics teacher, implied during the interview that her mathematical content knowledge was “ok”.

Recommendations for Practice

Recommendation Number One

Administrators should provide support to mathematics teachers in respect to mathematical content and best practices associated with mathematical pedagogy. This support should be provided by administrators through classroom observations focused on the mathematical content of a mathematics teachers’ lesson and mathematics teachers’ pedagogy. Classroom observations and instructional feedback related to subject content are characteristics of instructional leadership and as such indirectly increase student achievement (Johnson et al., 2011; Seashore Louis et al., 2008; Warner, 2010).

Recommendation Number Two

Administrators should increase their knowledge of mathematical content and best practices in mathematics pedagogy by engaging in professional development designed specifically to support administrators in relationship to current trends in mathematics. Administrators can improve their mathematical content knowledge by working on mathematics skills through observations, working with mathematical coaches, and professional development (Nelson, 2010). Administrator professional development with the assistance of a math coach allows administrators the ability to see what to expect in mathematics classrooms through teacher instruction and student discussion. Professional development related to mathematics instruction may also give administrators more

confidence to talk with teachers about mathematical content (Carver, 2010; Steele et al., 2015).

Recommendation Number Three

Administrators should engage in shared leadership and shared content knowledge with their administrative peers to increase mathematical content knowledge of administrative staff (Stein & Nelson, 2003). Current and future administrative hires should have in depth content knowledge pedagogy of at least one subject and develop awareness of other subjects as time progresses (Carver, 2010). This recommendation could be achieved by hiring administrative personnel from different content backgrounds.

Recommendation Number Four

Administrators should refer mathematics teachers to mathematics coaches or mathematics content specialists within the district or state as needed. Mathematics coaches could assist mathematics teachers if administrators are not able to sufficiently address content needs within the school environment using available staff (Carver, 2010; Nelson, 2010). One administrator mentioned utilizing district content staff to support a mathematics teacher to examine the teacher's classroom instruction and one mathematics teacher validated the instance.

Recommendations for Future Research

Future research should include a quantitative study to determine if a statistical significance exists between the perceptions of administrators and mathematics teachers in regard to support provided by administrators to mathematics teachers. Further research related to administrative mathematical content knowledge and its correlation to mathematics teacher observations should be conducted as research in this area was found

to be limited. As this study is limited to the viewpoints of administrators and mathematics teachers at one school within one district, future research could include a sample of mathematics teachers and administrators from a wide variety of high schools across the state of Louisiana or across the country. This research could also be expounded on by extending the sample to include middle school mathematics teachers and administrators.

Conclusion

The purpose of this chapter was to provide a summary of findings, discussion, and recommendations for practice and future research. The purpose of this study was to explore effective leadership traits of secondary school administrators that foster and support teachers of mathematics. Mathematics teachers, administrators, and district personnel involved in one high school in North Louisiana were provided with an opportunity to share their experience related to support provided to mathematics teachers by administrators. The results of this study indicate that mathematics teachers feel most supported when administrators provide adequate instructional materials and collaboration through professional development and PLCs. Recommendations for practice encourage administrators to conduct observations and provide instructional feedback focused on mathematical content and best practices of mathematics pedagogy, participate in the professional development focused on mathematics content and pedagogy, use administrative peers for shared content knowledge, and refer mathematics teachers to mathematics coaches or content specialists.

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APPENDIX A

INTERVIEW PROTOCOL FOR TEACHERS

Interview Protocol for Teachers

1. How would you describe your teaching career up to this point? Follow-up: Which courses have you taught? At how many schools have you taught?
2. During the interview the term administration refers to your current assistant principals, vice principals, and principal. Describe your professional relationship with administration at your school.
3. Describe each of your administrators' leadership style. Follow-up: Describe each of your administrators' mathematical content expertise.
4. Transformational leaders strive to set academic goals and provide motivation by promoting goals in a collaborative school environment. In what ways, if any, do any members of your administration exhibit characteristics of transformational leadership?
5. Instructional Leadership is defined by an administrator's actions and characteristics that support or affect the learning and development of teachers with a goal of increasing and enhancing instruction. In what ways, if any, do any members of your administration exhibit characteristics of instructional leadership?
6. Please describe how your administration supports faculty members to enhance student achievement. Follow-up question: Are there other staff members that support faculty members to enhance student achievement?
7. What actions do you believe administrators specifically perform to support mathematics teachers to enhance student achievement? Follow-up question: Are there other staff members that support mathematics teachers to enhance student achievement?

8. Is there a difference between how mathematics teachers are provided instructional support by administration versus all faculty? Please elaborate or explain as needed.
9. Please describe a specific scenario or situation in which your administration has provided support to you or your fellow mathematics teachers specifically to increase student achievement.
10. What changes have you made to your instructional routines based on administrative feedback or support?
11. What could your administration do differently to provide further instructional support to you as a mathematics teacher?

APPENDIX B

INTERVIEW PROTOCOL FOR ADMINISTRATORS

Interview Protocol for Administrators

1. How would you describe your administrative career up to this point? Follow-up: How would you describe your teaching career? Which courses have you taught?
2. Describe your leadership style. Follow-up: Describe your mathematical content expertise.
3. Transformational leaders strive to set academic goals and provide motivation by promoting goals in a collaborative school environment. In what ways do you exhibit characteristics of transformational leadership?
4. Instructional Leadership is defined by an administrator's actions and characteristics that support or affect the learning and development of teachers with a goal of increasing and enhancing instruction. In what ways do you exhibit characteristics of instructional leadership?
5. What actions do you intentionally perform to support all classroom teachers to enhance student achievement? Follow-up question: Are there other staff members that support faculty members to enhance student achievement?
6. How you describe your relationship with mathematics teachers at your school?
7. What actions do you specifically perform to support mathematics teachers to enhance student achievement? Follow-up question: Are there other staff members that support mathematics teachers to enhance student achievement?
8. Please describe a specific scenario or situation in which you have supported math teachers at your school specifically to increase student achievement. Follow-up: if respondent only answers in a personal manner, ask respondent about a professional situation.

9. What could you do differently to provide further instructional support to mathematics teachers?

APPENDIX C

INTERVIEW PROTOCOL FOR DISTRICT PERSONNEL

Interview Protocol for District Personnel

1. Please describe your current role as district staff within the district?
2. Describe your leadership style.
3. How would you describe the leadership styles of administrators at the case study site?
4. In your opinion is there any difference in how administrators support mathematics teachers versus all staff at the case study site?
5. What actions in your opinion do administrators specifically perform at the case study site to support mathematics teachers?
6. What actions do you intentionally perform to all support classroom teachers to enhance student achievement?
7. What actions do you specifically perform to support mathematics teachers to enhance student achievement?
8. Please describe a specific scenario or situation in which you have supported math teachers at the case study site specifically to increase student achievement. Follow-up: if respondent only answers in a personal manner, ask respondent about a professional situation.
9. What could you do differently to provide further instructional support to mathematics teachers?

APPENDIX D

HUMAN SUBJECTS COMMITTEE APPROVAL



LOUISIANA TECH
UNIVERSITY.

MEMORANDUM

OFFICE OF SPONSORED PROJECTS

TO: Ms. Jessica Hunter and Dr. Bryan McCoy

FROM: Dr. Richard Kordal, Director of Intellectual Property & Commercialization (OIPC) *RJK*
rkordal@latech.edu

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: March 23, 2018

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

**“Support Provided by Administrators for Mathematics Teachers:
A Case Study of One North Louisiana High School**

HUC 18-114

The proposed study’s revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. *This approval was finalized on March 23, 2018 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond March 23, 2019.* Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

Please be aware that you are responsible for reporting any adverse events or unanticipated problems.

A MEMBER OF THE UNIVERSITY OF LOUISIANA SYSTEM

P.O. BOX 3092 • RUSTON, LA 71272 • TEL: (318) 257-5075 • FAX: (318) 257-5079

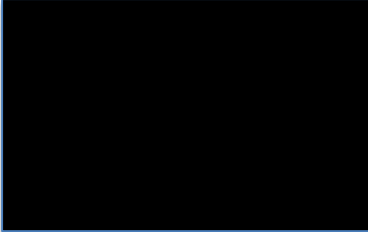
AN EQUAL OPPORTUNITY UNIVERSITY

APPENDIX E


DISTRICT SUPERINTENDENT APPROVAL

District Superintendent Approval

New Snip
Ctrl+N



February 24th, 2018


Superintendent 

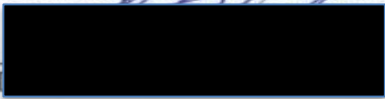
My name is Jessica Hunter. I am a doctoral candidate in the ED.D program for educational leadership at Louisiana Tech University. I am currently conducting research for my dissertation on *Support Provided by Administrators for Mathematics Teachers: A Case Study of One North Louisiana High School*. I am requesting your permission to interview teachers and administrators within your parish for a pilot study and case study. Qualitative data will be obtained by the researcher conducting interviews with high school teachers and their associated administrators as well as by examining any pertinent documents related to the case study topic to determine and compare methods in which administrators support mathematics teachers.

Participants in the study will be high school teachers of mathematics as well as their associated administrators and involved district personnel. Participation is voluntary, and all responses will remain confidential and anonymous. Participants will also be given the opportunity to review all data collected and written related to their testimony for accuracy and participant approval. To allow teachers, administrators, and selected district personnel within your district to take part in the study, please consent to participation by signing below. If you have any questions, please contact me using the information provided below. Thank you for your consideration.

Thank you,

Jessica M. Hunter
 Doctoral Candidate
jmh442@gmail.com
 (318)803-2579

As Superintendent of  I give Jessica Hunter my permission to interview teachers, administrators, and district personnel as well as examine any public pertinent documents for the above-described study.

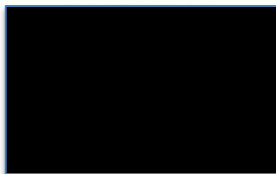


3/5/18

Date

APPENDIX F

BETA TESTING LOCATION PRINCIPAL APPROVAL

Beta Testing Location Principal Approval

March 27, 2018




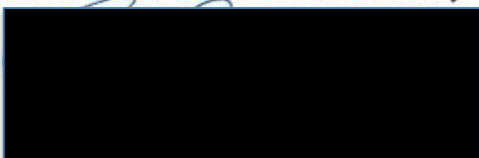
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Doctoral Candidate
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(318)803-2579

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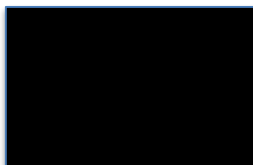


3/27/18
Date

APPENDIX G

CASE STUDY LOCATION PRINCIPAL APPROVAL

Case Study Location Principal Approval



April 11, 2018


Dr. 

My name is Jessica Hunter. I am a doctoral candidate in the ED.D program for educational leadership at Louisiana Tech University. I am currently conducting research for my dissertation on *Support Provided by Administrators for Mathematics Teachers: A Case Study of One North Louisiana High School*. I am requesting your permission to interview teachers and administrators within your school for my case study. Qualitative data will be obtained by the researcher conducting interviews with high school teachers and their associated administrators as well as by examining any pertinent documents related to the case study topic to determine and compare methods in which administrators support mathematics teachers.

Participants in the study will be high school teachers of mathematics as well as their associated administrators and involved district personnel. Participation is voluntary, and all responses will remain confidential and anonymous. Participants will also be given the opportunity to review all data collected and written related to their testimony for accuracy and participant approval. To allow teachers and administrators within your school to take part in the study, please consent to participation by signing below. If you have any questions, please contact me using the information provided below. Thank you for your consideration.

Thank you,

Jessica M. Hunter
Doctoral Candidate
jmh442@gmail.com
(318)803-2579

As principal of , I give Jessica Hunter my permission to interview teachers and administrators as well as examine any public pertinent documents for the above-described study.

A large black rectangular redaction box covering the signature area.

5/1/2018
Date

APPENDIX H

CONSENT FORM FOR INTERVIEWS

Consent Form for Interviews

Louisiana Tech University

Support Provided by Administrators for Mathematics Teachers: A Case Study of One
North Louisiana High School
Research Study

Consent Form for Interviews

A purposeful sample of teachers, administrators, and district personnel are being asked to be interviewed by the researcher for a research study being conducted through Louisiana Tech University and the College of Education. The research study is called “Support Provided by Administrators for Mathematics Teachers: A Case Study of One North Louisiana High School. The research will focus on comparing and exploring the perceptions of both administrators and teachers in regards to administrative support provided to mathematics teachers. The interview data collected will be used solely for the purpose of this study.

Confidentiality regarding individual interview responses and demographics will be maintained to the greatest extent possible. Pseudonyms will be used for each teacher and administrator as well as for any individuals identified by the interviewee during the interview process. If you agree to be tape recorded, recordings will only be heard and transcribed by the researcher. The recording will be conducted using a voice recorder and will be deleted after it has been transcribed. There are no foreseeable risks to participating in this study; nevertheless, the information collected will not be shared with anyone beyond the researcher, including other educators and school officials. Snippets and quotes from your interview may be used as needed in the researcher’s body of research and result section. All quotes will be attributed to individuals using the previously mentioned pseudonyms. Your interview will be conducted in a confidential location, such as the privacy of your own classroom or office. Your privacy will be protected to the maximum extent allowable by law.

Participating in this study is voluntary and the completion of the interview is expected to last a maximum of one hour. You may choose not to answer any question or end this interview at any time. Please indicate your voluntary agreement by providing your signature below. If you have any questions about this study, please contact Jessica Hunter at (318)803-2579 or jmh442@gmail.com.

You indicate your voluntary agreement to participate by signing below.

Signature _____

Name (printed) _____

Date _____

Please initial here if you agree to have your interview recorded: _____

APPENDIX I

ADDITIONAL CONSENT FORM FOR INTERVIEWS

Additional Consent Form for Interviews

HUMAN SUBJECTS CONSENT FORM

The following is a brief summary of the project in which you are asked to participate. Please read this information before signing the statement below. You must be of legal age or must be co-signed by parent or guardian to participate in this study

TITLE OF PROJECT: : SUPPORT PROVIDED BY ADMINISTRATORS FOR MATHEMATICS TEACHERS: A CASE STUDY OF ONE NORTH LOUISIANA HIGH SCHOOL

PURPOSE OF STUDY/PROJECT: The purpose of the study is to explore effective leadership traits of secondary school administrators that foster and support teachers of mathematics. Research will specifically make connections to instructional and transformational leadership practices, actions, and traits. This exploration will be investigated through a case study using artifacts, observations, and interviews completed by high school educators, administrators, and district leaders.

SUBJECTS: Secondary Mathematics teachers, Secondary Administrators, School Staff such as Curriculum Coordinators, and District Personnel within one school district.

PROCEDURE: Secondary Administrators will be interviewed individually and as a group on a volunteer basis. Then Secondary mathematics teachers will be interviewed individually and as a group on a volunteer basis. Any additional school staff and district personnel identified by either an administrator or teacher will then be individually interviewed regarding support provided by administrators for mathematics teachers. Interview data will be analyzed to determine how administrators support mathematics teachers.

BENEFITS/COMPENSATION: None

RISKS, DISCOMFORTS, ALTERNATIVE TREATMENTS: The participant understands that Louisiana Tech or the researcher is not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research.

I, _____, attest with my signature that I have read and understood the following description of the study. " SUPPORT PROVIDED BY ADMINISTRATORS FOR MATHEMATICS TEACHERS: A CASE STUDY OF ONE NORTH LOUISIANA HIGH SCHOOL ", and its purposes and methods. I understand that my participation in this research is strictly voluntary and my participation or refusal to participate in this study will not affect my relationship with Louisiana Tech University in any way. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. Upon completion of the study, I understand that the results will be freely available to me upon request. I understand that the results of my survey will be confidential, accessible only to the principal investigators, myself, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participating in this study.

Signature of Participant or Guardian

1/15/18
Date

CONTACT INFORMATION: The principal experimenters listed below may be reached to answer questions about the research, subjects' rights, or related matters.

Principal Investigator: _Jessica Hunter or Dr. Bryan McCoy

Members of the Human Use Committee of Louisiana Tech University may also be contacted if a problem cannot be discussed with the experimenters: Dr. Richard Kordal, Director of Intellectual Properties (318) 257-2484
rkordal@latech.edu

APPENDIX J

CODES, DEFINITIONS, AND TRANSCRIPT EXAMPLES

Codes, Definitions, and Transcript Examples

Code	Researcher Definition of Code	Example from Interviews
Administrator Collaboration	Examples of collaboration between administrators, administrators supporting one another	“They both work off each other. I mean, they do vastly different things separately and they come together for a lot of stuff as well”
Approachable	How one allows themselves to be available to others	“They have pretty much an open-door policy, when I see something, I feel comfortable enough to go in and discuss it with them.”
Authoritarian	Strict enforcement of policies and control	“when I was the assistant principal my leadership style was probably authoritarian because I wanted to get things done.”
Discipline	Student Discipline used to redefine the behavior of students	“Well if we ever have a problem with a student distracting the class, we don't have to keep them in here. It's always been that way since I've been here, and it continues to be that way. It's probably that way because we have a dean of students and that's all he does is deal with discipline, so he doesn't have any other responsibilities really like a principal or assistant principal would. Yeah, they just make sure we can have class without chaos.”
Distributed Leadership	Administrators delegate leadership roles to others	“They come to me to do things but they also are willing to let me take the lead on things when I want to.”
District Expectations	District goals and focus	“I don't know what the other teachers said; a lot of that type of stuff is pushed to the supervisors and content area and we, I just talked to them the other day.”
District Support	Evidence of support provided by district personnel	“But as far as being supportive and getting materials and whatever I ask for; I ask them first just because they have a lot more

		disposable money than we do at the school.”
Content Knowledge	Mathematical content expertise of administrators	“Well our principal taught algebra so but you know Algebra has changed even in my nine years of teaching, but she has a little bit more knowledge than the other two. So you know they will say that they know the standards but they don't even know how that really applies to the actual content.”
Easily Accessible	Easy to talk to and find when needed (This code was merged with Approachable.)	“She again is ...I can get her on the phone quick.”
Empowerment	The process of giving power or encouragement to someone to do something	“I would like to think that it's my role to empower others to do what they need to do and so that would be ideal is more from empowerment stance.”
EOC Course Support	Any support provided specifically to EOC teachers and courses	“Well they are certainly encouraging to the tested type folks and we're also encouraged to push them toward ACT since leap 360 next year is really our only measure of student achievement that gets publicized.”
Feedback	Instructions, critiques, comments provided to someone to encourage improvement or changes	“And then if they are struggling with finding a way to move kids or engagement or whatever let's say I come in and do an observation, just a walk through or something and we see low engagement whatever or whatever I'll try to. That's a... it's a hard balancing act because there's people who have been doing this for a whole lot longer than me. But at the end of the day I try to remind teachers, ‘I'm like would you want to be in your classroom’.”
Flexibility	The ability to change or modify	“our assistant principal is maybe a little more flexible, a little bit more. She likes to talk. She can listen to what you have to say and try to relate or whatever and our

		accountability specialist she doesn't have an overwhelming presence.”
Goal-oriented	Focused on goals	“But really, my other leadership side is you know making sure that kids are getting what they're needing, so balancing understanding the perspective of my teachers but also making sure that we're on the right course.”
Let's me do my job	Allows independence to work without supervision	“I haven't been this year and I think that's because they know I am in here doing my job and they don't have time either. I think other teachers probably get observed more than me. I mean, but I don't know that for sure.”
Life Long Learner	A person who is continuously involved in self-improvement	“One of my teaching philosophies is the day I feel I have nothing to learn is the day that I am going to retire.”
Materials	Resources needed in the classroom	The assistant principal “is really good with scope and sequence, rigor, pulling material for you. She really knows a lot about state and standardized aspects of it.”
Moral Support	Assistance which affects the psychological being	“The school system office, you know they are they are always encouraging.”
New Teacher Support	Any support provided to a new teacher	“When we do get new faculty, they are kinda set up with a mentor to kind of...you know...keep in touch with them and see how things are going.”
Observation	Observing someone to monitor progress	“we go and actually we are in class. We are in the classroom. A lot of times our teachers are not afraid of us coming in.”
On My Side	Supportive of someone	“They have trust in me.”
PLC	Professional Learning Communities, where	“I am not sure if they are using it, but she is using it as far as PLCs are concerned.”

	teachers collaborate, these usually take place during the school day	Because before we really did PLCs, there really wasn't a PLC and it was all day all day and then it was on a certain day it was on everybody's planning."
Professional Development	Any material or instruction provided to increase teacher knowledge of content or pedagogy	"She does send us plenty of stuff that we could look at, emails and websites and those things, to try to get us to go more to a PARCC type instruction for this test."
Scheduling	Moving student schedules or classes	"I would do that for any teacher make sure that the kids are in the right place to begin with and if they're not or if they think that they're not and that's not try to, you know, find out more about it about the student and then see if they are better suited, you know, to go somewhere else."
Student Choice	Allowing students to choose their assignments and completion methods	"it's probably better for the students to feel like they have some choice and it's not all, you know, this is what you have to do with that though in math it can be a challenge."
Student Understanding	Increasing student conceptual knowledge of mathematics	"You know kids are discovering and exploring more now and I think that that's going to be a way."
Student Centered	Classroom management style where students are managing the classroom environment and learning experience	"Don't get me wrong they've always given us flexibility with how we approach our kids because the big thing now is like group the kids teaching each other."
Teacher Leaders	Teachers provided elevated privileges by administrators to support coworkers	"I feel like I've proven myself in a lot of areas and so they just have trust in me and they come to me to do things but they also are willing to let me take the lead on things when I want to."

APPENDIX K

TRANSCRIPTS

Transcripts

Teacher One Interview

Interviewer: [00:00:09] How would you describe your teaching career up to this point?

Interviewee: [00:00:13] It's been good, it's been challenging. I taught Algebra 1 for 8 years and with the EOC in constant change there but now I've moved to Algebra 2 and advanced math so I've really enjoyed this year.

Interviewer: [00:00:36] So during the interview the term Administration refers to your current assistant principal or vice-principal or any other Administration that you have so it's like an all-encompassing term. So describe your professional relationship with administration at your school?

Interviewee: [00:00:50] It's a very good relationship, close, I can go to them about anything, they always have my back.

Interviewer: [00:00:56] Describe each of your administrator's leadership style?

Interviewee: [00:01:02] Let me think about the best way to say the best words to use. Our principal is I guess more of a rule follower she wants you to follow the rules very black and white our assistant principal is maybe a little more flexible a little bit more she likes to talk she can listen to what you have to say and try to relate or whatever and our accountability specialist she doesn't have an overwhelming presence. It's a good relationship with her. You can ask her questions and get advice or whatever and not feel like you're bothering her or whatever.

Interviewer: [00:02:20] How would you describe your administrators mathematical content expertise?

Interviewee: [00:02:25] Well our principal taught algebra so, but you know Algebra has changed even in my nine years of teaching, but she has a little bit no more knowledge than the other two. So you know they will say that they know the standards but they don't even know how that really applies to the actual content.

Interviewer: [00:02:56] Transformational leaders strive to set academic goals and provide motivation by promoting goals in a collaborative school environment. In what ways, if any, do any members of your administration exhibit characteristics of transformational leadership?

Interviewee: [00:03:10] Well they definitely have goals especially with the EOC classes and they get other teachers to support those teachers. We had a small group and a team and I was included in that even though I don't teach an EOC class and then we all went and worked on a specific standard where we practice test questions because there is no practice. You know really there's not a whole lot to go by on the State website so we worked just for those teachers. You know that makes a huge impact on our students' school score.

Interviewer: [00:03:57] Instructional Leadership is defined by an administrator's actions and characteristics that support or affect the learning and development of teachers with a goal of increasing and enhancing instruction. In what ways, if any, do any members of your administration exhibit characteristics of instructional leadership?

Interviewee: [00:04:11] Well if we ever have a problem with a student distracting the class we don't have to keep them in here. It's always been that way since I've been here and it continues to be that way. It's probably that way because we have a dean of students and that's all he does is deal with discipline, so he doesn't have any other responsibilities really like a principal or assistant principal would. Yeah they just make sure we can have class without chaos.

Interviewer: [00:04:53] and yeah that's always a good thing. Please describe how your administration supports all faculty members to enhance student achievement.

Interviewer: [00:05:03] I guess we have the standard PLC meetings... the SLT's and that kind of thing. Among three administrators you know we have more support in that I think then if it were one or two people trying to handle the entire faculty... uhm I'm trying to think of other things.

Interviewer: [00:05:35] How do you do your PLC meetings? Do you have a common period? Or is there time set aside in the day or during the week?

Interviewee: [00:05:44] We have time during our planning periods. So they have it like all day long but it's always like some topic like act or whatever trying to meet a certain student goal and supporting us like once every six weeks something like that.

Interviewer: [00:06:07] So are there any other staff members besides a ministration that support you to enhance student instruction.

Interviewee: [00:06:20] there's a lady at the school board. She's a curriculum specialist. [REDACTED], she especially helps math teachers.

Interviewer: [00:06:51] I am trying to identify other people that I can interview besides in the school. What actions do you believe administrators specifically perform to support mathematics teachers to enhance student achievement? What actions do you believe administrators specifically perform to support math teachers to enhance student achievement?

Interviewee: [00:07:09] Uhm I don't know specifics for just Math teachers. I'm trying to think of anything. I mean we did but I don't even know if we they did that for any other subjects like English biology or history. Like we did like trying to support the teachers that are brand-new teaching Algebra 1 one of them is in the MAT program and he's never even taught or student teaching so we have like for those Math teachers specially supported them more than I think like a new English teacher would be coming in. At this

point in my career here, I am not getting as much support but I am being the one who is supporting others because I have done the algebra one thing for so long.

Interviewer: [00:08:09] Would you say your Administration let's more veteran teachers assist those newer teachers than the actual Administration?

Interviewee: [00:08:21] Right yeah especially in the math department.

Interviewer: [00:08:30] Is there a difference between how mathematics teachers are provided instructional support by administration versus all faculty?

Interviewee: [00:08:38] There is not any kind of difference.

Interviewer: [00:08:42] Please describe a specific scenario or situation in which your administration has provided support to you or your fellow mathematics teachers specifically to increase student achievement.

Interviewee: [00:08:59] I mean I guess that would be like when I was... I'm trying to think of a good example. What was the question again about instructional support?

Interviewer: [00:09:19] Yes any kind of situation you have felt supported by administration buy instructional support it could be moral support anything.

Interviewee: [00:09:28] Yes if there's anything I need I know I can go down there. You know we're doing nepris videos and there was something I needed like I can always just go to them and say this is what I need for my class and they will make it happen even if it's something like you know software whatever they're more than willing to do what needs to be done to make it happen.

Interviewer: [00:10:07] Do administrators ask you, do they recommend professional development for you or do you find that for yourself and ask if you can go or that kind of thing how does that work?

Interviewee: [00:10:18] They have sent me emails like saying this is available to you this conference if you want to go so I guess they do recommend.

Interviewer: [00:10:37] What changes have you made to your instructional routines based on administrative feedback or support?

Interviewee: [00:10:40] I mean I think I always take into account what they say when they're observing because you know things that I may not see. I'm trying to think of this year in particular, the best way to say that one of the big things our assistant principal when she was coming to observe or the formal observation, I want to see student choice and I didn't and I didn't realize that was a big thing to her. Every administrator has their thing but I have incorporated that more and I think it is you know it's probably better for

the students to feel like they have some choice and it's not all you know this is what you have to do with that though in math it can be a challenge.

Interviewer: [00:11:59] What can your Administration do differently to provide further instructional support to you as a mathematics teacher?

Interviewee: [00:12:04] I don't know if there's anything different that they can do as far as like I'm trying to think like a lot of my wanting to answer your question is based on past experiences and not necessarily in the present so it's hard to say. As an algebra 1 teacher things that probably could happen but now it has been smooth sailing. Right now there's not really anything that they could do.

Interviewer: [00:12:42] So do you think the support that you're given now versus an Algebra 1, Geometry EOC teacher is different?

Interviewee: [00:12:51] Yeah, I think so.

Interviewer: [00:12:52] And that's because of the testing?

Interviewee: [00:12:51] I think so. Which we have gotten a lot of support for ACT stuff, like ACT prep books. If there's anything I need to get them, you know working on increasing their score. They will help me with that for sure. ACT is big for them too, but I think the big thing for our math this year that we had new teachers teaching EOC classes so I would say a lot of support has been given to them.

Interviewer: [00:13:35] That is really actually all I have.

Teacher Interview Two

Interviewer: [00:00:10] Ok. So my dissertation is on how administrators support mathematics teachers so there's general questions about your administration in general and then about you specifically. So how would you describe your teaching career up to this point?

Interviewee: [00:00:31] I mean I've done a lot of professional development. I have had a lot of professional development. I am a strong believer in professional development. One of my teaching philosophies is the day I feel I have nothing to learn is the day that I am going to retire.

Interviewer: [00:00:59] That sounds pretty good. So during the interview the term administration refers to your current assistant principals, vice principals, and principals. So anybody that's on your administrative team. Describe your professional relationship with administration at your school.

Interviewee: [00:01:13] They have pretty much an open door policy, when I see something, I feel comfortable enough to go in and discuss it with them and you know

when I want something I have to take up their time. They tell me no sometimes, but they tell me yes sometimes too.

Interviewer: [00:01:34] So describe each of your administrator's leadership style.

Interviewee: [00:01:45] Leadership style? Well with me, I mean obviously I feel like I've proven myself in a lot of areas and so they have trust in me and they come to me to do things but they also are willing to let me take the lead on things when I want to.

Interviewer: [00:02:06] How would you describe your administrator's mathematical content expertise?

Interviewee: [00:02:09] Well [REDACTED] is a former secondary math teacher, so hers is excellent. For [REDACTED], that's not her most comfortable area but she is always willing to learn and try to understand.

Interviewer: [00:02:31] Ok. Is there anybody else?

Interviewee: [00:02:34] Well there's [REDACTED], who is the disciplinarian, so he really doesn't have anything to do with content.

Interviewer: [00:02:35] Transformational leaders strive to set academic goals and provide motivation by promoting goals in a collaborative school environment. In what ways if any do any of your members of your administration exhibit characteristics of transformational leadership?

Interviewee: [00:02:54] Uhm. You want to read that again for me.

Interviewer: [00:02:58] So transformational leaders strive to set academic goals and provide motivation by promoting goals in a collaborative school environment. In what ways if any do any members of your administration exhibit characteristics of transformational leadership?

Interviewee: [00:03:16] Uhm, well Like I said when. First professional development is concerned. When I go to [REDACTED] and I present my case for something that I want to attend. You know she is usually supportive in any way that she can be and if she can't, she encourages me to go to the school board office. But of course I am expected to bring it back to the school and to the school system. [REDACTED] is very proactive in bringing others in and bringing the department together with department skills and that sort of thing.

Interviewer: [00:04:07] So instructional leadership is defined by administrator's actions and characteristics that support or affect the learning and development of teachers with the goal of increasing and enhancing instruction. So it actually kind of leads to what you just answered there. So is there anything else that you wanted to expand on in that area.

Interviewee: [00:04:25] Just that and not just the school, but from the school system office. You know they are they are always encouraging. You know, professional development and bringing things to people I mean we have pretty extensive professional development days before we come back to school and then we have them throughout this year and they are not just fluff days.

Interviewer: [00:04:52] So when you... when the school system is pushing PD who normally presents you with that.

Interviewee: [00:05:00] Well [REDACTED] usually organizes it, but she usually doesn't...you know we have the teacher leaders and like we will be going to the teacher leaders conference at the end of the month and you know, we're expected to come back and redeliver to the school system. So, you know, if we don't necessarily do it on the back to School we will be called upon to do it at different times throughout the year.

Interviewer: [00:05:24] So, please describe how your administration supports faculty... all faculty members to enhance student achievement.

Interviewee: [00:05:48] Well let me think how to give specifics. I mean I always feel supported all the time of course I am kinda pushy, but I wish I can but we do know one thing is when we do get new faculty they are kinda set up with a mentor to kind of. You know, keep in touch with them and see how things are going. Help when things start to kinda falter and get everybody back on track. You know, I feel that the math faculty at [REDACTED], we work collaboratively together within the different subject matter and you know, we share what we can with each other. You know [REDACTED], just switched over to advanced math, functions, and to Algebra 2 this year. You know I worked with her sharing what I have to try to make it as smooth as possible. They're are always encouraging us to do that and they, you know, they do check up on us and see how things are going and what they can do To help.

Interviewer: [00:07:08] As far as observations go, do they do more than just the formal and informal?

Interviewee: [00:07:14] That yeah they usually pop in one or two other times just to kind of get the feel of things. But, you know, the only ones that get written up are the ones that don't conform.

Interviewer: [00:07:26] So what kind of feedback do you usually get from your observations?

Interviewee: [00:07:31] Well, mine have been positive lately, one of my flaws is my inability to really control... that I always get marked off is having the kids run the classroom. I don't have the time for that stuff and as you know and that's one of the things I always talk to me and they try to give suggestions on things that would help improve that area on the evaluation. But, for the most part the content is there and the kids are usually engaged.

Interviewer: [00:08:11] Do you have different administrators coming to observe you or do you have the same one every time?

Interviewee: [00:08:16] In a year, it usually.... it's usually the same one. Then they rotate. You know, I don't have the same one every year.

Interviewer: [00:08:25] So, in your opinion, is there a difference between how mathematics teachers are provided instructional support versus all faculty?

Interviewee: [00:08:36] Well, when I'm looking at you know when I look at the schedule of PD and stuff I do see that Math and English are hit very hard. I don't know if hit hard is the right word, but there are a lot for them to attend. Social Studies and Science gets a little bit harder. But now with the new standards I expect to see a lot more PD for them. You know, it kind of depends on what's going on in the state of our curriculum. I mean I've seen a lot of math and English because of common core, You know, now it's kind of cut back a little bit. Of course we got the new EOC because there was more algebra 1 and geometry and there is more PD for algebra 1 and Geometry than there is for algebra 2. But, you know I go to the Algebra one stuff. That's because, you know math.

Interviewer: [00:09:38] So do you think the algebra 1 and geometry teachers are supported more like other than PD. As far as...

Interviewee: [00:09:44] Yeah I mean I do because there's more to give them specifically for their area. You know with Algebra 2 and Advanced Math that, you know. There's not any EOCs we are expected to work on the ACT.

Interviewer: [00:10:27] Can you describe a specific scenario or situation in which your administrator has provided support to you or your fellow mathematics teacher specifically to increase student achievement.

Interviewee: [00:10:37] Well I mean. You know I am on the [REDACTED] board and so they do support me going to the conference ever year and they have made me a teacher leader for the last four or five years and when I have asked to do things, I almost always as long as I don't ask for unrealistic things like going to NCTM, except when it was in New Orleans, they did. Of course I was able to find other ways to help alleviate the costs. But they, you know, they are encouraging for things like that. But I in turn give back. You know, I'm sure there are some others that may not feel that way. But they are not willing to get up there in front of people and embarrass themselves.

Interviewer: [00:11:35] That doesn't bother me anymore. I just I don't care.

Interviewee: [00:11:40] So that's kind of the way I am you know, take it or leave it.

Interviewer: [00:11:44] So what changes have you made to your structural routines based on administrative feedback or support?

Interviewee: [00:11:52] Like I said, you know, I have incorporated some of their classroom management or student involvement. There really I mean there really hasn't been much negative. I did have an observer at one time who said this wasn't going and this wasn't going on and I said yes it was. We had this discussion ...well I couldn't hear it. I can't help it that you sat in the back corner and didn't bother to hear where the discussion was going, but I know that was going on. But, I don't know what more I can do about it.

Interviewer: [00:12:33] Actually I had this question on the last thing. So, do you get to choose your schedule in any way for next year or have any choice in like duty or any kind of thing.

Interviewee: [00:12:46] Yes, well, because I am qualified to teach dual enrollment, I do get the honors, non-advanced where they can earn college credit and I do get the probability and statistics class. Makes sense that I get the Algebra 2 because, they're prepared to get and I don't get all of Algebra 2. I do get a couple of classes. Just for my sanity. But one year I only have Algebra 2 and that next year, it was so hard because I had kids coming from a not prepared background. So you have about half of the kids, you what I'm saying.

Interviewer: [00:13:41] Do you do PLCs?

Interviewee: [00:13:44] It's really kind of hard. Because. The way to scheduling it is, not all are off at the same time. I do know that that is the goal of [REDACTED] for next year and to have that time. That we can get together and we'll do a lot of picking up the phone or sending e-mails. That kind of stuff, but you know basically I teach all advanced math and Precal. [REDACTED] teaches all the advanced math functions.

Interviewer: [00:14:15] That there's not much overlap.

Interviewee: [00:14:17] I mean we do kinda discuss things right. Yes, like as far as I said about Algebra 2, [REDACTED] and I communicate on that and you know, [REDACTED] does Algebra 2 honors so you know it's the same but it's not.

Interviewer: [00:14:53] That's the way it's been up to this point at our school and now they're kind of spreading it out a little bit because they're like that's not really fair for this one person to be in charge of the Leap. Feel that pressure so well kinda.

Interviewee: [00:15:10] But here's what I see, because there was a teacher who taught Algebra 2 quite differently from what I did and didn't have quite the same requirements that I did. The kids were all over the place. That's what happens when you don't have the people doing it on the same page.

Interviewer: [00:15:39] So last question, What could your administration do differently to provide further instructional support to you as a mathematics teacher?

Interviewee: [00:15:57] I mean they really do provide support, other than giving me a blank check to go to NCTM or to that kind of stuff, but that is not realistic and it's not fair to the other faculty. I do know that when things are going on in the state, the Central Office does try to support as many going feasibly as possible. You know you can't have your entire math department gone, you can't get subs.

Interviewer: [00:16:56] Any other faculty members here that support you other than administration.... curriculum coordinator or anything like that?

Interviewee: [00:17:07] It's the central office. Pretty much.

Interviewer: [00:17:09] You don't have like a separate curriculum for [REDACTED] (She shakes her head no). OK. And then for central office it's just [REDACTED]? Is there anyone else?

Interviewee: [00:17:15] Well [REDACTED] has just taken over for Secondary Math

Interviewer: [00:17:19] I am just trying to identify who else I can talk to.

Interviewee: [00:17:22] And she just took over.

Teacher Interview Three

Interviewer: [00:00:06] How would you describe your teaching career up to this point?

Interviewee: [00:00:09] long. It's been 49 years and I have enjoyed it very much and been very successful. That's the reason that banners up there. Students that I taught have gone off to the major universities in the world and I love students and I love math. And, the opportunity to put both of them together for 40 something years has been really very nice.

Interviewer: [00:00:46] Great. Which courses have you taught?

Interviewee: [00:00:50] Well when I first started teaching, that was at [REDACTED] for eight years and they gave me Physics and general science and then later they gave me kind of like a general math kind thing. But when I came to [REDACTED] in [REDACTED] they gave me a geometry class and Algebra 2 the first year and then after that it was algebra 2, Algebra 2 honors and what we called advanced math the most basic. Now precalculus and then in 1990 they added calculus to the curriculum and I've been the only calculus teacher that [REDACTED] ever had and so now I teach Algebra 2 honors, Pre-AP precalculus, and then AP Calculus.

Interviewer: [00:01:46] During the interview the term administration refers to your current assistant principal vice principal and principal. Describe your professional relationship with the administration at your school.

Interviewer: [00:01:56] I've known [REDACTED] for...ever since I came to [REDACTED] which is [REDACTED]. She was another math teacher at the time and it's been fun watching her advance from the classroom to get her doctorate degree and then to assistant principal and then to principal and I have loved her dearly. She's a personal friend. The administrator that we have in second position now [REDACTED] is new this year and I'm just getting to know her. The other administrator is [REDACTED]. He's dean of students and I have a lot respect for him. He keeps the students at this school under control. He's older than I am. I don't know how much longer he's going to be around nor do I know how much longer I am going to be around, but we've had a good relationship. The other one is the fourth one is the accountability specialist. She also was she's the chemistry teacher and I have I can say a good relationship with her.

Interviewer: [00:03:12] Describe each of your administrator's mathematical content expertise.

Interviewee: [00:03:16] [REDACTED] taught mathematics. She taught my daughter algebra. I don't know if she ever taught anything but algebra. She may have. Oh. I don't know. I just don't know what [REDACTED] is, the assistant principal, because as I said she's new and she did not come up in this system. She came out...she was from [REDACTED] and [REDACTED]. I don't think he knows much about math and of course the other one, [REDACTED] the accountability specialist taught chemistry so she knows a lot of math.

Interviewer: [00:04:05] So next two questions are about specific leadership styles. Transformational leaders strive to set academic goals and provide motivation by promoting goals in a collaborative school environment. In what ways if any do any members of your administration exhibit characteristics of transformational leadership?

Interviewee: [00:04:24] I love it when big words are used. [REDACTED] came to be principal. In part..about part of last year, because of desegregation order principal and the assistant principal switched. So she came in and she hasn't as a...as an administrator she hasn't been very forceful with me personally because she knew she didn't have to be. What she's done with other teachers, I'm not really sure. Now, [REDACTED] came in and she was assigned to all. Her main goal is test...raising test scores. And so she would do things like come in and this I'm sure was assigned to her by [REDACTED] this job and she would come on the line and look at the JPAMS records that's out. I don't know if you use JPAMS or not?

Interviewer: [00:05:33] We use Webpams, it's the same thing I think.

Interviewee: [00:05:34] I think that's what Webpams is called now. Anyway so she can go in and make sure that everyone has tests each day...I mean each week and they're labeled and that they're up to date stuff like that. And that's been good for teachers who are kind of lazy about recording their, you know, they're given a test and they haven't recorded it in the last two weeks and stuff like that and I think by pressuring them she's increased the parent happiness because the parents can know how their child is doing on a more timely basis and of course the other one they all three... not [REDACTED]. But the

other three are SLT evaluators and over the years I've had, of course, [REDACTED]'s new this year so I hadn't had her before but both [REDACTED] and [REDACTED] had done that and they keep things going. Now for me personally, they just kind of let me do what I want to do. You know I retired in 2010 and then came back to teach same position, same type of students and all of that. So. I don't really have to prove myself very much and so I consider all that stuff to be kind of a nuisance. But you have to go through it and so and they've been to me personally they've been very supportive in allowing me to do what I want to do.

Interviewer: [00:07:17] Great Ok. So instructional leadership is defined by an administrator's actions and characteristics that support or affect the learning and development of teachers with a goal of increasing enhancing instruction. In what ways if any do any members of your administration exhibit characteristics of instructional leadership?

Interviewee: [00:07:40] Well I have already talked to you about what [REDACTED] does. [REDACTED], she's dealing with other teachers what needs to be done. She leaves me alone and that's what needs to be done.

Interviewer: [00:07:55] Ok. Please describe how your administration supports all faculty members to enhance student achievement.

Interviewee: [00:08:08] Well. Number one goal at this school is student achievement and that ought to be the case at every school and they do what is necessary to enhance that. As I said. with teachers who need they identify the teachers who need help and identified the needs of those teachers. They identify those teachers who need to be left alone and leave them alone. And what they're doing with the other teachers, I don't know. You'll have to talk to them. As far as I'm concerned they're doing exactly what they should be doing by leaving me alone

Interviewer: [00:08:57] In your opinion do you think there's a difference between how mathematics teachers are provided instructional support by administration versus all faculty?

Interviewee: [00:09:05] I don't know if there is any difference in... in what they do but they do realize that mathematics is.... math and English. Language arts are probably the highest echelon. Then you go down maybe science and social Studies....Science might be up high. I don't know about that one but then down to social studies and then down to the arts stuff like that all.. which are important to me and all which are important to them. And all of them are supported....not equally. They know that in my case there has never been with any administration I've had. [REDACTED] goes back one year. [REDACTED] goes back two years and those would be the only ones I would approach with, "Hey I need for my...sometimes I have calculus students who are".... I had a few years ago I had one who took calculus as a freshman and then I got him up through the Calculus 2, calculus 3, calculus 4 when he... when he graduated he went to MIT and he got into calculus 3 up there, I think and so along the way... just for instance I said I had discovered some

practice AP material that would be not just for the AB portion but for the BC portion and I said I need this for this one kid. It's gonna cost 300 dollars. What do you say. No hesitation at all. That was with a couple of principals back. But I had to renew it again. two years ago and the principal there ...whatever was necessary they provide. I don't know whether they're doing that for all the subjects. But, now he did ask me the other principal did ask me does...would anybody else benefit from this. I said yeah every once in a while I have a student who comes along and is a head of all the other calculus students and needs this. And so the... it's been successful on several and when I teach calculus, I teach calculus for understanding, not for let's make...get a high score on the AP. If you drill those quick questions over and over and over and just teach that material you can make a high score. So but when they get off to college or anywhere when and beyond calculus into an analysis and stuff like that in if they go into those higher mathematics courses if they don't have a thorough understanding of what basic calculus ...how basic calculus is a part of that larger thing of analysis then they're not going to be successful there. And they might be successful for a course or two in calculus and then afterwards they will fall off. So I try to fix it so that when I teach the calculus it's going to be... I'm teaching the other stuff at same time and therefore. It might not be. This is... it's for understanding it's not necessarily high AP scores and so I've had lots of people pass it but I only put the names on the board who make four or five and so we haven't had as many as we could have had if I had drilled the test.

Interviewer: [00:12:54] Right.

Interviewee: [00:12:55] But I needed that extra material too and so to get back to your question, I believe that any time I went to administrator and said this is what I need. I would get it No hesitation. And I don't know I've never heard any story on this campus any other subject having any problem at all. They will do what is necessary to get whatever the teacher asks for. So I can't say there's more but. It might be for math. I don't know.

Interviewer: [00:13:28] Ok. Can you describe a specific scenario or situation in which administration has provided support to you or your fellow mathematics teacher specifically to increase student achievement? Other than what you've already.

Interviewee: [00:13:40] I think we'll just use that example again.

Interviewer: [00:13:45] What changes have you made to your instruction attains based on administrative feedback or support?

Interviewee: [00:13:51] I'm sorry when I changed the curriculum, it's because I found a better way to do it. And I haven't found anyone, EVER who was evaluating me who knew more about it than I did...knew more about the math or the pedagogy. So they just stay quiet and leave me alone.

Interviewer: [00:14:16] I Think I know the answer to the next question too. What could your administration do differently to provide further instructional support to you as a mathematics teacher?

Interviewee: [00:14:25] Nothing. They are doing just fine.

Interviewer: [00:14:29] This the last question. So In terms of professional development is it recommended to you by your administration? Or do you just come up with something that you want to do and ask or are you at the point where you don't want to do any more PD?

Interviewee: [00:14:44] Well, PD can mean just personal stuff. Doesn't have to be Logged in at this time. Logged out at that Time I got this certificate on this note. And I am. Constantly in it as part of the fun part of my job is discovering new stuff, even after nearly 50 years. New stuff new mathematics at least it's new to me and are new ways to present things and when I do experiment with it a little bit in the classroom and then I'll write it up and send off to publication. And I've had lots of things published in the mathematics journal of the National Council and even this last summer. It was sometimes with very special students. Some will... also keeps my mind sharp over the three months and I find that if I keep my mind sharp over the summer. It's easier to get back in the fall. And so this summer I'll be spending some time with a student and giving him calculus. But last summer I gave it to him, he was a freshman in the freshman year and he did it. He was ...I did Algebra two with him ...well a couple of them and he... We were doing imaginary numbers and so I was showing them i to the zero. And then that i to the fourth and i to the eight are all the same number and so forth. And then I asked him to give ...to figure out i to the year of his birth which was 2002. And he did it the way I expected him to. And then he did it another way. and he got two different answers and the way he had done it both times were mathematically correct. So of course in my mind. Right. But what is it? What is it? Well and then we got the calculator. And there is a stage in which it turns into a negative one to some power and then its negative one ...I forgot how it works. I have the article somewhere around here. Anyway I wrote it up and sent it off to the National Council and they published it.

Interviewer: [00:17:18] I think I saw that on the news.

Interviewee: [00:17:21] And so there are not a whole lot of people who can read and understand but you could and so not only what I do find new stuff but what they do that finds me new stuff and ordinarily this is the first time it's been so good that it was publishable but ordinary I just walk over there and give them a handshake. That's a big deal.

Interviewer: [00:17:41] Oh yeah.

Interviewee: [00:17:41] I've seen one of them when he was thought he was getting one and he started squirm. So my professional development is self-Initiated and self... Now I have to go to those other things and I sit there and.... It is torture and that's what the

professional development days are and you sit there. But I do a lot of that kind of thing and then when I decided...it's fun it's really fun. After all these years to, you're making a presentation then all of a sudden you know after 40 something years I could have presented it this way and they'll understand it faster. One of the fun things about just our jobs especially in math I think is to study... How human beings think, observe how humans think and not only how they do but how. Why after all these years has that never occurred to me either in mathematics or in the way it's presented the way it's taught? And that's the fun stuff that's what keeps it fresh and that's what professional development is by definition and it's not something that comes in from the outside except with kids come up with like that kid. But it's what I discover on my own. And I think part of what you're getting ready to go and in a few minutes I'm going to talk to you about becoming a future administrator. But If I don't think about it...I better say it while I am thinking about it. When you are providing professional development to people is to give them at least the opportunity now some of them aren't mature enough to come up with the stuff on their own. Some of them aren't experienced enough to come up with stuff on their own. But give them an opportunity. It might even be good professional development for young teachers could be. Looking at those journals where other teachers across the country and the world as a matter of fact have come up with things and a lot of what has been interesting to me is I'll read something that. One person wrote. In fact when this kid sits here so that why I pointed when he came up with that thing and I had it published the article next to it, got me into another tangent. And so is the guy from Hawaii and he had made this conjecture about.... I don't know I can talk to this because you know about math. It had to do with the Pythagorean Triples and something about a right triangle ...I don't remember exactly what it was... he'd come up with his conjecture. So before that he had sent me a proof my work and I took his and I said well it's just well...connected this to this and sent it to him and said look here's what you've been looking for. So from that he was able to take that little clue and proved his own conjecture that he'd been working on for I guess decades...I Think he's a retired college professor in Hawaii. And, then the last journal issue he published his proof of his own conjecture and at the bottom thanked me for all of the... for the connection. And so that's professional development. And if you become an administrator. I think. That helping a teacher develop their own intellect and develop their own. And a lot of times they'll say I just I'm not able to do that. When you're certainly not able unless you try and if you give them the opportunity and give them the incentive. So it's not so much something imposed from outside....alright so we brought this expert in and here he's going to tell you all this stuff. At least part of it can be self-Initiated.

Interviewer: [00:22:19] . Great. Well there was not.. actually that is it.

Teacher Interview Four

Interviewer: [00:00:42] So my dissertation is how administrators support math teachers. How would you describe your teaching career at this point?

Interviewee: [00:00:57] Its been great.

Interviewer: [00:00:57] Which courses have you taught?

Interviewee: [00:00:59] Algebra 1, Integrated 1, and Integrated 2.

Interviewer: [00:01:01] During the interview the term administration refers to current assistant principal vice principal and the principal. Describe your professional relationship with administration at your school.

[00:01:17] We have some great principals here. We have [REDACTED], which is her first year here as well. And she's actually the one I interviewed with first then [REDACTED] and they have both been great. They both work off each other. I mean. They do. Vastly different things separately and they come together for a lot of stuff as well. It's been great. My professional relationship has been awesome. They are really easy to work with.

[00:01:40] Describe each of your administrators Leadership style?

Interviewee: [00:01:44] [REDACTED] is more like a new school type.. She's very logistics base very planning forward thinking. [REDACTED] has been doing this for years now. I can't forget when she started work here. She's been in the game a while as teacher for a long time and in administration. Her experience, she plays off experience. She just has a veterans mentality that how I would describe it. She has just been doing it so long she can answer any question that. She really is a veteran type like that leadership.

Interviewer: [00:02:15] She was here when I started. Teaching which just 10 years ago. But for [REDACTED] yesterday though I know she's been here a while.

Interviewee: [00:02:24] And she was a math teacher.

Interviewer: [00:02:26] Okay that was my next question. So describe each of your administrators' mathematical content expertise.

Interviewee: [00:02:31] Well [REDACTED] taught math now mostly when I'm discussing anything I go through. [REDACTED] or [REDACTED] just because they're pretty much my math department leaders. [REDACTED] is the leader I believe and [REDACTED] Is pretty good guy. I Ask them both. As far as math [REDACTED] is really good with wide scope and sequence. Rigor pulling material for you she really knows a lot about state and standardized aspects of it. [REDACTED], I have never really discussed mathematics with.

Interviewer: [00:02:59] So the next two questions are about specific leadership styles. Transformational leaders strive to set academic goals and provide motivation by promoting those goals in a collaborative school environment in what ways if any, do any members of your administration exhibit characteristics of transformational leadership?

Interviewee: [00:03:20] Could you describe transformational leadership one more time?

Interviewer: [00:03:21] Yes it is. So leaders they set these academic goals and everything that they have done in the school is motivation towards those goals.

Interviewee: [00:03:31] SPS. I mean that's the big I mean. As much as it is about wanting to be individualistic in the classroom and really you know. We are held to a state standard. Now we get a score. You're an A school, you're a B school, you're a C school. So the state standard really is a big part of our day to day. Don't get me wrong they've always given us flexibility with how we approach our kids. Because the big thing now is like group the kids teaching each other. But of course when you're in a classroom with them every day you see which you can and cannot do in the classroom. We have to teach, especially math. So much material so much major content. That you really, even when you want to go outside that box sometimes you can't. But goal based still works. It still works. The main goal of college. I mean I'm very happy with my kids are going to graduate high school. I'm very proud of them but the main goals are to prepare for college of course so that is my personal goal orientation. My year to year is to make sure that they are ready for the next year and we based that off of our standardized tests. That's really the basis of where you're going into your next year approaching basic means you were behind on this year and you are going in behind next year. So as far as goal orientation that is the way it is around here. You know you have, especially a school like [REDACTED], you have a certain level you're held to a sort of standard. You really can't. You don't slip off the block whenever you're a major school.

Interviewer: [00:05:04] So instructional leadership is defined by administrators actions and characteristics that support or affect the learning and development of teachers with a specific goal of increasing enhancing instruction. In what way that any do any members of your initiation exhibit these characteristics?

Interviewee: [00:05:19] [REDACTED] is she was my advisor and so I spent a lot of time talking about that and she is big on like the new age form of teaching. So she helped me a lot with integrating that especially just being a first year with such a content area as this. She really helped me integrate that which I was able to do, I'll say partially successfully this year. I still did a lot of instruction on myself but I was able to integrate it enough such that I feel good about doing it and next year I can do proper planning to do more of that new age type. I mean. I believe does... it can work. I do believe the best way to learn something is to teach it. I am much better at math as a teacher than I as a student. I mean... which is...everybody will be everybody is going to be better at something if you teach it.

Interviewer: [00:06:10] Yes.

Interviewee: [00:06:11] So I need to do some research on it absolutely. You know we don't have time, in my 20 minutes with [REDACTED], she can't teach me some new age method, but she did help me incorporate it.

Interviewer: [00:06:21] So what are you defining as a new age method of teaching math?

Interviewee: [00:06:26] Maybe it's maybe it's not maybe to teach kids teaching each other. It isn't new that maybe that's not new to everybody. I just try to keep the kids teaching each other in small groups and big groups high with low .Kids asking these questions. That's the big thing that's hard is the question asking them the questions you want from kids nowadays because if you prep it too much it seems fake and that's not going to teach them anything. So it has to be inherent to ask these questions and then the content of math it's really hard. You know if I was teaching. History or civics or something I mean that's discussion based I have a degree in history as well. And so that's a discussion base. It's easy to do that, in math. I mean. Especially with 14-15 year olds I mean we're going to talk about theories about how you solve diverse things, how I solved it. Mechanics of math are so straightforward I mean its surgery, you really don't change it that much. But I get it with the comprehension and that's what they're adding in to the state testing. I mean there's so many like ethic problems with math. I never thought I'd counter that until we got into high school in 2008 and I never saw any problem like that. I mean it was all pretty much all at that point in college still but. College is not even incorporating this. You know. But I do I think it's helping, do I think it'll make them better going into college and make college easier. Absolutely. Because I get the comprehension thing and I see their point is because people.. to make a point about math is will I use this in my day to day. So they try to give you day to day scenarios. And let you use your math. Comprehend. And. Analyze it. So I see the..I see what they are doing. Do I think it's. Being used effectively. Yes maybe like 70 percent. I think there's a little ways to go with it.

Interviewer: [00:08:23] Yes, I would agree with that. Please describe how your administration supports all faculty members to enhance student achievement.

Interviewee: [00:08:29] We are a family here, So it really is everybody's got everybody's back here Specifically. I mean. I've never had a question go unanswered I've never been told...come back later. I've never been written off so. The support as far as support goes. I mean just the attention from administration is to support us.

Interviewer: [00:08:48] Are there any other staff members besides administration that support you.

Interviewee: [00:08:53] Everybody from, our Administrative assistants. Each individual department we've got [REDACTED] we've got [REDACTED] we've got [REDACTED]. They all are really attentive really good with their jobs you know from discipline to the counselors I mean I can't tell you how many times I've been told by a counselor you know asking about one of my students and we work together to help them move forward. We're very interconnected here which is for a school as big as we are because we are not 5A we are 4A But it is still a big school with a lot of kids and for as many kids as we have, they still get one on one attention from what I have seen.

Interviewer: [00:09:38] What actions do you believe administrators specifically perform to support math teachers to enhance student achievement?

Interviewee: [00:09:44] I mean. From my experience with any major content especially one with standardized test you're going to get a lot of... That rolls back to our goal orientation. I mean we get a lot of attention. We can check my e-mail. It's always full of something. We are given.. we are trusted a lot as teachers they do give us the best.. until you proven yourself wrong that you're right. But. I felt like in math especially math and English get the most attention out of all subjects just because they're so integral to the whole high school experience and College. And science as well. There's only so many sciences you can take you've got to take these three, you have to take algebra you have to take geometry you've got to take algebra 2 Then you've got to take one more whatever that may be.

Interviewer: [00:10:41] So in your opinion is there a difference between how mathematics teachers are provided instructional support versus all faculty? You kind of alluded to that some.

Interviewee: [00:10:55] If we're going to talk about getting math is the hardest subject. I mean biology. Chemistry is a little bit of math so now a days especially. There's not I can't give you note cards and tell you to write out terms and you memorize it. I mean you can just about pass any subject other than math by strictly memorizing. Memorizing terms, rote memory. Rote memory is big in math as well. But it all ties into solving. You have to solve something to get through math. English you can and of course reading, reading comprehension. But I mean. Anything where you can just memorize something is always going to be easier than something you have to mechanically solve. So what was the original question?

Interviewer: [00:11:41] Was there any difference how administrator supported math teachers like versus the whole staff?

Interviewee: [00:11:46] I couldn't speak from experience because I don't know how the other staff is supported. I think we are all well supported but with math I definitely feel like there's a little bit extra attention

Interviewer: [00:11:57] Due To the high stakes testing?

Interviewee: [00:11:59] Unfortunately it does all come back to EOC testing which I mean I'm on the fence about at times. I think everything should be prepped for the ACT. That's my issue is I hate when my kid have amazing...amazing standardized scores. But when I see them two years later and they are struggling in math on the ACT that makes me feel like I didn't do something right.

Interviewer: [00:12:18] I think there's just...

Interviewee: [00:12:21] There's a disconnect in the testing.

Interviewer: [00:12:22] Like our lead EOC versus ACT you are kind of teaching towards two different things all the time it's kind of hard.

Interviewee: [00:12:28] Its also weird going Algebra, Geometry, Algebra 2. I think it should be Geometry, algebra, then algebra 2.

Interviewer: [00:12:33] Ok. I am completely with you...there is nothing in Algebra 1 that helps with Geometry.

Interviewee: [00:12:40] More and more geometry for.

Interviewer: [00:12:41] Well that's because eighth grade math is more Algebra 1 now. when it moved down.

Interviewee: [00:12:47] But I think it should go 8th grade, geometry, Algebra 1, algebra 2, Because the kids by the time they have gotten to algebra 2 have forgotten the algebra 1. I don't understand that. I believe that one switch could drastically improve our ACT scores.

Interviewer: [00:13:06] I agree with you there. Can you provide a specific scenario or situation in which administration has provided support to you or your fellow mathematics teachers specifically to increase student achievement?

Interviewee: [00:13:23] We are getting a new curriculum.

Interviewer: [00:13:30] Springboard?

Interviewee: [00:13:30] I think we are going to Springboard. Any time I have every asked for something they have been...they either give me it or they push me in the right way. It is so much about material now. We do not have enough of those comprehension questions on deck.

Interviewer: [00:13:44] So what are you currently using?

Interviewee: [00:13:47] That bad boy I'll tell you right now I opened up maybe one day a year.

Interviewer: [00:13:53] We have the same adoptive stuff that like...

Interviewee: [00:13:56] Yeah, I have never used it.

Interviewer: [00:13:57] I know I've never opened ours. It stays down there.

Interviewee: [00:13:58] I have so much tertiary work pulling other material because that thing was hot garbage. I am so glad it's gone.

Interviewer: [00:14:06] Do you do you personally get a lot of support from like the district office [REDACTED]?

Interviewee: [00:14:09] [REDACTED] is great, I really like [REDACTED]. [REDACTED], I haven't had as many conversations with her, but [REDACTED] is always there and always on deck. But as far as material goes, I found out. So that in itself is huge support. They have always been really supportive with helping find materials and stuff. Yeah, getting material is a big thing. We don't have enough of these comprehension questions. Which is weird considering how much comprehension is addressed. We have to find out. Right but Springboard, I haven't looked at it, but I am going to get a book early and look at it over the summer and see what's up.

Interviewer: [00:14:59] I review instructional materials for you can say edreports. It is decent, but for high school its kind of all over the place. Honestly I'm waiting for illustrative math to come out for the high school because. It's really good at the middle school like the best material I've seen for anything It is the best middle school material and they are currently piloting the high school. So I'm hoping it's just as awesome. Yes. But the middle school material is amazing and so their high school should be public next year.

Interviewee: [00:15:43] I mean that's the thing that we are struggling with the 8th grade Algebra 1.

Interviewer: [00:15:46] Yes. I know. It's tough for 8th grade algebra one because they've got to teach algebra 1 and eighth grade material and they're tested on both. It's just it's just rough situation all around right there.

Interviewee: [00:15:57] Yeah, I took algebra 1 in 8th grade year ago. I can't remember how I felt about it going into high school. But I definitely see kids who especially the ones who took algebra 1 in the 8th grade and then failed. Yes there's a huge gap.

Interviewer: [00:16:17] I would agree with that. What changes have you made to you instructional routines based on administrative feedback or support.

Interviewee [00:16:26] Wow, I have changed a lot around Christmas, I have to feel out the kids though. I change stuff based on the class honestly I mean every class gets the same instruction. But I approach it in different ways in class I mean obviously my integrated 2 kids get a different treatment than my algebra 1 kids not because I want to teach them differently because they'll learn better if I teach them differently.

Interviewer: [00:16:49] So what did you realize at Christmas that made you change things?

Interviewee: [00:16:54] I just had time. I can make. I've made small change throughout the year but I could not make the big changes. At the time. the time really helped around Christmas but. But it was just minute stuff. Especially after I had seen the interim an diagnostic test that changed the whole game that changed Everything. I started teaching

my kids how to write essays for math problems. That in and of itself is something I never dreamed of.

Interviewer: [00:17:22] Is there anything that your administration could do differently about further instructional support to you as a math teacher?

Interviewee: [00:17:27] We could always use more people. That's one thing administration has a lot on their plate here. They could definitely each use a personal assistant of course that's not in the budget. But they do the most that they can. I truly believe they do the most. If there was anything we needed is just some random generator of math problems. I mean, you know it's hard. The type of mechanics. It's hard to generate short answer problems...especially the wack a do questions from scratch.

Interviewer: [00:18:02] I'm always looking for resources and things like that I don't fully understand. So as far as professional development goes do you seek that out yourself or do your administrators email you with particular professional development opportunities or I know there is required stuff, but is there anything? Is there any additional PD that they encourage you to go to that's not mandatory?

Interviewer: [00:18:25] We get emails about it, but did I dive into it, you know not so much. There's lots of summer. There's leadership things. I believe everything that's possible we get something about. But as far as or PD with math... we know we do a couple with [REDACTED] before Christmas, but just to analyze stuff, but it was hard. Looking at those diagnostics and those they are just so much even if we were working them ourselves, it would take me 40 minutes to solve that thing. I mean. We've got opportunities I just haven't looked into them personally.

Interviewer: [00:19:09] I was just trying to see if they were offered that that was really what I was getting at not actually whether you actually took the opportunity or not. So as far as classroom observations go I know there's a formal observation and informal observation do they come in any other than that.

Interviewee: [00:19:25] No, I mean they come by if there is something needed. but, I have not been micro-managed in that since. So I have only been those two times.

Interviewer: [00:19:30] Ok. So as far as feedback that you've gotten from your observation I'm not I don't want to know what you what you scored or anything like that. Was there any feedback that was given did you use?

Interviewee: [00:19:57] I tried them. Of all I got to [REDACTED] and I got points off for, see we were doing linear equations that day so I don't think I asked enough high level questions and I didn't any group work that day so I got a [REDACTED]

Interviewer: [00:20:15] So the person who is observing you, I don't really care who it was, their math background hi or low?

Interviewee: [00:20:24] low.

Interviewer: [00:20:24] Okay. So do you think that had any effect.

Interviewee: [00:20:26] And I think it was a straight classroom management. I thought it was fair. I mean a [REDACTED] the first year, I was find with it. Yes. To me that's stuff is not important. I want do my best but I know I am doing what's right. So I will take a 2.8 all day.

Interviewer: [00:20:48] I just wonder if ... depending on the observer.

Interviewee: [00:20:52] If you go into PE class are you really going to judge them on their content. Here's somebody that is just a teacher. Former math's teacher who doesn't even work out very well. It would probably be unfair. I see what you're saying. I would be honest if I felt misrepresented.

Teacher Interview Five

Interviewer: [00:00:00] So how would you describe your teaching career up to this point?

Interviewee: [00:00:29] In terms of?

Interviewer: [00:00:37] How long have you been here? How many years....

Interviewee: [00:00:42] I have been here...I just completed my fourth year at [REDACTED], but I have been in [REDACTED] for seven years. My teaching career is more, based around coaching jobs. So, I kinda bounce around to move up the coach's ladder. So, I've taught a bunch of different subjects not just specifically math. I've taught business subjects, I've taught history...math. This is my 6th stop in 15 years. I've been around a little bit, but as far as progression type thing, I think I am getting better at it. Of course, this is my second year to teach geometry back to back and I've taught geometry before in a different school system. I think it helps me to also taught algebra for a few years. I know have a good idea where the kids are coming from.

Interviewer: [00:01:52] During the interview the term administration will refer to your current assistant principal vice principals or principal. Describe your professional relationship with the administration at your school.

Interviewee: [00:02:06] I'd certainly say it but we're a little bit more laid back here than other places. When those people move into the big chair they're a little bit more, administrative, if you will. While I think that's their job, the vice principals are more day to day personality dealing with the teachers. You know, currently our principal with our vice principal. I would say she was more personable when she was the vice principal than when she was in the big chair, but I know she's got a lot of different stuff on her plate. That's what I would expect from somebody in the top leadership roles of school. The other ones it's a little easier to walk into their office to get something off your chest or to

get a problem resolved. Say here and here at [REDACTED], we are family-eque you know. Which if I were going to describe it. It would be big sister big brother relationship with the vice principal and the principal is the mom of all of us I guess

Interviewer: [00:03:31] Describe each of your administrators' leadership style.

Interviewee: [00:03:40] . [REDACTED] only deals with students, so if you have an issues with students, you need to get him to resolve it. He can be pretty dictatorial or cranky at times, because he's been in education a long time and seen all of it. And it's the same suspect and the same families and same type of issues, but he will get on it. So I really don't have to bring any students that way because I teach honors classes. [REDACTED] is very approachable through whatever form you want to send or something or questions. I get a quick response on her. She's very interested in test scores and those things. So. Her knowledge of that comes from working that realm a couple of different places helps us. You know she's, she's new to [REDACTED] and I think that her experience has helped too. She has a better idea of what other people are doing than other administrators. [REDACTED] is kinda in charge of testing and plc stuff. She again is ...I can get her on the phone quick. If I miss her it's usually within a class period she gets back to me about a question and she actually taught me in high school so our relationship is a little different than me and some of the other administrators. I have known her for a really long time. I don't know if she treats me any different, but I may not approach her as I do other people. But, she's.... she is... if she doesn't seem like she knows the answer. She'll find out which is helpful because I don't have time to figure it out. If I present these people with a problem, it's because I have already looked and I feel like I am wasting my time and that's their role, so I will kick it towards them. [REDACTED], she is, she was a lot more visible when she was a vice principal and I know that role has changed. She handles a lot of stuff in her office which is fine with me and she handles a lot of stuff on the phone. I had a lot more of a working relationship when she was a vice principal and some of that is because she handled a lot of discipline for females. So when she was the vice principal I was not teaching honors so I had more discipline issues I needed her to fix. The last couple of years since she's been in the big chair and I have been in honors geometry. There's not much reason for me to ask her. Her style would be... I don't know she kinda flops between. You know like a centralized leadership style to a team leadership or shared leadership. This kinda depends on I guess what's going on and sometimes her mood.

Interviewer: [00:07:12] Ok, How would you describe each of your administrators mathematical content expertise?

Interviewee: [00:07:22] I would say [REDACTED] is probably the highest, because she did taught in the math department and when she is in charge of our observations you know she knows what she is looking for, of course being geometry most people can hang when they come in here and watch as far as a college educated person...which all these people are with higher degrees. It's not an issue as far as what I am covering when they come in here and watch. As far as... I was... I think. [REDACTED] told me she's more of an ELA person. Which lends me to believe she didn't like math, but I don't know that to be the

case. I have no idea about [REDACTED]....I mean [REDACTED]. But [REDACTED] I would say here math knowledge is up there too, because she was a physics teacher. I know that she has used a lot of stuff.

Interviewer: [00:08:33] So the next two questions are about two specific leadership styles and so the first thing I am going to do is describe the leadership style and then ask about if any administrators have those characteristics. So transformational leaders strive to set academic goals and provide motivation by promoting those goals in a collaborative school environment. In what ways if any do any of your members have your administration exhibit these characteristics?

Interviewee: [00:09:03] And this is curriculum based when you asked the questions... so with math. A lot of it and I don't know what the other teachers said a lot of that type of stuff is pushed to the [REDACTED] supervisors and content area and we..I just talked to them the other day. . And we kind teamed up in the summertime and all get together and move one way of course here on the school level. I mean I wouldn't say much. I feel like they are more day to day. Ahhh,. of course I mentioned [REDACTED]'s test scores and I say like. I say with [REDACTED], there is some good collaboration on what we need to do specially. And I don't know that she does come to me because I'm in the lower test subjects and I'm taught both of them before. We have three new teachers and newer than I am at [REDACTED] and a couple of them brand new teachers. So I don't know if that's the same experience for everyone or if she just leans on me for that math content in the lower areas. The older teachers know what they want for their class but they're not tested except for the ACT so... I've seen the all of the test or the whole test and I have a pretty good idea of what's on there. So I'd say somewhat with regards to math you know. But you know I don't know this I'm isolated with just me or if we do have some. You know...PLCs and you know how those usually go so they are not really. Very informative and they are more about the day to day stuff. So I would say on the school level. If I was going to rate it on the likert scale from 1 to 7. Probably a 3. Not. Leadership wise they are not... They have their bosses too. It's kinda the way we run things it kinda rolls downhill so but I think personally I do get asked with regards to that a little bit more than other folks. So..

Interviewer: [00:11:39] Ok, so instructional leadership is defined by administrators actions and characteristics that support our effective learning and development of teachers with a goal of specifically increasing and enhancing instruction. So in what ways would you say any members of the administration exhibit characteristics of instructional leadership?

Interviewee: [00:11:54] Well again that would fall to [REDACTED] and she does send us plenty of stuff that we could. Look at emails and websites and those things to try to get us to go more to a PARCC type instruction for this test which I think, which I am not going to interject my opinion, but. I mean one administrator was in charge of that so she is the... Well... We had the opportunity to learn new things and of course we are encouraged to go. I just got an email today about what would you call it. Leap 360 focus group. I know I was the only one that she suggested going and I don't know if that's because I have done

both or what. I don't know if it's just those folks talking about the leap test. I did spend a day doing that and problem shooting some of the Louisiana believes stuff and how to find stuff.

Interviewer: [00:13:25] So, you are going to the teacher leader summit?

Interviewee: [00:13:32] I doubt it. They did a meeting that was pretty well attended in [REDACTED]. They kinda went on a state tour for like a week and they hit all the major spots and they were talking about leap 360, but also eagle and those things and how to find resources and they had the computer guys over the website. The DRC direct people from whatever state they are from and we could ask them questions and they did tell us some stuff that was coming down the wire that is going to be pretty helpful. You know when you coach football on the level we do our time is pretty limited So I can't spend hours over the fall semester trying to find eagle problems. There is just no time.

Interviewer: [00:15:22] I agree with that. Can you describe how your administration supports all faculty members to enhance student achievement?

Interviewee: [00:15:31] Well, they are certainly encouraging to the tested type folks. and were also encouraged to push them toward ACT, since leap 360 next year is really our only measure of student achievement that get publicized we are highly encouraged to get these kids knowledgeable enough to be able to take these classes. We offer stuff to take these tests and we offer stuff for them as far as ACT prep I would say so yes we're. Highly motivated to keep our A rating so we are highly motivated to encourage teachers to encourage kids to achieve.

Interviewer: [00:16:24] What actions do you believe administrators specifically perform to support math teachers to enhance student achievement?

Interviewee: [00:16:37] I mean those things I mention would...you know [REDACTED]..getting me to go to that meeting and there's been a couple of ...what do they do when it's live? It's a...

Interviewer: [00:16:53] Webinar?

Interviewee: [00:16:54] Yeah, webinar. You know I have seen those that were helpful, but again having the real math administrator being in the role of principal and a lot of that and the whole time I have been here it's kind of kicked up to curriculum supervisors who..they all...I mean yesterday I called and I guess before she got to work and she called me back within a short period of time because I had a test question. So as far as I know it's easier for me to talk to my school board leaders or my school board administration than it is for you to call [REDACTED]. I don't know about curriculum wise, but I know it's real easy. I know I can send [REDACTED] a text real quick and get a reply real quick or I can call her or email and of course [REDACTED] is. I talked to most of them yesterday. It was quick and easy. Of course, right now is kind of down time for them, but It's usually it's in the morning that I can get a question answered, no problem. That's...That's kind of their job. I

don't know that it is here. I mean, I know if falls on the assistant principal, but as far as being supportive and getting materials and whatever I ask for. I ask them first. Just because they have a lot more disposable money than we do at the school and, then also if I ask for something, they want to know if it will be good for everyone else and vice versa. We have some good teachers down there at [REDACTED] and [REDACTED]. They will, they want this to. You want me to get you these too and well yeah a lot of times.

Interviewer: [00:19:00] Is there a difference in your opinion between how mathematics teachers are supported versus like all staff?

Interviewee: [00:19:11] I would say math and ELA are probably supported more than. I mean the difference; we probably have more support than your histories or your arts. Verbally support ever body, but I would say as far as resources math and ELA are higher supported. I feel like I have all the support that I need and that I can get whatever I want. That is my feeling depending on the price tag of it.

Interviewer: [00:19:42] How could your administration or what could your administration do differently to provide further instructional support to you?

Interviewee: [00:19:54] I mean, I will tell you, I mean generally speaking if I ask for it. It happens. I mean really, I should like, I mean I guess the protocol would be for me to... I mean I printed off this PARCC practice test and protocol would be for me to drive over to the school board for me to, you know, for me to have them copy it out. Well I just took that. I think I just sent it over to [REDACTED] and said, can you make this happen for me. I don't have time to go by there you know and it was softball season. I really don't have time to go over there and hand it to those people and I had that done within a week. So, I say that type of stuff means a lot to me to. I mean if I don't have to go do it and someone else will do it for me, you know. I do appreciate that and that's kind of the way I think it should be. Because we're supposed to be here, teaching, and other people should do those things. I feel better about school systems that make that happen. I just don't have time to set up there and find out who it is and to do that, do this. She sent it over and it was, it was, here when I requested it was. A day earlier than I asked for it.

Interviewer: [00:22:22] What changes have you made to your instructional routines based on administrative feedback or support?

Interviewee: [00:22:39] I have added a lot of those long wordy and multi-step problems based on conversations with [REDACTED]. I have put a lot more PARCC like stuff into my exams and bellwork and they have been exposed to a lot more of those wordy problems and multi-step problems than they have before. I have done a lot of it. So I will see how it goes.

Interviewer: [00:23:00] So as far as your observations go, I know you have a formal and informal observation, are you observed any time other than that?

Interviewee: [00:23:10] I haven't been this year and I think that's because they know I am in here doing my job and they don't have time either. I think other teachers probably get observed more than me. I mean, but I don't know that for sure.

Interviewer: [00:23:24] So, that's really all I have.

Administrator Interview One

Interviewer: [00:00:05] So how would you describe your administrative career to this point?

Interviewee: [00:00:08] Oh gosh, diverse and in different places. Different student populations. Different states. But I enjoyed working for the State Department a whole lot. I think I learned the most there. They've all taught me something but I'm glad to be landing somewhere a little bit longer than a year because they've all been great opportunities to move and for the right reasons. I feel like they all kind of led me to this point but this is my first year in about five years to be in the same position for the second year which is really strange because I'm one of those stay the course never like bouncing around or trying new things and then I think you get on kind of like a new job high for a while and it was nice it was really fun. And I learned a lot at all of them, but I think they all served their purpose in landing this one place. I wouldn't, I don't know what else to say about that. Is it like what I've done what I've experienced or how long I've been?

Interviewer: [00:01:19] What you answered is perfectly fine. So if I need more I can ask some questions. It's okay. Before you were an administrator did you teach?

Interviewee: [00:01:31] Yes.

Interviewer: [00:01:31] What courses did you teach?

Interviewee: [00:01:32] I taught language arts at the junior high level for most of my career.

(Phone Rang, Interview Stopped and Tape started over)

Interviewer: [00:00:05] So how would you describe your mathematical content expertise?

Interviewee: [00:00:12] Back to the other question though. Before I taught language arts middle school, but I'm first through eighth grade certified. Taught in Texas my first couple of years taught in California my next couple of years elementary so, but I never... only second grade did I teach math which is interesting. That was my only time, but I was, I taught everything in second grade. And then as I moved up I guess the language side was more my strength. So I just kind of stayed that route and then ended up curriculum coordinator at [REDACTED] at the high school level. I was also at the district office in Missouri which meant, I was curriculum, but not specific areas kind of the whole overarching thing. So what was your next question because you said?

Interviewer: [00:00:57] Oh, how would you describe your mathematical content expertise?

Interviewee: [00:01:00] Yeah it's pretty slim now I know what... I know where the resources are. And that's one thing that I learned with the State Department is that I don't have to be an expert in everything, but I need to know what questions to ask and so that's what I do. I ask a lot of questions, I look at assessments, I know what to look for in assessments, and I know where to push people to get the resources they need or how to help them look at them and you know they need to understand the rigor documents, they need to understand the EOC, and the end of course, the assessment guides. They need to understand how to use the tools they have and if I can't help them, I find people.

Interviewer: [00:01:35] Yeah.

Interviewee: [00:01:35] That's really what I do now when it comes to the day to day instructional piece, like I can walk in a math class, and I know what to look for. As an observer of that now if it gets like algebra 2 and so and further on I do get a little... I couldn't tell you if they're doing the exact right thing or doing it the right way but I can tell you if they're on the right topics. So, that's about as far as I know. Now [REDACTED] is our math person. I'm the English language person.

Interviewer: [00:02:08] Great. So to kind of piggyback what you were saying how would you describe your leadership style then?

Interviewee: [00:02:16] I think that I am very involved with what my teachers are doing and I want to support them. So, I think I take a look and figure how do I help or how do I get out of your way. If you got this and I can tell you've got this and you don't need me and you don't want all of that extra support then I'll check in on you and you're good. I just kind of feel like you have to adapt to your personalities of your staff. So I kind of try to meet my teachers where they are what they need. So really learning them is a big part of my leadership style and making sure my approach works for them. It's not the same with everybody; I'm not always good at doing that. Sometimes your instinctive nature comes out, but I just want to support people so any. And I think my leadership role always comes down to what can I help you with. You know if you don't know something, ask, and I try to be approachable. And I try to check in with people a lot. I don't think that you can just let people go right off. I think you have to check in and some people say they're fine, but really my other leadership side is you know making sure that kids are getting what they're needing. So balancing, understanding, the perspective of my teachers, but also making sure that we're on the right course. Because if you're not teaching the right stuff then we're in trouble.

Interviewer: [00:03:52] Right.

Interviewee: [00:03:52] I mean teaching I have people who can teach all day and a lesson that's beautiful, but it's nothing that we should be covering. You know, keeping

people who are great teachers still kind of on track in a way that makes them not want to shut down. It's hard.

Interviewer: [00:04:09] It's challenging.

Interviewee: [00:04:09] It is. It is. But I try, I try really hard and I try to find people to connect them with that they are more comfortable with if it's not me. And just to support really support get out of the way. I think that's a good... that's a good approach.

Interviewer: [00:04:28] So the next two questions are about specific leadership styles and so I am gonna describe it and then ask if you exhibit any of the characteristics or if not that's fine. So transformational leaders strive to set academic goals and provide motivation by promoting those goals in a collaborative school environment. In what ways do you exhibit characteristics of that leadership style?

Interviewee: [00:04:53] I think I am. We have not had common planning at the school which to me is the foundation of being able to collaborate and help people pool their resources together. So I would say that was huge here. So when I say transforming it was like you know you would have thought I was asking to flip the school upside down when I said let's get people common planning. I couldn't do it last year because the schedule was already made but this year I really worked hard to make sure that I got all my math and all my English and all my sciences and all my social studies at least by grade band like 9-10 and 11-12 planning together. I also am putting together some very, content specific PLC meetings that are scheduled now. Those are on our calendar. Being on my calendar actually being effective are different things and having PLCs where second period everybody else second period comes to a meeting. That's called a faculty meeting during the day. In my opinion, because everyone teaches something different that's coming to that PLC to do it right it really needs to be content specific. And so, plus it needs to be something that is not just a collaborative component, it needs to be stretching them and showing them new or having them work in assessments or having them analyze something like really going through the process of how do we get better at what we do. What were some of the other ones? I know that was. That's one that I really... New teachers is a big part. I think. Gosh, we dropped the ball on new teachers a whole lot. I think they genuinely need, they need mentors, but their mentors aren't always as available as they need them to be and they don't always connect. You know you don't always connect to the person you're set up with as a mentor. So sometimes that works really well and that mentor takes care of things and sometimes they're just kind of a filler and then they kind of come and check in with me. It's very time consuming to work with new teachers. I enjoy it. I enjoyed it in the curriculum coordinator role but we have two administrators in this building here 950 children.

Interviewer: [00:07:16] I know.

Interviewee: [00:07:16] It's me. Who does the new teacher stuff? It's me. It's me who does all the PLCs you know and [REDACTED] handled all the, all the other stuff and she's really she's really big on the components of the work that she has always done because she used

to be in this position. So I think we balance each other and she lets me do my job. The part that I guess they were they were trying to get all of us assistant principals to kind of roll into more of a curriculum administrative role, but it's hard. So pulling PLCs together supporting new teachers, I'm looking at my wall of stuff, assessment planning. I have a whole to do list back there.

Interviewer: [00:08:02] Oh you do don't you.

Interviewee: [00:08:02] Yeah. Assessment planning for the year and all the back to school PD just really being strategic in what we do and realizing that we can't do, I can't do everything, but what are the most important things for me to touch while also supporting teachers and balancing that with schedules. So like looking at a calendar putting dates down. You know listening to teachers needs when it comes to just simple stuff like tardies and how they're frustrated about this or they're frustrated about that and in trying to streamline some of our processes that's a big deal. Okay. Can you read that question again because I like some of the points that the leadership?

Interviewer: [00:08:47] So transformational leaders strive to set academic goals and provide motivation by promoting goals and a collaborative school environment.

Interviewee: [00:08:54] And I think that's what the PLC component is for. I mean, I really, looking at data is a big deal. I don't think we know how. I don't think a lot of teachers have ever really been trained on how to look at data. You get your scores back. You see your kids. You make some assumptions. You're either happy or you're upset because your scores met your SLTs or didn't and then we move on and I think there's more to that than just meeting an SLT. So setting those SLT goals, I'd love to say SLTs were effective at really motivating teachers. I do think they do in ways, but I also think when you're kind of required to set a certain goal. Even something that is completely unrealistic that just makes that whole goal setting process. I mean, it just, it devalues the process. So you know if we were told you can't, you can't set a goal as an F, but you have an SPS and your students walk in the door with twenty-two.

Interviewer: [00:09:57] Right.

Interviewee: [00:09:57] What are we doing here? Like are we really saying we're going and maybe you can, but I do like the new accountability component with the growth component and for high schools that's half of our EOC scores.

Interviewer: [00:10:10] Believe me I completely understand because previous to my job I taught geometry which you know is the end of the road which means I have to have mastery and advanced on all students. Ok.

Interviewee: [00:10:20] Sure. Let me get right on that.

Interviewer: [00:10:21] Right I'm sure.

Interviewee: [00:10:25] I think the alignment is better than it's ever been. Truthfully speaking with assessments and our standards being the thing we had. We did have a time where it was not enough and so I think we're in a better place. I just think from a goal setting perspective I think you have to be realistic, but you also have to look at those teachers who are teaching your really, really weak kids and go. Look I want you to grow them. What does that look like? Let's talk about what that looks like by kid and then having kids also set those goals. I did that with my kids. It would be like here's where you are. Here's where we want to be. Where do you want to be?

Interviewer: [00:11:01] Right.

Interviewee: [00:11:01] Then. Here's where you could be at the end of the year. And what can that mean to how you do on the, you know the, leap exam because it was 8th grade and they had to pass it to get high school. That makes a difference to.

Interviewer: [00:11:13] It does. [REDACTED] has this wonderful thing where she gets every student to write their own goal for the year and she has it all on the walls. It's really cool.

Interviewee: [00:11:23] I did a goal setting project where they actually, at the beginning of the year, they would actually create these cards that were it was a digital version of the program and you could move all of your goals like what's your short term goals. What's your mid-term and long term goals? What do you want to do this year? What are you trying to achieve in the next six months and then next year in the next five years?, because junior high kids can only think that far. That's the end of high school for them. That's a lot of goal setting. But yeah we called them dream boards and put them up all over the wall and you would be amazed at how powerful putting something and making what you want to do very visual and then being able to get it back at the end of the year. And look at it throughout the year and go, yeah, I did that. Yes, I did that. I just think it makes it more intangible.

Interviewer: [00:12:12] It does.

Interviewee: [00:12:12] And we all kind of do it in our head, but putting it on paper or some, something visual really makes a difference I think.

Interviewer: [00:12:21] Yes.

Interviewee: [00:12:22] So yeah, goal setting is huge. I would say that we're going to do a better job of that this year. Last year I was really limited. On when I can meet with people, the personalities of the staff, and I traditionally worked in poverty schools that were failing schools and so to come to a school that was not a failing school. You can't use the same approach. You can't walk in and go, Hey let's fix something you walk in and go OK what's going on. All right let me hear about that and you really have to take your time because if you flip the switch on people they are like look we ain't broke.

Interviewer: [00:12:59] Right exactly.

Interviewee: [00:13:00] Why Are you trying to change things? And so you have to build trust more you have to take the slower... its hard for me.. slow and steady wins the race in a school that's really good. but we're mov... You know I do believe we can move from good to great. And I think that we have challenges in different places and trying to address that. Special ed's been one of our places that I really want to revamp kind of what we're doing so setting goals for those teachers and those kids and saying how do we do this better. I guess that's it. I think.

Interviewer: [00:13:34] That's great. Actually you answered a lot of the next question was about instructional leadership. So I don't think we even need to cover that because a lot of what you're doing sounds like instructional leadership and transformational leadership which is great. So what actions do you intentionally perform to support classroom teachers to enhance student achievement? All classroom teachers.

Interviewee: [00:13:52] All classroom teachers? I guess I go back to some big picture, big items. Like the PLC processes, that is, that is a good use of their time and is it meaningful to them. And then if they are struggling with finding a way to move kids or engagement or whatever let's say I come in and do an observation. Just a walk through or something and we see low engagement whatever or whatever I'll try to. That's a, it's a hard balancing act because that's people who have been doing this for a whole lot longer than me. But at the end of the day I try to remind teachers I'm like would you want to be in your classroom? Would you want to sit through your lessons? And if it's not engaging to you then maybe you need to think about being on the other side of this stage on a stage process because that can be really fun for you, but it can be very painful for the person involved or just not engaging. I think of history a lot. When I think about that. Science can fall into that category to math and fall into that category. I mean you can really have those instructors who are just truthfully I am the center of this world and helping them see how they can still do a little of that and how you can do a little bit different and you can really meet in the middle and get the best of both worlds because there are times when you have to give. There are a lot of times when you need to let kids discover. And when does that happen? What does that balance look like? Being reflective about that, It's hard. Especially for teachers who just it's these kids it's these kids.

Interviewer: [00:15:42] Right.

Interviewee: [00:15:45] That one's hard. Read the question again because I know you talked about instructional so.

Interviewer: [00:15:51] What actions do you intentionally perform to support all classroom teachers to enhance student achievement?

Interviewee: [00:15:57] Well, I think that's back to keeping kids in class and attendance. That's a big big big deal right now. I want our kids to be here every day. We have an attendance not I wouldn't say an issue. Everybody has attendance problems.

Interviewer: [00:16:08] We have a really bad attendance problem at the middle school.

Interviewee: [00:16:10] Yeah it's just kind of like "oh it's a Friday I'm not coming oh we're having a pep rally. Well we're going to miss an hour so I'm just not going to come" OK. We still have class and incentivizing in a way that it doesn't seem like you're paying kids to come to school. I don't want to do that, but making this the place you want to be right? And how do you get all of your teachers to kind of buy into that. I think that we start with helping them out by making sure kids get to class. If I can't get them here every day at least when they are here you're going to be in that classroom at the beginning of class through the end of class. And so we're doing some shifts in how we handle tardies. Currently kids... the door closes and kids are supposed to come all the way down to attendance and get their tardy slip and then go back to class. Well high schoolers just go OK. nobody knows I'm coming. I'm gonna roam for at least 10 minutes and then in 20 minutes I'm going to go back to class and my teachers gonna be like where have you been. Well [REDACTED] had a long line. So I've been waiting you know nobody knows where they are for 20 minutes.

Interviewer: [00:17:16] Oh yes.

Interviewee: [00:17:17] That to me is not efficient. And teachers don't want to close their doors because they can literally grab and get you in classroom and not give you that tardy faster than they can send you down to go get the tardy and the teachers don't have the privileges to put tardies in.

Interviewer: [00:17:33] Right.

Interviewee: [00:17:34] So that is something we're working on and I think I'm having someone on every hall between every class change when the bell rings doors close those kids walk straight to me or whoever's on that hall like an L and tardy tardy tardy go back I can see you. I can see both hallways from beginning to end. So I can see you come in. The teacher sees me down there. She feels confident closing that door that I'm going to take care of you and then sending you back to class.

Interviewer: [00:18:04] Right away.

Interviewee: [00:18:05] Right away like I want it to be less than two minutes. You're back. And then there's kids who are gonna be like oh crap we can't roam around for 10 minutes. [REDACTED] doesn't do this anymore. We gotta talk to [REDACTED] or [REDACTED] or one of our other administrative people you know. And so, I think that it will help but I think that's part of getting teacher to buy in that we're really supporting their class time. And we know how important it is for them to be able to teach from bell to bell. If I'm going to ask you to teach bell to bell I wanna make sure the kids are there. So whatever we can do to get kids in class. I really think like to me that was a big issue. I think attendance will be tackled next move one move one little bar and see what happens and then we'll start talking and I probably will pull a team together to talk about attendance.

Interviewer: [00:19:00] I definitely want to hear what you come up with attendance. I need some ideas too.

Interviewee: [00:19:04] I don't know. I think they really do want to be here and I just think that it's kind of a come and go and that just means teachers need to be teaching seriously every day. I think some of it is because they don't feel like they're doing anything. When did going on a field trip become a day to just not go to school.

Interviewer: [00:19:21] That's why we stopped having stuff like that.

Interviewee: [00:19:23] It isn't just.

Interviewer: [00:19:24] We used to do a positive behavior day and they would go to the park or go bowling in [REDACTED]. They just wouldn't come.

Interviewee: [00:19:30] They just took a day off.

Interviewer: [00:19:30] Yeah. So we just, why are we going to pay out that money if you're not going to come to school.

Interviewee: [00:19:34] Yeah.

Interviewer: [00:19:35] So we just stopped. What they got to doing is like surprise positive behavior day. Like I wouldn't tell them what it was and then they would do like bingo in the cafeteria. They love bingo like loved bingo. We had community support, like community donated all these gifts. Gift cards and stuff and they would play bingo all during lunch like they would extend the lunch period. So they would have their lunch and then they would play bingo and it was they loved it. I've never seen kids so excited about bingo but it really worked really well.

Interviewee: [00:20:04] I think that sometimes we think really big and sometimes it can be pretty simple.

Interviewer: [00:20:10] Really simple concept. They love bingo.

Interviewee: [00:20:10] I think games are fun in general. Yeah I think you know I like that idea. I like a surprise PBIS day. We don't do PBIS as well at the high school level.

Interviewer: [00:20:22] Ours wasn't fully implemented I would say either that they didn't do anything last year.

Interviewee: [00:20:27] We really just started last year with PBIS. And you know I'm from [REDACTED] we've been doing this. Yes. Forever I don't know 10 years at least I think we started to do it maybe it's been about seven years. It might have been more like 2000.

Interviewer: [00:20:47] I think that when I've taught for one semester and they had the [REDACTED] bucks then that was like 10 years ago.

Interviewee: [00:20:56] It's been around. I mean there was a state initiative like a state like you got to do but nobody checked it and so nobody ... I think that comes it's funny when I worked for the state I learned that you have personalities in every district and certain districts have personalities. Ours has a very all right. We're not doing it then kind of personality when it comes to state initiatives. Right. I think you get that in different places like [REDACTED] Parish they're like let's follow the rules. [REDACTED]'s like you know they kind of straddle sometimes.

Interviewer: [00:21:28] Yeah it's like we're going to start following the rules and then we are gonna change to what works for us.

Interviewee: [00:21:31] Give us supplemental material because we like this better you know like it doesn't They don't really jump in feet first. I think [REDACTED] jumps in feet first [REDACTED] jumps in feet first. Pretty much a lot of smaller districts really do. It's funny how but here. I just I worked for the state so I can say this but like everybody would be like OK here she is they liked me but it was the message right. Right. It was the message they didn't like. I was like Look I'm just the messenger I'm giving you the message if you don't want to do it if you do but then I would always persuade them eventually. It's fun to watch those personalities schools are that way too. Yes. And then you have your teachers. It's just such a social mix. So much. It makes it hard to be sometimes you just want to go we are doing it. And that just doesn't. You can't railroad over people. You can in certain places because [REDACTED] we could just be like we're doing it. Here's what we're doing. And people would be like okay were doing it. They might argue a little but if you said we're going to do whatever they would do whatever but doesn't work that way. There's too many they were used to being told that you have to do something different this didn't work. Whatever or whatever. So they've always kind of worked in that turnover environment. Plus there's a lot of new people there every year. So you're always you know nine or 10 people in your staff are new every year. I mean that was the big that was part of my second year there we had hired nine new teachers I had nine alt-cert teachers in my building who didn't even know what an SLT was. How to write a lesson plan. They didn't know what standards were had no clue. So the training involved in that was intense. But then you come here and you know I lost one person you know and and so it's just different

Interviewer: [00:23:23] That is true. So in your opinion do you think mathematics teachers are supported differently from the way you support all classroom teachers.

Interviewee: [00:23:32] I think I support them. I think I'm a little more intense with them. Maybe a little more intentional because I know that their shifts realistically have been the biggest shifts. I like that I've seen what elementary and middle school has already done. They moved first. So I keep saying look this happened they felt this way. Here's what here's what you need to expect. And here's how you're going to feel about it. Just kind of go ahead and tell them what the next steps will be. But I would say yes

because I think that's where our biggest gaps are. That's where I had an alt-cert teacher. I mean I'm just thinking about it. I did it that way at ██████ to and math was always the issue when I worked for the state. Yes absolutely. Do I think that I'm the best fit to give them all the tools. No. So I know my limits. I know how to get them to a certain point and I know when to call in support.

Interviewer: [00:24:33] Yes.

Interviewee: [00:24:34] And then when I start having concerns I might pull in ██████ or call ██████ at the district. Have them come do a check in and say hey what are you doing. But I would say yes because I know what I'm supposed to be seeing and especially when I'm not seeing it. They get a little more. The EOCs in general get a little more and just like but the junior high is everything by everybody except for your electives everybody's an EOC everybody is lead. So. Yeah. We do prioritize I have to prioritize with my EOC classes. I don't know. I'm trying to think of any other thing that I would.

Interviewer: [00:25:18] Was there anything that you do specifically for math teachers that you wouldn't necessarily do for everyone else?

Interviewee: [00:25:30] I don't think so. I'm very I'm very big about using your resources but I do that with everybody I might dig in a little more with math to make sure they know might quiz them a little bit like where does it say on the rigor document how are you assessing this I might dig in to their assessments a little bit more. I might call for more support mid year when I think there's a concern with them. But I would probably do that if I felt the same way about English or U.S. history. So I think no nothing completely different. But I think in that last year. Yes because I have that two new teachers who you know. And we had a new EOC. so We had no idea. well they had no idea what was gonna be on it. We have a 360 now. I think I'm pretty consistent with all of them. Just figuring out the math. I think it depends on how certain your teachers are too we have some pretty solid math teachers I've loved math long before and worked only on English which is what I do to ██████. So I really just kind of prioritize my weak spots kind of red yellow green my teachers.

Interviewer: [00:26:41] So when you say strong math teacher do you mean content area like content knowledge.

Interviewee: [00:26:47] I would say strong kind of is all encompassing you got engagement tie you know that your teach.. I know that you're teaching the right stuff and I know that That you know where to get your where your resources are and how to use them properly and you make pretty solid assessments generally. That to me is strong Yeah.

Interviewer: [00:27:14] Can you describe a specific scenario or situation in which you have supported math teachers at your school to increase student achievement?

Interviewee: [00:27:21] Yes. Okay so mid-year after looking at leap 360 scores. god, that diagnostic was Just a pain. So we're not doing it this year. We're not going to do the diagnostic but I'm absolutely. And we just think we landed so much better than elementary middle school when it came to all the new shifts because they got it all together with them and then kind of said OK so here's your resources. So having leap 360 as much as it was a pain in some ways trying to schedule it and get kids tested and giving them the time. It really gave us a lot of data to look at and I knew those assessments were quality. I knew what was going to be on them. Showing teachers where all of that is and how to get ready or making sure they've covered this. By the time we give that leap 360 unfortunately our curriculum. Scope and Sequence for the district and the text we were using didn't connect. They had. How do I say this. I don't think we had everything for leap 360 until like it was there.

Interviewer: [00:28:25] Right. Yes.

Interviewee: [00:28:27] Guides like I didn't have this cool little this many minutes and this much whatever.

Interviewer: [00:28:33] And also those assessments tested certain standards so if you hadn't taught up to those standards.

Interviewee: [00:28:38] Yes. Yes. If you didn't know what was on form one. Right to be ready for form one, then we were gonna have some gaps in form one. So, I don't think my teachers, again they were brand new and I was brand new here so my supports were. Kind of threw stuff at them and hoped they would swim. They kind of like doggy paddled a bit and then they kind of sunk about mid year. And I got worried and so midyear. After we. We. Looked at all of our scores we looked at our charts. We do all of our data analysis we do lines a big problem here what about this kid. I mean we really did all that midyear I was like OK. But our weekly assessments are not Are not getting it done and not weekly. But whatever you're using as your nine weeks grades need to really be aligned and that's. You know we might have the final but we've got to work backwards from there and build to that and that still hasn't been fleshed out 100 percent obviously. So we sat down and we took all of what we could see going forward with these leap 360s and the assessment guide and we pulled questions and found questions and made questions that aligned to the standards pulled my algebra two teachers and my stat's teachers and everybody to the table and they sat down and they said OK I'm going to work on this. You work on that and they pulled questions they made question banks for my teachers to pull from. I thought that was a pretty solid. Like maybe you're like oh crap I got to together.

Interviewer: [00:30:18] Oh yeah definitely.

Interviewee: [00:30:19] I mean giving them a tool like that it's huge. Now did they use that tool. No not the way they should have and you know I got my brand new first year teacher who I think he's got tons of potential but he's already telling us that that can't be done or that that's wrong or And I'm like how long have you been here?

Interviewer: [00:30:42] Right.

Interviewee: [00:30:44] You're one alt-cert. I am learning. It's his personality it's very much "I know everything and you all just don't know these kids."

Interviewer: [00:30:53] I know who you're talking about. It's [REDACTED].

Interviewee: [00:30:56] Did you interview everybody?

Interviewer: [00:30:57] Yes, except for one person, but I know who you are talking about.

Interviewee: [00:31:01] I really, really love him. And I think he has so much potential but I don't know how to. I don't know how to get him to be a little more humble.

Interviewer: [00:31:14] He's going to have to see it in action in the classroom I think. I think he needs to ...

Interviewee: [00:31:18] I know I really.

Interviewer: [00:31:19] Sit in someone's room for a while.

Interviewee: [00:31:21] Yes. And I think that that's going to. I think that's going to happen. We got a new the intern that was working for [REDACTED] this last year is now one of our Algebra teachers. And I know she's seen quality instruction. I know she's seen it. I know she's had to prep for it she went through the true program. And management and balancing all of that. They're both going to be still struggling with that in ways. But I just really don't know how to help. I don't know. I can't change their personality. So then I just have to kind of work around it and at some point I'm probably just going to be I know that you think you know but you really don't. And I need you to do what we're telling you to do because if your scores go down because or even if they're OK you know OK does not mean good because they could've been good if you just did this. I mean when we got to like two or three questions he's like they just can't do those I'm not even gonna spend my time on it.

Interviewer: [00:32:23] I've found that the largest indicator of like student achievement is the teacher believes that they can do it.

Interviewee: [00:32:30] That they can do it. Absolutely. Yes. And I think that that will be my next call out I guess is look I hear you say all these great things about these kids and how you want to support. But the end of the day only.

Interviewer: [00:32:47] They can surprise you in what they can do. Like.

Interviewee: [00:32:48] You got to give them the opportunity that.

Interviewer: [00:32:50] They do have to be given opportunity. Have you seen have you used Edulastic.

Interviewee: [00:32:55] No but.

Interviewer: [00:32:57] I think told [REDACTED] okay [REDACTED] yeah

Interviewee: [00:33:00] [REDACTED] told me about how I'm going to write it down I'm going to write down again. I will put it on. I will do this. Me and [REDACTED] will look into and try to get some stuff going with that to try to get it. It's free isn't it.

Interviewer: [00:33:11] It's free for individual teachers is just as long as a district doesn't try to buy it. The district can purchase it but individual teachers is free. I'm telling you like you can really pinpoint like what's going on. And those assesments. I mean....

Interviewee: [00:33:26] Do you think my Spec Ed could use it.

Interviewer: [00:33:28] Yeah I think everybody can use it.

Interviewee: [00:33:30] I have a really big gap in Special Ed not because it's just special ed. I mean kids have a special ed student. My five year old is going to struggle. She's going to have some processing stuff she. She may come catch up but I think that is going to be a tough road for a while until she gets to that leveling off point but we really have to hit those supports better and having the right tool. You know I don't have math experts in special ed necessarily but they're in a classroom they'll see the instruction and then hopefully that they can do some stuff in those small groups I have changed the study skills class from these mass groups of kids have like 15 kids too. You're going to have two every period all day two and you're going to work with those two. And I think that individualized instruction with the right tool where we're meeting them where they are and they're getting on grade level instruction. That's the balance. That's what research says works. You got to support them....

Interviewer: [00:34:29] Yes. You still have to teach content like on grade level content and with support from. I only have one last question. So is there anything that you could do differently to provide further instructional support to your math teachers?

Interviewee: [00:34:48] Yeah I mean researching tools that people talk about like Edulastic helping them really develop quality assessments this year. I know people don't like to meet collaboratively sometimes but really kind of pushing that collaboration and what's working for you what's not being a facilitator of that at the beginning and hopefully I can kind of let them think setting the ground rules. Being a facilitator showing them how PLCs need to look and then saying Okay y'all can do this. You lead your PLCs and I think the TAP schools. Have done a good job with that. And one of the components of TAP was clustering and I've had some teachers and principals say all over this day talk about how just a life changing making PLCs the right way.

Interviewer: [00:35:48] Make them work.

Interviewee: [00:35:49] And that teachers lead them the right way and they are they are they are they know why they are there they know the ground rules and they do it because when you pull yourself out then it becomes them and not you. And that's when you really get.

Interviewer: [00:36:03] I think SREB I think they have a I think one of the last things we went to was on how to do like efficient effective PLCs. And they have some kind of guidelines that you can use.

Interviewee: [00:36:16] What's it called?

Interviewer: [00:36:16] It's called SREB I'll look it up and e-mail you. Sure what I have actually that'll probably be the easiest thing to do.

Interviewee: [00:36:23] Because I think That's where I dropped the ball because I have so many I'm juggling so many balls that sometimes I get I know what I want but I can't always get right to.

Interviewer: [00:36:35] They have a process procedure like the teachers sit down. They're going to be let's say they're analyzing a certain amount of a test looking at test data and so one person goes over what they saw and then everyone quiet and then they're writing down questions and then they ask and then they have time to question puts like a certain procedure and it worked pretty well in the training. So.

Interviewee: [00:36:58] Otherwise it turns into collaboration as well. Everybody yes and no one is listening and you're not really getting where you want to. Oh yes. And that can happen easily and I can lead that way sometimes I can get more chat session than I am like but I want to start with those parameters pretty early so that you know our cell phones are put away. We're really engaged we're not checking e-mails we're not sitting in our room just doing whatever while everybody else is sitting over here talking pooled at the table. This is how we run a PLC and being kind of stern on that early on and you have to. teachers don't work well together. And we also don't listen. I know you. We are the worst to be taught.

Interviewer: [00:37:46] So this year you are going to you do have a common planning period for your like Content Areas.

Interviewee: [00:37:52] Ok. So what I did this year I could get it done where I had all of my freshman sophomore all my EOCs for sure but freshmen and that ended up being mostly freshman and sophomore classes. So my biology's are together US history. Only that one was a little tricky so those didn't end up working out but that's okay the math English one has their English two algebra geometry and only have one geometry one and a half geometry person so geometry is probably going to be more with me and he will

come and check in with me and he asks for stuff and he'll look at his data. He's always a little like aloof and But he gets it done. Surprisingly he's very much that can get engagements high. But the kids are engaged. It's just not that it's not always the best but his results work out. And as we move forward I'll try to nudge him but I kind of again gotta take it slow with certain people kind of lead them and then they discover it. Like your discovery learning with the kids it might take longer but you come in like with guns ablaze and people just shut you down. Unless they're really looking for that which I've been in school where they are and it works perfect in their like. Yes we love this.

Interviewer: [00:39:24] You kind of have to feel it out. See what's needed.

Interviewee: [00:39:26] or they are always getting griped at and now they feel like they're getting like information of what to do. I mean you can do that easily too. But here I have a lot of people who know a lot but they don't always implement it. They don't always. They can talk the talk.

Interviewer: [00:39:44] That's the case in a lot of places.

Interviewee: [00:39:44] They can talk the talk really well. I think of History a lot when I say that. But anyway I will say I'm hopeful I am most excited about this year because I do feel like you get schedule right. Especially in high school if you get scheduled right you get the right kids in the right classes you get. You know what we're doing this year we're doing algebra well integrated two kids are also taking math essentials like their ... their blocked.

Interviewer: [00:40:16] Oh yeah.

Interviewee: [00:40:17] First period kids are going to come back second period first periods integrated two second period id math essentials. Now Math essentials in a very loose term. Oh yes. We're having good success with our integrated two kids doing very well on EOC. We know that we knew they were struggling that's why put them in integrated one. So how do we give them support without killing them on credits. That's what was happening. Like if I You know put a math lab in there okay they get credit for that. But there are also a lot of my jumpstart kids so they're going to need. They're going to need certain credits. Right. And then they're going to be needing to be seriously in their career stuff. I was trying to be a little more strategic a little more like what's best for kids right this minute and how do we support them and get them through something that obviously is a challenge. So we'll see how that works. I didn't want them to be back to back. I wanted it to be like a morning and then come back in the afternoon and I think it was cool about back to back. It's just like what Junior High. Are ya'll blocked?

Interviewer: [00:41:22] We are.

Interviewee: [00:41:22] What's bad about it?

Interviewer: [00:41:26] OK. Well I don't really know yet but this is going to be the first year that we're doing at the middle school and they couldn't make it where the same teacher had it. And so also the second hour well might not even be a math teacher.

Interviewee: [00:41:45] More like an intervention.

Interviewer: [00:41:46] It could be anybody. So. I kind of have to decide what we're going to do in those classes.

Interviewee: [00:41:52] They're gonna need lots of support maybe that's your Edulastic.

Interviewer: [00:41:54] Oh yeah. Gonna be doing a lot of online stuff. Yeah that way.

Interviewee: [00:41:59] And facilitating that and those teachers can get real comfortable

Interviewer: [00:42:02] The problem were Having is that. PPI Contract business with the [REDACTED] Academy won't sign it. So.

Interviewee: [00:42:14] [REDACTED] Academy really won't?

Interviewer: [00:42:14] No. The way ours is written up it's I don't know. I don't know if each district's is written up differently but the way our district is written up is that any time the superintendent can audit them, for whatever reason so a lot of people won't sign it.

Interviewee: [00:42:32] Yeah that's interesting.

Interviewer: [00:42:33] Yes. Like there's language in there that says the superintendent can audit them. Can ask for audits at any time. And So [REDACTED] was like. We're not big enough for that. We're not hiring lawyers for that kind of stuff. We don't want to deal with that. Yeah which I don't blame them.

Interviewee: [00:42:49] Yeah but you know you kinda think that word audit is so negative it could have been.

Interviewer: [00:42:54] It could have been anything but.

Interviewee: [00:42:56] other other less like offensive sounding words possibly but mean what you're actually going to do. Well describe audit. Like what does that really mean or are you just or you just want to know how are you what are you doing.

Interviewer: [00:43:08] A general checkup. Right exactly.

Interviewee: [00:43:09] And are they really going to audit on they have how do you even get access to all that.

Interviewer: [00:43:13] Exactly.

Interviewee: [00:43:13] Yeah. That's not cool. well. Yeah we're working on our block is going to be it's new you know that one particular teacher. He was very upset about it. Anyway I'm just like whatever he can do it. Believe in your kids.

Interviewer: [00:43:35] Yes exactly.

Interviewee: [00:43:36] And you know instead of saying it actually do it.

Interviewer: [00:43:40] I believe that is the number one game changer. Believing believing that they can do it.

Interviewee: [00:43:44] And I keep tell people y'all we have come so far with our FTS? with our accountability model because now we have growth like if we take those kids who came to us with a 48 I'm looking at last year from [REDACTED]. OK. There's my math. Forty eight point eight will green sticker at the bottom. OK. That was SPFs for math students that we got as freshmen last year. OK let's just say we're we're in the same boat this year somewhere in that range because that's a weak link. [REDACTED] I've talked to her. Right. She's got math weak linked over there. And so like if we grow them. That's half that's a lot.

Interviewer: [00:44:24] That's a big increase.

Interviewee: [00:44:25] We can increase. I bet those kids have the skills they just maybe weren't teaching The right stuff or they weren't supported the right way or.

Interviewer: [00:44:32] That's a lot of opportunity for growth. I think that's definitely.

Interviewee: [00:44:35] I know. So I'm just like we have.

Interviewer: [00:44:38] You got room there. So that's always a good thing.

Interviewee: [00:44:41] Yeah. And those and these integrated two kids are going to be the ones who make those big leaps. If we do it right. Yes. And so we'll see. I just I'm hopeful that you know it's all depends on that person in the classroom can they do they believe in this. I mean we talked about this I didn't just throw this on anybody, but I think that there was this impression that it was going to be morning afternoon. And it we really that's what we wanted. But I think it's going to work out better with back to back because you don't lose any ground. You walk in you pick up right where you left off because you only had four minutes bathroom break and come right back in. So they don't even have to pack up.

Interviewer: [00:45:22] Well then if you're doing something if it's the same teacher if you're doing some activity you can just keep going.

Interviewee: [00:45:27] Oh yeah you just pause four minutes they go. They come back and now you're.

Interviewer: [00:45:32] That's what ours were kind of excited about. I wish we could have done that because they wanted like those MDC lessons like they're often two class periods that would be perfect. Well might not work out that way. And I think some people's are back to back like that but some aren't.

Interviewee: [00:45:46] What curriculum are y'all using?

Interviewer: [00:45:50] Well our adopted curriculum is the McDougle but our scores are pretty bad. We talk to [REDACTED] we are trying to get them to do illustrative. I hope we can I really like it.

Interviewee: [00:46:06] We adopted springboard for the high school junior high is Eureka elementary is Eureka elementary fidelity is pretty good. I think Junior High is kind of where they're missing.

Interviewer: [00:46:22] Well [REDACTED] and I were talking about this yesterday but those that started in the middle school have not i meant started in the elementary school and hadn't made it all the way up yet.

Interviewee: [00:46:29] So so jumping in halfway point. Yes yes.

Interviewer: [00:46:32] So there are still some gaps there I think. I just hope we stick with something long enough to actually see if it's going to work.

Interviewee: [00:46:40] And I think we have to Springboard when we adopted it. We really looked at it. I think the teachers even some of my new teachers and I have one that's going to be teaching integrated one. And he was like I'm really really loving this He doesn't ever say anything like he was kind of like.

Interviewer: [00:46:56] We are supposed to adopt for the high school and middle school in the next year. [REDACTED] adopted for some reason this the middle school adopted this summer and they did go with Illustrative.

Interviewee: [00:47:06] Did they.

Interviewer: [00:47:06] They did.

Interviewee: [00:47:07] I think they let them kind of test the waters. There are so many. I mean you know they're just grasping at straws and the district gives them a little leeway like you know [REDACTED]'s doing Eureka they were the only school in the district using Eureka I think they just kind of go look let me do my thing..

Interviewer: [00:47:25] Well when you have scores like that and you can stand the room to say hey look this is what I think is going to work. Let me try this. Why not.

Interviewee: [00:47:34] Yeah I know [REDACTED] had a lot of success with Eureka with their last principal now it's [REDACTED]. And I think he's just kind of. Kind of kept the ball moving I don't know how they've been doing. I do miss that about my job state job I knew how everybody was doing.

Interviewer: [00:47:50] Yeah.

Interviewee: [00:47:52] I knew what was working here. What was working there.

Interviewer: [00:47:53] Well you knew what was coming up and everything.

Interviewee: [00:47:56] I did like being in the know. Now I'm always like why didn't you tell me.

Interviewer: [00:48:00] Right.

Interviewee: [00:48:01] And she never has time to talk to me anymore so I'm always like what is this what about this. And sometimes I just don't have time to think about it either I'm just kind of. Trying to in the building and at this level what we really need is someone we need two assistants and we need one like kind of does like. The tardies the attendance like they focus on that side and the discipline side. And then you need someone who focuses on the curriculum side and then you get the best of both worlds.

Interviewer: [00:48:33] Oh yeah definitely.

Interviewee: [00:48:34] But does it often really. And really I'm not discipline I don't do a whole lot with that that would be our dean of students. He's 80 years old by the way and he does a good job. It's just we're not all on the same page. And not because we don't want to be we are just all doing our different part of the puzzle here. But I think to be 100 percent effective. All those pieces have to go together. and know what the other pieces are doing so that there's not a lot of different messages sent to teachers and everybody we are working on that. We are all about.

Interviewer: [00:49:13] I'm Learning that to actually in the new job. It's like. I'll get an email from a teacher and then they'll like CC the principal and the principal sends back a message that's not quite what I would have sent and then I'm like yeah yeah. Yeah. Yeah We're gonna go with that. But.

Interviewee: [00:49:36] Yeah a lot of different and then it's like children with parents like they'll find the person that they know will give them the answer they want. GO see them.

Interviewer: [00:49:43] Oh you know . Yeah I remember that very much if mom said no I went and asked Dad like it was the first time he heard it. Oh yeah. Oh then he said yes go ahead. Well that's it. Yes all along. Oh yeah. Well I'd just like thank you for your time. Thank you.

Administrator Interview Two

Interviewer: [00:00:03] How would you describe your administrative career up to this point?

Interviewee: [00:00:10] And we're just talking about I guess I've enjoyed my administrative career. Sometimes it's filled with things to do so it's hectic and sometimes it's troublesome because we have some students that we don't reach and we have some parents that we don't reach and that's troublesome. But all in all. It's a chance to have a real impact on what goes on in the school and how it affects kids. So I've enjoyed it. I really have.

Interviewer: [00:00:59] Do you think you've touched more students in this position than when you were a teacher?

Interviewee: [00:01:04] Definitely. Because I get to touch teachers who get to touch the students they teach. I get to touch everybody including the teachers. So yes.

Interviewer: [00:01:16] OK. Before you were an administrator what did you do?

Interviewee: [00:01:20] I taught mathematics I started the computer science department when the Trash 80s were a long time ago. We actually wrote programs for voting and all kinds of things you know. Several of my students now work in and out at [REDACTED] and different places because we started the computer science department and I sponsor them. I was a [REDACTED] cheerleader for four months and I had the band. I mean I played in a band when I was in school.

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Interviewer: [00:00:01] Ok so based on the courses you're taught I'm assuming your mathematical content knowledge is top notch then. It's good?

Interviewee: [00:00:11] It's ok, it's ok.

Interviewer: [00:00:14] How would you describe your leadership style?

Interviewee: [00:00:18] You know when I was when I was the assistant principal my leadership style was probably authoritarian because I wanted to get things done. And I found that when I told people what I wanted done. They did it. As a principal. It's different because now I have to be more diplomatic. And I've come to realize that. People you know if they respect you and they respect what you're trying to do and you treat them

fairly. I have people come in and say I see that this needs to be done. May I have that job and that's an everyday thing. You know my leadership style has changed with the position change and I think it's a whole lot better I'm happier because I'm not fighting all the time. But in both cases I got a lot done. But the assistant principal position is a whole lot different because now, I'm the face of the school as the assistant, I had to see that things got done for the principal. Now I have somebody doing that for me. My leadership style has changed a little bit.

Interviewer: [00:01:42] The next two questions are about two particular leadership styles. The first being transformational leadership.

Interviewee: [00:01:50] I have to get that.

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Interviewer: [00:00:03] Ok. So transformational leaders strive to set academic goals and provide motivation by promoting those goals in a collaborative school environment. In what ways do you exhibit characteristics of transformational leadership?

Interviewee: [00:00:18] The goals that we set follow the district goals. We also have goals for our schools. And you know the goals if you're going to accomplish your goals in this school I don't know about other settings but in this school you have to collaborate with the teachers and the staff and the parents and the kids if they don't all buy into what you're trying to do it's not going to work here because we've got people who have. Have ideas and they have dreams and they have they know what they want to accomplish and they have certain ways they want to accomplish something if we don't all get together and on the same page then what we are trying to do if it doesn't match with what they want to do we have to share ideas and come up with a way Oh yeah that's what's going to help you and that's what's going to help the school and this is the way we're going to reach it. We collaborate all the time. We have once a month we have what we call department head meetings where the department head brings from their department concerns and problems that their teachers have seen that they deal with them and we talk about how to take care of it how to make it palatable for everybody concerned. And we work out... we have problems but we try to work them out just like I was trying to work out problems for each for each kid. We were talking about one student who might not be able to take a class on the second floor of the annex. So we're going to work out a schedule where this child gets what she needs and we can go on with school. But we do that all the time. You can't. I don't care what kind of goals you have if you don't collaborate with the people involved. And get their help. It's not going to work. So we do... we do that all the time.

Interviewer: [00:02:28] Okay. So instructional leadership is defined by administrators' actions and characteristics that support or affect the learning and development of teachers with the goal of increasing and enhancing instruction. So what ways do you exhibit characteristics of instructional leadership?

Interviewee: [00:02:44] You know that's what we have [REDACTED] for. She's actually, she was hired for instruction and testing and we both know she will come with ideas and she has great ideas she'll come with ideas to tell me. I think this is what we need to do for our teachers. We have two teachers who went to a professional development yesterday they do it on their own during the summertime. They are actually receiving instruction on how what they are going to do next year and how they going to do it; how to make it better with the mathematics if you talked to [REDACTED]. Then we hired one of our interns that we trained. Last year they went off and got when they went to these meetings last month they came back so excited because of the way that math is being taught is changing.

Interviewer: [00:03:46] Yes

Interviewee: [00:03:46] And they went off to those meetings they came back they said oh gosh we're excited. And the kids are going to be excited. You know kids are are discovering and exploring more now and I think that that that's going to be a way. But I have to be in a position where I let people do what works. You know it might seem trite, but it works. Do what works and are able to come up with this was a better strategy for teaching than I did last year and they talk about it in department meetings. Now our actual department head is [REDACTED]. Did you get to talk to him?

Interviewer: [00:04:33] Yes.

Interviewee: [00:04:34] OK he's in a world of his own. I'll tell you he's in a world of. magnificent teacher has written books and discovered mistakes in books and all of this kind of thing. But he's not the person who actually covers that department. [REDACTED] is because she is more related to the kind of things that the other teachers did. He has the very best students at the school and he can go with that. But we also have students who are not at that level and who need extra help and support and all that. So we have teachers who surround those kids too and they decide Oh this is a much better way to `approach this than you know what I've been doing and they make discoveries and they actually get a chance to use them. So with me I have to act as a facilitator for them to allow them to use what to try different things and to encourage them to try things that might not have been tried before and sometimes it works sometimes it doesn't. But we find out we're looking for the best way to teach kids in ever setting. And sometimes if you're in a classroom you've got different kids who learn differently and they have to find ways to reach those kids. And that's what we struggle with every day and we plan to be make every kid successful up to the point where he can be successful. So I'm like a facilitator for whatever they need... you know and sometimes I walk away I'll take care of that because this is not working.

Interviewer: [00:06:22] Right.

Interviewee: [00:06:23] But you have to let people you. If you hire a person to do a job you have to let them do the job. And like I said I facilitate what works in this school.

Interviewer: [00:06:37] What actions do you intentionally perform to support classroom teachers to enhance student achievement?

Interviewee: [00:06:43] I have [REDACTED], [REDACTED] and I, we go and actually we are in class we are in the classroom. A lot of times our teachers are not afraid of us coming in. There a few you know get a little nervous or whatever but most of our teachers know that when we come into a classroom we're looking for what works to help you decide you know and its not I came to get you kind of thing. It's the kind of thing where I came to find out what's going on so that we can best support what you're doing and we're in those classrooms so we have a handle on and we discuss the three of us discuss what I saw, what [REDACTED] saw, what [REDACTED] saw, and what then we bring the teacher and say. Now what is your take on what you're doing and we let them talk about this is why this is what I'm doing this is why I'm doing it and a lot sometimes we learn from them because that's what's best in that classroom. They're the ones who are with those kids but we actually go into we are there and they know we're there to support them.

Interviewer: [00:08:00] So do you think that you do anything differently to support mathematics teachers vs all classroom teachers

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Interviewer: [00:00:03] Ok. So the question was do you do anything differently to support mathematics teachers versus all classroom teachers?

Interviewee: [00:00:14] We found that yes and no. We found that last year I had a real problem because I needed two math teachers and math teachers are hard to come by. So what we what we did was partner with [REDACTED] and [REDACTED] but mostly the [REDACTED] and we got those interns in so that we could train people and get them you know get some new blood in here and they kind of support each other for mathematics. I don't really know of anything that I do differently. When when they have a problem you know we just try to take care of the problem but I'm not. I don't know of anything I do differently for math than I do for English except try to try to find the best people for the each department. and I don't know of anything.

Interviewer: [00:01:17] Would you say that you support EOC classes more than Other classes?

Interviewee: [00:01:26] No. What we do is we try you know we have professional development and all that to actually help them know what kind of testing is being done, what is being focused on with the testing and that kind of thing. But for each classroom these kids deserve to be taught and sometimes we have a problem with all of the testing that goes on because we sometimes wonder when we are going to teach because of all the EOC and all that. But you know I was really particularly satisfied with the way it went last year now. We didn't get some of the scores that we want. I think we will remain an A

school but we didn't get some of the results that we wanted. But the way it was structured for math and English we had the interims so that we could tell what progress was being made toward the end of year testing and we did those interims and we got a chance to evaluate you know get data and evaluate and say oh this is what we need to focus on in the next month or two and whatever. But the interims helped us to decide what we needed to teach. But in other classes we also try to focus on what we need to teach in those classes to whether it's EOC or not. You know at [REDACTED] We just want excellence everywhere. So whether its EOC we've got a lot of AP and a lot of other testing that go on but we just try to make every classroom the best it can be. So that's all I can say about that.

Interviewer: [00:03:19] Can you describe a specific scenario or situation in which you supported a math teacher.

Interviewee: [00:03:28] What do you mean supported a math teacher?

Interviewer: [00:03:28] That can be however you interpret it so.

Interviewee: [00:03:33] I'll be right with you.

Interviewer: [00:03:34] Supported professionally. Examples.

Interviewee: [00:03:38] Well you know with a math teacher they'll... [REDACTED] came in to say you know I want to go to this professional development and I have to find you know the funds and the whatever to get them you know. And we did that we sent about three or four of them this Summer to be just so that they know what's going on for the... for the coming year. And I make sure that they can get there they get whatever support they need. We just take care of it in the classrooms if they're having trouble with kids; we pull those kids out now they have you know they'll sometimes come back and say I'm having trouble with this child. What can you do. And we make sure that we call the parents get the parents support. I've even had parents go in. We've decided to go in a sitting classroom to say boy do you want me here. Go in and sit and say now son you want me to come and sit every day. If this is the way you gonna act I'll be here. But whatever the teacher needs. A scenario? Ask [REDACTED] we take care of her all the time. [REDACTED] last year you were asking about EOCs and SLTs; [REDACTED] is one of these people who have kids off to you name it. He has kids there. Rice and Harvard, Yale and in other countries he has a young man right now who is a 10th grader that he teaches every day. He's here in this school right now teaching this fall. And in meeting room because he's the young man is a 10th grader. But he's teaching him college math right now because he's already passed calculus and all that. So he's going to... [REDACTED] is going to have a class of one student where he's going to be teaching him college Algebra college. I think he'll pass the college Algebra during the summer because that's what they're doing now. But he'll be teaching him a college course and it will be a class for one person. That's the way and I'm with that's going to be his class and I made arrangements to talk about such a scenario. We provide for this one child to learn that like I said he is off in his own little world and

we allow that because we know what he does for students. That young man doesn't need to sit in a 10th grade math class taking something that he could teach himself.

Interviewer: [00:06:34] Right.

Interviewee: [00:06:34] So we provided that for him and for the teacher he came in last year and he said these SLTs are killing me you know I'm going to take all this time to choose two things that I'm going to accomplish when I'm accomplishing 24 things. And I've got a worry. So I said [REDACTED] set two SLTs and go on and do what you gonna do because I know whatever you do is going to be successful anyway. You know I didn't require him to sit through the professional development. We were teaching other people how to just put the SLTs in the computer because that's what they were having trouble with. He didn't need that so that math teacher went back to his classroom and started preparing for what he was going to do the next semester instead of sitting through those things. But we take them wherever they are and we do for that particular teacher. And that's not because he was mad that was because he was a teacher who needed to be doing something else rather than sitting through this stuff that we are mandated. So and that's for english math social studies we don't care. But when you I could give you some scenarios where we help teachers but thats because [REDACTED]'s got the greatest teachers. In the world.

Interviewer: [00:07:57] Yes.

Interviewee: [00:08:00] A couple of parents that is out there waiting for what.

Interviewer: [00:08:07] Last question. So is there anything you could do differently to provide any further support to math teachers.

Interviewee: [00:08:14] Probably be no matter what you're doing and you know you can always do it better or be more accessible to them or whatever. But if you think of something that you think I need to be doing let me know and we will try to get it done. But. Like I say we hired [REDACTED] which is a great find to bring in. And we're going to be concentrating on math because our algebra scores weren't what we wanted our integrated two and all that. We're going to be concentrating on that we move teachers around of what they were teaching last year was not quite what they needed where they needed to be. So we've actually talked to them. And. Collaborate. You talked about collaboration. We've collaborated on it and we decided that we are going to allow you to teach something else and we made changes this summer that we hope is going to strengthen support what we what we're doing and actually increase our scores but actually what we actually want is student learning.

Interviewer: [00:09:32] Right.

Interviewee: [00:09:33] And if we have the student learning our scores are gonna go up anyway. That's I think that's it for me.

Interviewer: [00:09:42] Thank you. And that's all I had actually.

Administrator Interview Three

Interviewee: [00:00:00] I don't have any math teachers this year.

Interviewer: [00:00:03] That you evaluate.

Interviewee: [00:00:33] Right, I do Career classes and that kind of stuff.

Interviewee: [00:00:39] Now we have like I said lots of ways that you can support people I try to help but I would do that for any teacher make sure that the kids are in the right place to begin with and if they're not or if they think that they're not and that's not try to You know find out more about it about the student and then see if they are better suited, you know to go somewhere else.

Interviewer: [00:01:10] Right?

Interviewee: [00:01:10] But I mean I would do this for any not just for math I would do that for any teacher that thinks they have kids in the wrong place. We try to do most of that work up front, checking all of their transcripts and their test scores and what have you so that we have at least some idea of where to put them.

Interviewer: [00:01:30] Right?

Interviewee: [00:01:32] And sometimes you most of the time we are right, but every now and then we make a mistake or,

Interviewer: [00:01:36] Oh, thanks. Yeah, sometimes you'll find out they've got two PEs or whatever. They've got two classes the same period or yes.

Interviewee: [00:01:46] Yeah, Well its more that they are in a class that is not suitable. Like they're in an algebra class and they should have been in an integrated math or a geometry. They shouldn't be in it at all because you know, they go and jump start or something like that. I don't know. I've got a math teacher that she has a student that has a problem. He causes problems when he's taking a test. And so he just comes in here and take some stuff. So I mean, but I would like it said that I would do that for anybody. In this case it just happens to be for a math teacher. But I would do that for anybody. on that, you know I do set up the testing, the leap 360 and of course the EOC. That's about it. I can't think of anything.

Interviewer: [00:02:51] Do teachers come to you to ask for materials or resources or anything like that?

Interviewee: [00:02:58] Sometimes they do but I don't really have those. I really don't take care of resources now, sometimes I know where they are, you know, and then I will help in that way and I usually do kind of oversee calculators and what have you so yeah, I

help them get calculators and make sure that they're working and you know batteries and what have you, so that's... that's but like textbooks. Well, then I'll use those disposable now, so I guess it's the higher math classes maybe that's still using textbooks, but the other ones don't any more.

Interviewer: [00:03:33] Do you help with like SLT or like school SPS or anything like that or data?

Interviewee: [00:03:53] Yeah, even though it says accountability. That's really [REDACTED]. When [REDACTED] came that's what she did for the state. So my job is kind of.

Interviewer: [00:04:04] Shifted.

Interviewee: [00:04:04] Its kind of shifted. Plus the fact that we're doing a lot more testing now, you know, it has not when I took the job we didn't have as many EOC now. We you know, we have more EOC than we did before and now we've added all that Leap 360. We have to schedule all of that.

Interviewer: [00:04:29] I have to do all of that. Yes.

Interviewee: [00:04:51] You know the teachers can't do that. The lady that had this job before I did she would do the teacher observation stuff for like six teachers. Well, since then we've kind of divided it up all the teachers between the three of us and I have 23. So, you know, it's just it's just has changed. so I don't do this much accountability.

Interviewer: [00:05:21] As you used to.

Interviewee: [00:05:24] As I used to and especially my predecessor that was her on the phone. That's what she did but that she was very good at so but anyway now it's [REDACTED] that kind of because that's what she did it. at the state department.

Interviewer: [00:05:38] Do you do any observations other than your like your formal informal that you have to do for Compass?

Interviewee: [00:05:48] If they ask me to but I usually don't have time, I used to do more, you know, like try to make..you know go in every room, I don't want to time anymore. You know, I do good to get the ones that I'm supposed to get them twice.. now sometimes somebody will ask, like [REDACTED] or [REDACTED] will say Hey, you know go see this one go see usually because they need another set of eyes. Yeah, when then I'll get around to it and now we're also monitoring halls every time the bell rings. So you can't get as much done.

Interviewer: [00:06:35] So I believe me I understand that. I do a lot of the same things you do and it's tough and we have we do observations every week. It's like a list that you have to do you for teachers and kids like, okay, maybe I can sometimes not so much but I say we do we do that. I know I spoke with [REDACTED] at the end of the year last year. Just

talking about doing common planning period did y'all were you able to do that in your schedule?

Interviewee: [00:07:03] Well in some subjects we did and of course when you have two teacher that teach different, you know like an English 2 and an English 4 you know, I only was able to give them the common planning with English 2 and not English 4, so but for the most part, yes, we were able to do that.

Interviewer: [00:07:30] Yeah, do you think they're using that common planning period like effectively? do you think they're making use of that?

Interviewee: [00:07:38] I am not sure if they are using it, but she is using it as far as PLCs are concerned. Because before and we really did PLCs there really wasn't a PLC and it was all day all day and then it was on a certain day it was on everybody's planning. That means it kills the whole day and she couldn't do anything else and now you know, she's got like she's been preserving the Wednesday. So one Wednesday, she do English and math and then the following and on there. So it's like fourth fifth sixth and seventh happens to be there and then the following week she'll do the biology and then history and you know during their planning period so it ... She uses it like that, if they do amongst themselves, I'm not sure. I'm not sure.

Interviewer: [00:08:38] So and I think you said this multiple times. You don't think that you specifically don't support Math teachers anyway outside of like what you would do for everybody else?

Interviewee: [00:08:52] Yea, I don't think so.

Interviewer: [00:08:53] Do you think [REDACTED] or [REDACTED], do they?

Interviewee: [00:08:56] I think [REDACTED] does because she's coming to do all of the you know, the EOC and of course algebra and geometry are EOC, but we have a pretty strong math department when it comes to the upper level classes. It's our lower classes that we have lot of problems with especially last year. So we're hoping that that's better this year. We had uncertified teachers last year's, three of them and our scores showed so, you know, but again, you know now it's so we hired a new teacher and whiles she a new teacher and another teacher. She's out on maternity leave right now as I mean it all it all adds up it all matters and I don't know we are just hoping that we can do better with the math this year than we did last year.

Administrator Four Interview

Interviewer: [00:00:05] How would you describe your administrative career up to this point?

Interviewee: [00:00:12] Long.

Interviewee: [00:00:16] I've been here over 52 years and it gets harder every year but this place is a family environment. I see kids, I've called kids parents and the parents will be kids that were here previously. They know me, I know them. I even know those kids grandparents. It is a family environment around here.

Interviewer: [00:00:55] How would you describe your teaching career?

Interviewee: [00:00:59] Well prior to this I did social studies and coach. But I got into discipline pretty soon after that.

Interviewer: [00:01:20] Please describe your leadership style.

Interviewee: [00:01:29] You know, I'm more of a authoritarian I believe that kids should have discipline. I am the dean of discipline here and I can tell you that most of my job is dealing with parents and that...that the parents are the number one problem. Most of these kids have no home support and no leadership in the community if there's no home support.

Interviewer: [00:02:10] Okay, so how would you describe your mathematical content expertise?

Interviewee: [00:02:31] You know, I'd say it's pretty poor.

Interviewer: [00:02:39] For the following questions, I am going to ask you about different leadership styles. Transformational leaders strive to set academic goals and provide motivation by promoting goals in a collaborative school environment. So in what ways, if any, do you exhibit characteristics of transformational leadership?

Interviewee: [00:02:56] I...I have goals. The goals that I have are the same at the school that's promoted, that is I support the students and I do that by hosting our annual honor roll breakfast. You've probably heard of it that it's in the paper. You see this article here on the wall.

Interviewee: [00:03:21] What I'll do is all the students that met their grades that they need to do and their scores, I'll give them a limo ride to the [REDACTED]. That's part of their motivation. We have pancakes for breakfast and I'll help serve them.

Interviewer: [00:03:46] Oh that's pretty cool. Now I'm going to ask you about instructional leadership. So instructional leadership is defined by an administrators actions and characteristics that support or affect the learning and development of teachers with a goal of increasing and enhancing instruction in what ways do you exhibit characteristics of instructional leadership?

Interviewee: [00:04:18] I think that instructional is different nowadays. It's all about the test scores and it's not about how happy anyone is and what I do here is discipline. I don't do anything with the instruction side of things. I talk to students mostly.

Interviewer: [00:04:48] Oh, okay. So what actions do you intentionally perform to support classroom teachers to enhance student achievement?

[00:04:58] Well, I support teachers by bringing food one day. I bought Newks to feed the teachers who had worked hard for the students and I'm also let me see how to say this. I do all the duty. And I like to be where the action is. I'll stand in the hallway upstairs there and I'll sweep sometimes where I can be around what's going on. I'm about supporting the teachers in terms of what I've done to support the students. And another way that I support teachers. Would be through this discipline.

Interviewer: [00:05:58] Okay, no, I understand that. That's fine.

Interviewer: [00:06:04] Would you say that you support mathematics teachers differently than any other teachers?

Interviewee: [00:06:16] No, I wouldn't say that.

Interviewer: [00:06:23] Okay, so, can you please describe a specific scenario or situation in which you have supported Math teachers at your school specifically to increase student achievement.

Interviewee: [00:06:46] Well I try to keep the students... I handle the discipline that way the students aren't a bother to the teachers. I deal with the parents. Keep that under control. But for example, let me tell you what I do to support students and it kind of keep the behavior down to support teachers. What I do is if a student can go five days without a cell phone write up, I'll let them use their cell phone during lunch one day. one day right before lunch. Right before their lunch break they can use their cell phone. And I do that for all the students. Anyone that doesn't have a write up that day or that week. They can come in early to the cafeteria and use their cell phone freely for a period of time before lunch.

Interviewer: [00:08:05] Oh, well, that's a that's a pretty cool idea. That's probably something we should kind of think about. I really like that idea. That's a pretty good cell phone incentive for kids.

Interviewee: [00:08:20] Yeah, well, I also want to add that... with no discipline there can be no learning and like these parents these days. They don't care. I want you to go to go look in that closet right over there.

Interviewee: [00:08:43] Yeah. Yeah, go look in that bottom drawer.

Interviewer: [00:08:49] Oh, wow, there's ...That's pretty neat.

Interviewee: [00:08:56] You see I have these basic toiletries that if a student comes in here and I can kind of smell them. I'll tell him to go over there and wipe it under their arm

real quick and nobody has to know. I even have kids tell me...that they'll want to put it back and I say no you can't put it back. It's yours now. You've already used it. I'm constantly buying new deodorant, new toothbrush things like that because these kids need it and they know to come in here. They come in here and get out of that drawer because they know I have these things for them and it's providing that basic supplies that they might not be getting home from the parents.

Interviewer: [00:09:46] Wow.

Interviewer: [00:09:51] I'm sure your students really appreciate that.

Interviewer: [00:09:59] So do you do anything with instruction?

Interviewee: [00:10:03] No, I handle the discipline.

Interviewer: [00:10:07] Do you do any Compass observations?

Interviewee: [00:10:10] No.

Interviewee: [00:10:13] The principal and assistant principal handle all the compass observations and [REDACTED]. She does them too.

Interviewer: [00:10:24] Okay.

Interviewer: [00:10:31] Well, that's really all I have.

Interviewer: [00:10:36] I thank you for your time. Thank you. I'm I really appreciate your interview.

Interviewee: [00:10:45] Now, you're welcome. I don't want to step out here and look at this article that I was telling you about on the wall here. Come see.

Interviewer: [00:10:52] Okay.

District Interview One

Interviewer: [00:00:04] Would you please describe your role at the district level.

Interviewee: [00:00:08] My title is director of curriculum and instruction. I oversee all curriculum Decision making processes. And have a few people that work with me on that. But I directly support. 3-8 math. And science. Primarily. Then we have other people to support or go to but I am ultimately responsible for all of those. So curriculum decisions.

Interviewer: [00:00:37] How would you describe your leadership style?

Interviewee: [00:00:41] I believe in getting. You know that old adage is a good leader gathers good people around them. So. Thankfully I've been in this role now for a while; three and a half years. And I now have a couple of people that work with me. That I was able to select and bring in and I have worked with them prior I knew their work ethic. I knew they were strong in their content areas and they're doing fabulous jobs so I really do believe in that and. A good leader finds good people and honestly turns it over to them and it doesn't mean that I'm not involved at all. Like I said I still oversee it we still talk about all the decisions. But the day to day running is like 3-8 ELA and K-2 those are handed off to other people. I don't deal with the day to day of those things.

Interviewer: [00:01:35] So my Study was at [REDACTED] so I am going to ask you some questions about the administrators of [REDACTED] and how you and what you have seen as far them supporting teachers and then I am going to ask you about how you directly support those same teachers.

Interviewee: [00:01:52] ok

Interviewer: [00:01:53] The study is basically at [REDACTED] and how it works and that's where I'm focused and so any kind of questions you can think about like ...what you do to support those teachers at [REDACTED] about math teachers specifically.

Interviewee: [00:02:04] And up until... just to give reference to what I said earlier. Up until this academic year. I have been the primary support for math all the way through high school. And now [REDACTED] is picking up math which I know you're interviewing her also so she's picking up the math she of course has been involved she's a former high school teacher too. But in trying to spread some of my load that's what we did as far as the district leadership team.

Interviewer: [00:02:33] So how would you describe the leadership styles of administrators at [REDACTED] as far you've seen?

Interviewer: [00:02:40] They're very uhmm. [REDACTED] is more of the you know... the hire someone good and you can turn it over to them. [REDACTED] is assistant principal is more of the coaching and mentoring type. She's going to actually sit down with them and look at their data from their leap 360 and talk about where were our weaknesses what can we do and do we need to make some changes. Do we need to pull some kids in for extra remediation? How can we do that? Those are the level of discussions that she has with them. Whereas [REDACTED] is more of a hands off in that area and getting into the weeds so to speak instructionally. Which is interesting because xxxxxxx is actually a very bright brilliant former high school teacher. She also knows that there are high school math teachers that don't want to listen to that...

Interviewer: [00:03:48] She knows math. What actions in your opinion do administrators at [REDACTED] specifically perform to support mathematics teachers?

Interviewee: [00:04:02] Well I know that especially this past because we have a few new ones. [REDACTED] was primarily working with them instructionally. She observed. She gave feedback. She called me and when she saw needs and I worked with them on making sure that they understood the lessons the materials. We spent. A good bit of time. Myself, [REDACTED] who's the math department chair at [REDACTED] and actually going through items with them and locating. Different items of the same standards like within the PARCC released items that they can pull from and so forth.

Interviewer: [00:04:40] Do you think the support that they provide to math teachers is any different from the support they provide to any classroom teacher?

Interviewee: [00:04:50] Last year but; Because they were brand new teachers. Before that I would say no at [REDACTED].

Interviewer: [00:05:00] Do you think Last year more support was provided to EOC teachers versus other math teachers?

Interviewee: [00:05:16] I would say so yeah.

Interviewer: [00:05:16] So what actions do you intentionally perform to support all classroom teachers to enhance student achievement?

Interviewee: [00:05:25] First of all just making sure that teachers have what they need but first and foremost you know as much as I believe in having a quality curriculum the... the most important thing in the room is that teacher. But my part in that and with the district part in that is making sure that every teacher has what they need to teach classes so that means that they have high quality curricula they've had the training in it and that they any resources. Whether they are computer training in the digital software things like that that. They have access to those things. So that's the first thing that they have what they need to teach. The second thing is providing the professional development. And then the coaching part because you know you can attend professional development sessions and then still walk away and be confused when you get back in the classroom And so the coaching part of it comes in when they really...we realize it needs more individualized you know either to a school or just one teacher And then you know I go to schools and support them in their PLCs or after school meetings or whatever we need to do.

Interviewer: [00:06:35] So what actions do you specifically perform to support mathematics teachers to enhance student achievement and how is that different from the support that you provide to all teachers?

Interviewee: [00:06:45] Mathematics Teachers versus...well math is my favorite. Like I said I do have other people responsible primarily for ELA. So. Now. Now in the prior years I did have to directly touch ELA so now you know I primarily am the support person for 3-8 and so I provide. I am trying to think what else. Is this going to be OK?

Interviewer: [00:07:16] Basically what I'm trying to get at is there anything that you would do differently for Mathematics Teachers versus like any other curriculum or any other subject area.?

Interviewee: [00:07:30] It's high quality materials. Give it and making sure they have the high quality materials that they have the training and then coaching. Is really you know those three things and you could you know I know the nuts and bolts like you do of the mathematics training and I mean you know they've got the trainings on rigor and on the math practices and they understand how that goes together but that's all part of high quality training here. So I don't know I guess the answer is no. Look...I wanted to say yes, but I don't think so.

Interviewer: [00:08:11] Can you describe a specific scenario or situation in which you supported math teachers at [REDACTED] specifically to increase student achievement like something specific?

Interviewee: [00:08:18] Sure sure. This year was more involved at [REDACTED] because we have new teachers there and we will again this year. And that was when they got their leap 360 results. They went through them with [REDACTED] and they actually asked me to come over. And we went through not only because they already had their data pulled but we began to look at it by the by the content of items and the domain of the standards of the items that they were looking at. So really getting in the nitty gritty as far as where their students are succeeding and where you know where the holes were.

Interviewer: [00:08:58] So is there anything that you could think of to provide further instructional support to mathematics teachers that you're not currently doing?

Interviewee: [00:09:08] We are having some trained as the math content leader and they will you know I'm sure bring back stuff that you and I have been trained in before but it will be from a new voice which will be helpful. I don't know if you have learned that yet. I get her. I have been telling yall that.

Interviewer: [00:09:29] You know, sometimes it Takes somebody that's not a math person or not it's very weird.

Interviewee: [00:09:32] And what's hilarious is that they will turn and look and say you said this and I will say...yeah I sure did. But they respond differently when it's someone else. And if that's the case and that's what works. I've just said fine...That I have to remember the original question.

Interviewer: [00:10:01] I think you answered it. Was there anything you can do additional?

Interviewee: [00:10:26] Of course I would like them all to be PARCC trained and the things that I have the benefit of doing... And when those opportunities come our way I recommend as many as those are willing to be recommended and fund as many as I can fund. So when those opportunities present themselves we try to get them those options.

Interviewer: [00:10:49] Do you. Know of anyone else at the district level that would support Math teachers at [REDACTED] other than [REDACTED]?

Interviewee: [00:10:59] At the high school level. No. I mean.

Interviewer: [00:11:01] That's only two that came up in interviews and I just wanted to make sure. Do you know of any documentation that there would be the like of the PD or Anything like that?

Interviewee: [00:11:24] I have a binder full of PD offered and you are welcome to look at that.

District Interview Two

Interviewer: [00:00:09] Could you please describe your role in the district?

Interviewee: [00:00:15] My title is Director of Strategic Initiatives which is one of those kind of made up things but I do testing and accountability primarily.

Interviewer: [00:00:28] How would you describe your leadership style?

Interviewee: [00:00:32] Oh gosh. I don't know. I would like to think that it's my role to empower others to do what they need to do and so that would be ideal is more from empowerment stance. I don't like micromanaging. That's not my personality.

Interviewer: [00:01:02] There's a question about your mathematical content expertise. I'm Just gonna skip that.

Interviewee: [00:01:08] I mean for the sake of in case you need it. I do have a bachelor's degree in pure mathematics. And you know 20 some odd years experience teaching.

Interviewer: [00:01:23] The case study is at [REDACTED] so a lot of the questions I'm going to ask about what like what you specifically do and then like what is your opinion of what administrators at [REDACTED] do. Do you support all classroom teachers or just math?

Interviewee: [00:01:39] Just math.

Interviewer: [00:01:40] Just math . OK. Well I'm going to skip that question then. So what actions do you specifically perform to support mathematics teachers to enhance student achievement?

Interviewee: [00:01:48] So this is kind of a loaded question because you know prior to [REDACTED] has been supporting all teachers and she just handed high school math back off to me. Technically speaking. I've had high school math for a month now or something. Prior to that I helped math really in my role has been when I've worked with teachers in

the past to make sure that they have the available resources the stuff that they need in terms of curriculum providing time space and stipends if necessary for training and for them to meet to work on Scope and Sequence documents or common assessments or whatever. So my role has been to facilitate their work more than directing their work.

Interviewer: [00:02:44] Okay. Do you do any observations?

Interviewee: [00:02:48] I have But I don't have time honestly to do observations.

Interviewer: [00:02:56] In your opinion do you think that at the district level. Do you think mathematics teachers are supported differently than all classroom teachers or other classroom teachers?

Interviewee: [00:03:09] Probably inadvertently though It's not a conscious thing but as [REDACTED] and I are both math teachers. [REDACTED] has experience as a math teacher. There is a natural bias in our minds that. Those folks know what they're doing because we knew what we were doing when we were there and so we're probably more conscious of observing and supporting teachers that. We feel like when we look at test scores first off. That's where our eyes are naturally going to go or where the deficiencies are. But, I think because we are math teachers we have more respect for math teachers and so it is really about giving them what they need and getting out of their way.

Interviewer: [00:04:04] At [REDACTED] like how would you describe the leadership styles of their administration?

Interviewee: [00:04:10] [REDACTED] an old math teacher as well. So, you know when she was there she was looking for particular things she's looking for content more than really pedagogy kind of things which is an interesting. Most people are not they're looking for student engagement. They're looking for questioning techniques they're looking for teaching strategies that kind of thing. So that's interesting. So I think her observations of math teachers are probably different from her observations of others. [REDACTED] is not a math teacher so she is looking for the strategies she's looking at having. Really no content base that she's looking for more of the pedagogy. I don't know the answer to it. OK.

Interviewer: [00:04:59] So in your opinion do you think that administrators support math teachers more than any other content area at [REDACTED]?

Interviewee: [00:05:08] No.

Interviewer: [00:05:14] Do you think EOC classes are supported differently?

Interviewee: [00:05:17] I think EOC classes we are more mindful of making sure that. The Scope and Sequence documents that the materials align to the task honestly with the classes that are not EOC tested the. Algebra 2 Advanced Math calculus. We let them roll whatever that teacher is professional is because the teachers that they have at [REDACTED] are well seasoned and they are veterans to say the least. And they know their content. Better

than I do at this point even though I have taught those classes. So definitely we pay attention more to the EOC classes. We definitely dig into the data more because there is data to dig into. So I have to say yeah THEY get more time and attention. But. I don't know if that's really the nature of the course or it is the fact that they are EOC.

Interviewer: [00:06:24] Could you describe a specific scenario or situation in which you have supported a math teacher at [REDACTED]?

Interviewee: [00:06:30] Again it's going to be about resources. It's about them calling and saying hey we need a specific thing. Could you, you know I'm thinking about years ago one of the things that one of the math teachers wanted was Moby I think it was called. So he could walk around and write on the board. So you know it's about providing resources. You know. They'll call and ask for an online testing software. You know They've traditionally wanted Kuta but you know when they asked for Kuta month ago I said no. Their response was. Okay fine we'll get [REDACTED] to buy it. Ok fine. But you know the districts not buying it so really it is about providing resources. Other than that you know when we get together it's evaluating textbook series it is creating documents to facilitate their work. So.

Interviewer: [00:07:32] Is there anything that you could do differently to provide further instructional support to math teachers that you're not currently doing?

Interviewee: [00:07:39] I think that if I had more time. What happens often the weakest students get put with the least seasoned teachers. And so that's always problematic. If I had more time. I would be doing more observations and providing more support to those less experienced teachers. And I'm thinking the ones who teach to integrated math one that integrated math two the young folks like [REDACTED] and [REDACTED] and [REDACTED] was there last year. I think they needed more support than we were able to provide and at that point [REDACTED] was doing that. But, [REDACTED] had everybody everywhere. And you know I mean that's just an impossible task. Right now. I mean I have testing and accountability. But within that there there's all of that S.L.T. setting there's all of the SACS accreditations. You know it's multitiered, so I don't really have much time either.

Interviewer: [00:08:46] Oh yeah that's tough I understand. Well actually that's all I have.