THE TRANSFORMATION FROM INTERDISCIPLINARY TEAM TO PROFESSIONAL LEARNING COMMUNITY: THE PERSPECTIVE OF THE MIDDLE SCHOOL PRINCIPAL

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Submitted to the Graduate Faculty of

School of Education in partial fulfillment

of the requirements for the degree of

Doctor of Education

University of Pittsburgh

2009

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

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It was defended on

November 17, 2009

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The purpose of this study was to examine the implementation of professional learning communities which are a reform effort currently in middle level education. The researcher used an electronic survey to gather data to examine the extent to which a transformation from the traditional interdisciplinary team to a professional learning community was occurring. The Western Region of the Pennsylvania Middle School Association provided assistance in identifying a sample and accessing participants.

The researcher developed five research questions that guided the study. Research questions were designed to assist in determining what role the principal assumed in guiding and supporting the team within the building and how the principal functioned as a member of the team. Also, the research questions were designed to aid in determining what activities teams were presently engaged in and how those activities related to professional learning and an atmosphere of collegiality.

The results of the study demonstrated that a transformation was occurring as traditional interdisciplinary teams were operating within the context of professional learning communities. Furthermore, the results indicated the principal plays a vital role in supporting and nurturing this transformation and the principal's actions correlate with the success or failure of a professional learning community. Principal support is needed in providing time for the community to meet,

assisting the community in maintaining a focus on student achievement, remaining dedicated to the professional learning community therefore working to support their needs as the community develops.

These results support the need to further examine the role of professional learning communities in middle level education. Middle schools which currently contain interdisciplinary teams provide a natural setting in which to begin a professional learning community because the staff structure and teaming mentality already exist. However, further research would aid in determining the essential steps required to make the transformation from interdisciplinary team to professional learning community. This study suggests the transformation is possible given the proper support.

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PREFACE

First and foremost, I would like to thank my wife, Johanna, for her support, encouragement, and patience as I completed this journey. The investment of time and energy into a doctoral program was significant and without her by my side completion of this program would have been impossible. I cannot begin to express my thanks and appreciation for all she provided during this journey. And to my children, I hope my accomplishments prove that anything is possible when you put your mind to it. Always remember to dream big.

I would also like to thank my parents. They instilled in me a desire to achieve and a thirst for knowledge. Today their encouragement and support is evident.

I am also grateful to my dissertation committee. Dr. Otto Graf, Dr. Michael Gunzenhauser, and Dr. Charlene Trovato were all vital components during this process. They provided substantive and timely feedback throughout the process and their guidance was priceless. And to Dr. Sean Hughes, who served as my dissertation chair and advisor. From the beginning he told me this would happen and he has been there every step of the way. His guidance has been crucial and I am thankful we have had this time to work together.

And lastly, to my colleagues and friends in New Brighton who have been there throughout. Lynn Byers served as a reader but most importantly a friend for whom I turned to for advice. Jason Hall made me think every step of the way. And Gina McNally, it was our

morning conversations that often helped me return to reality. These individuals remind me every day what education is all about.

1.0 INTRODUCTION

The public school system serves children as they develop socially, physically, and cognitively. The years between entering and exiting the public school system are filled with challenges in all three areas of growth. While cognitive growth is often deemed the most important factor for measuring school success, it is often the social and physical growth that produce the most challenges for educators to overcome (Arhar & Kromrey, 1993). The challenges resulting as children learn social norms, experience new social settings, and learn to appreciate their physically changing selves are often a barrier within the learning environment (MacIver & Epstein, 1991). Nowhere are these challenges more prevalent than the middle school years. The middle school years, generally grades six through eight, are years of incredible change for all children. Students develop in many ways and each day often brings with it a new challenge for them and those who provide their education (Erb, 1999; Flowers, et. al., 2003). Flowers (2000) identifies the middle grades as the most influential years in a child's life. Children learn who and what they are in these years. Also, the middle grades are often the years that bring about the most challenges for educators. As a consequence, Flowers believes the middle grades require more attention and more dedication from educational researchers.

School reform is usually associated with either the elementary or high school years and the middle grades are often forgotten. Alterations in reading and math strategies, career counseling, technology classes, and others are prevalent in both the primary and late secondary

grades. However, middle schools are often left to chart their own course. This course must be appropriate to aid elementary students in transitioning to the middle school and then transitioning middle school students to high school. It is a massive endeavor that is not easily accomplished.

Throughout the late eighties and early nineties, middle school reform was rampant. The importance of the middle grades was finally recognized and many key factors in improving middle grade education were highlighted and changes were sought. The changes focused on all aspects of middle grades education from school structure, to interdisciplinary teaming where teams of teachers for all subjects taught the same children. The many concepts addressed in the reform were important to gaining a better focus on how to help the middle school student and how to improve the academic experience (Flowers, 2000; Jackson & Hornbeck, 1989; MacIver & Epstein, 1991).

With changes also came challenges. Schools were redesigned to fit changing needs, administrators altered their scheduling procedures, and teacher teams were organized to improve focus on the student as a whole person and not just as a piece of the classroom. For many schools, the most challenging aspect of change came with the implementation of interdisciplinary teams. The team approach required teachers to work with their colleagues, eliminate the isolationism found in so many schools, and alter their practices to focus collectively on the student and their many needs, not solely on academics. The National Middle School Association (NMSA) identifies various elements to successful teaming. The foundation of these elements is to increase the focus on the student. While many schools have implemented the concept of teaming, it is questionable whether they are meeting the standards of the NMSA (Mertens & Flowers, 2004).

A current trend that is sweeping across education has introduced the concept of professional learning communities. Professional learning communities focus less on the managerial aspects of education, a focus of many interdisciplinary teams, and more on professional growth. The professional learning community model was developed to assist schools in creating teams that would support and encourage professional growth, professional dialogue, and a focus on student learning. The professional learning community is meant to be goal oriented and contain a broad mixture of content area teachers in order to bring various beliefs and opinions to the table as professional growth and student advancement are sought (Drago-Severson, 2008; DuFour, 2007; DuFour & Eaker, 1998). The professional learning community concept has gained wide acceptance by middle level educators because the interdisciplinary team structure provides the framework needed by the professional learning community to be properly supported. Nationwide, many middle level schools are transforming interdisciplinary teams into professional learning communities in an attempt to aid in professional development and to support student achievement in an age of increasing accountability.

1.1 PURPOSE OF THE STUDY

The purpose of this study is to examine the implementation of professional learning communities which are a reform effort currently in middle level education. Historically, middle schools have contained interdisciplinary teams and supported those teams as they provided a well-rounded educational program to the students. Interdisciplinary teams provide the necessary framework to allow a transformation from teaming to becoming a professional learning community and ideally

increasing the focus on professional development, professional dialogue, and continuous learning.

A critical review of the literature has revealed that the professional learning community concept is gaining the interest of educators, particularly those in middle level education who recognize that the interdisciplinary teaming concept is an ideal foundation from which a professional learning community may grow. This research study will look at the transformation of interdisciplinary teams into professional learning community and attempt to draw conclusions on its effectiveness and the means by which it is occurring in Western Pennsylvania.

1.2 DELIMITATIONS OF THE STUDY

This study is limited to the school districts comprising the Pennsylvania Middle School Association's Western Region and the principals who chose to take part in the research. Although similar studies have been conducted by educational researchers in other locations, this study focused on a specific population and therefore conclusions should not be generalized across other communities and their middle school structure. This study may provide evidence for further research or impart the need to expand its reach beyond the Western Region of the Pennsylvania Middle School Association.

1.3 DEFINITION OF TERMS

Interdisciplinary Team: A small group of teachers, generally accepted as three to five, who have different content area assignments within the same grade. The teachers all work with the same group of students.

Middle School: A school which houses students in the young adolescent phase of life. The school is typically made up of grades six through eight, however schools have considered themselves middle schools when operating under similar formats. Other models include schools of grades five through eight, seven through nine, seven and eight, and other similar combinations. The National Middle School Association has not adopted an accepted middle school grade structure and chooses to support all schools that consider themselves a middle level school.

National Middle School Association (NMSA): National organization whose vision is to support the young adolescents and educators who comprise the population of our nation's middle schools. The NMSA is dedicated to providing a vision and resources to all who embody the middle school spirit. The membership is composed of those who work in or have a passion for middle level education.

No Child Left Behind Act (NCLB): Federal legislation signed in 2002 by President George W. Bush. The law expanded testing requirements, increased educator accountability, and introduced a more aggressive federal role in monitoring student performance.

Pennsylvania Middle School Association (PMSA): A subset of the National Middle School Association (NMSA), the Pennsylvania Middle School Association (PMSA) operates at a local level to support the mission and vision of the NMSA. The PMSA hosts professional

development seminars and provides research and resources to members. The PMSA is further subdivided into regions, which operate with local school districts in mind.

Principal: The educator who has the highest authority within the school and functions as the instructional leader.

Professional Learning Community (PLC): An environment that exists within a school that is created and supported by the educators who participate. The community seeks to accomplish that which cannot be accomplished alone by fostering an environment of mutual cooperation, emotional support, and professional growth. Its foundation is a team, similar in size and composition to the traditional middle school interdisciplinary teams.

2.0 REVIEW OF THE LITERATURE

2.1 ORIGINS OF THE MIDDLE SCHOOL

2.1.1 The Creation of the Junior High School

The late 19th century marked a turning point for education at the elementary and secondary levels. In this time education existed as a continuum of services where elementary and secondary levels were precursors to university level study and were meant to prepare a student for university. Students who participated in secondary studies were destined for the university level, otherwise they would have ceased their education following the elementary level and entered into the workforce. It was at the close of the 19th century that Harvard University president Charles W. Eliot grew concerned about the age of the entering freshmen. His concern developed into the creation of the Committee of Ten on Secondary School Studies. This committee launched a thorough investigation into the programming of elementary and secondary education and a review on how to improve what was being offered (Howard & Stoumbis, 1970; Lounsbury, 1960).

The committee determined that secondary education should begin at least two years earlier than it began at the time and in turn a student would spend a total of six years at the elementary level and six years at the secondary level before moving on to university level studies

(Tye, 1985). Because this recommendation grew out of the prestigious Harvard University and the Committee of Ten on Secondary School Studies, schools across the country began adapting their educational programming and altering their organizational system (Lounsbury, 1960).

Then in the early 1900's the business world began to make claims concerning how education should be offered and first referenced the notion of a junior high school. The Committee on Economy of Time in Education offered the suggestion that students should spend their elementary and secondary years in either a 6-6 model or a 6-3-3 model. The 6-6 model prepared a student for university schooling with 6 years of elementary education followed by 6 years of secondary education. The 6-3-3 model also utilized 6 years of elementary education, but it differed in that it contained 3 years of junior high education before completing a student's studies with 3 years at the secondary level. The 6-3-3 model recognized the young adolescent as needing a unique educational experience which would correspond with their developmental process. Most schools that had the resources chose to adopt the 6-3-3 model and therefore created the first junior high school which served as a transition between the six years in elementary and the three years in high school. The original junior high school model was very similar to today's middle schools and it was designed to support the specific growth and developmental factors associated with a young adolescent. The curriculum was meant to be offered in more depth, as compared to elementary level schooling, and exploration was promoted to help students develop responsibility for their education and the ability to research and solve problems (Gruhn & Douglas, 1971; Tye, 1985).

During its infancy the junior high school grew and developed into a replica of the high school model. The basis for its creation was clear; however, due to limited resources, small staff, and minimal enrollments in many areas the junior high school began evolving into a mini-high

school that was meant for the more elite students who were destined for the high school and university level. Since many areas were sparsely populated, students who wanted to attend high school had to travel great distances to do so at the county level. This was not possible for many students, so rather than spend time in junior high school, students dropped out after their elementary years and began working for their families, and later entered the workforce (George, et al, 1992).

It was following World War II that junior high schools began getting the resources they so desperately needed. The population was growing, resources were being dedicated to education and the junior high school was able to be reborn as the model it was meant to be when it was created in the early 1900's. In order to deal with the post-war needs of the country, an ongoing rush of immigrants, and the continuing influences of higher education the junior high school had stimuli for growth. By 1960 almost eighty percent of students entering the university level had gone through an elementary, junior high, high school model and the universities were claiming that students were better prepared for higher education (Alexander & McEwin, 1989, Lounsbury, 1960).

Those dedicated to elementary and secondary education still recognized however, that junior high schools were being influenced by higher education and were still functioning as mini-high schools. Teachers were organized into departments, promotion and retention decisions were made based on each individual subject and not based on skills, and electives focused on specialization and not growth, exploration, and development of a young adolescent. Coupled with those factors students were also grouped based on perceived ability from their IQ test and teachers and administrators saw the junior high school as a stepping stone to being invited to work at the high school level. This promoted tremendous turn-over at the junior high school

level. The original junior high school model was again defunct and students were not receiving the developmentally appropriate education that researchers and literature recommended. It was not until the mid-1960's that the Association for Supervision and Curriculum and Development published *The Junior High School We Need,* that the conversation began about tearing down the traditional junior high school and beginning again (Grantes, et al, 1961; Howard & Stoumbis, 1970).

2.1.2 The Middle School Emergence

The ASCD report and further research conducted during the 1960's detailed the ideal junior high school as a place much different than what currently existed. The results from these reports presented the notion that a new school be developed, the country must begin, again, in developing the transitional step between elementary and high school, and adolescent development and needs must be at the forefront of the design.

During the late 1960's and early 1970's the notion of the true six through eight middle school was developed and the framework for its establishment was set in place. While this framework had been adapted to changing needs, the philosophy remained the same. The curriculum, school environment, and scheduling needed to be developmentally appropriate and aimed at enhancing middle school students experiences (Cuff, 1967; MacIver & Epstein, 1991; Mertens & Flowers, 2003).

As these beliefs about middle level education have developed and education has transformed over the past century the focus has always remained on the development and needs of adolescents. Jackson and Davis (2000) state the most vulnerable span of development occurs for a child between the ages of ten to fourteen years old and the change occurs at all levels of

social, intellectual, emotional, and physical growth. These changes coupled with the transition from elementary to middle school provides a critical juncture in a child's development. Middle schools, formerly known as junior high schools, historically were just as their name describes, miniature versions of a high school.

The middle grades are often seen as a turning point for young adolescents as they navigate the ladder toward maturity. The middle school, as a milestone in their lives, can affect the trajectory of the remaining years of their educational careers. MacIver and Epstein (1991) see the middle school as, "…one of the last real opportunities to affect educational and personal pursuits" (p. 587). The middle school years are filled with many opportunities for students. These opportunities include new endeavors and new experiences. While some opportunities are seen as rewarding and exciting, for example a student playing in his/her first band recital, others invoke fear and anxiety, such as departmentalized classes and choosing electives. An important characteristic of the middle school years is that the structure is set up to meet the needs of the student while challenging them to expect more from themselves. While it is not always easy to identify students' needs, a well designed middle school allows for ample opportunities for student and teacher interaction (Eichorn, 1980; Lounsbury, 1984).

Middle school students are characterized by a plethora of needs and desires, however, they are in a stage in their lives where their needs are often conflicting. Middle school students need security and a sense of caring from the adults in their lives; yet, they also need to feel independent and have a sense of self (Jackson & Hornbeck, 1989). They need to be recognized for their achievements, but often they also need to be a part of the crowd and left to blend in (Arhar & Kromrey, 1993). Epstein (1988) states that middle school students should be pushed to further develop their strengths and aided in improving their weaknesses. He identifies these

years, generally grades six through eight, as years in which weaknesses can become impossible to overcome if left to grow and strengths can be lost if they are not supported. These years are useful in nurturing the child while he/she thinks they are growing independently from the adults who surround him/her (MacIver & Epstein, 1991).

The challenge of advancing a child's education while meeting their multi-dimensional needs within the school setting as they develop into a young adolescent is a daunting one. As the middle grades philosophy became more widely discussed through the seventies it became clear that a change was needed. A shift must occur to move from the junior high model of a grade seven through nine building to the middle school concept that created grade six through eight buildings (Lounsbury, 1984; Lounsbury & Clark, 1990).

While a change in organizational structure was a first step it would not be sufficient in creating a middle school that met the total needs of the students. Beane (1997) challenged administrators to place students at the center of the learning process. He asserted that education must be student-centered and should place a high value on teaching students at a level appropriate for their development. Beane furthered his challenge by stating that in order for a school to be student centered, teachers must increase their abilities to reach higher levels of pedagogy and become reflective practitioners. This furthered the belief that traditional junior high schools were no longer acceptable for educating adolescents and meeting their many needs. This concept began the middle school movement that changed many educational systems across the country in the seventies.

2.1.3 The Middle School Movement

To accomplish some of the feats necessary in helping enhance the middle school years for students, the middle school movement was started by Don Eichorn and the Carnegie Council. The middle school movement, today almost four decades old, began as a way to develop the middle school as an environment in tune with the needs of middle school age children. It was developed as a means to promote "responsive practices" in the middle school years and a way to address the changes the students were facing as they matured through those often difficult years (Eichorn, 1980; Lounsbury, 1984; Mertens & Flowers, 2003). Throughout history, middle schools in the United States have been an area of constant change. The grades contained within middle schools have changed, the curriculum is constantly unfolding, and the enrichment activities are in constant development. It was often argued that no single program could be developed to successfully lead students through the middle school years, as there were so many changes it was too difficult to comprehend what the students needed.

However, Don Eichorn had a vision for the appropriate junior high school and in the early 1960's created the nation's first middle school (NMSA, 2001). Eichorn's vision led to a framework that is still in place today. His beliefs have been adopted by the National Middle School Association and have served as the groundwork for middle level reform in the never ending process of creating an appropriate middle level environment.

Eichorn's original concepts for middle schools focused on developmentally appropriate structures and learning tasks, support structures for students, and programs that met the needs of the adolescent learner. These original concepts that created the nation's first middle school were also at the forefront when middle level reform was tackled again in the 1980's and 1990's. Reform was needed again in the 1980's because the population grew and middle schools became

overcrowded. As buildings filled to capacity, some of Eichorn's original concepts were pushed aside because educators needed to deal with large classes and insufficient support programs in the schools. It was in 1989 that a semiannual report entitled *Turning Points: Preparing American Youth for the 21st Century* was published and it called for middle level reform. The recommendations, many of which coincided with Eichorn's original concepts, called for a shift from large middle schools to smaller learning communities, more sustained, individual attention for students, learning environments that foster and promote curiosity, problem solving, critical thinking, and lastly authority and responsibility given to teachers and principals so they may transform and create schools that would meet the needs of their student population.

Eichorn's beliefs and the ideas of *Turning Points* continued to transform the middle level school leading to the National Middle School Association's review of the progress made in middle level reform. In 1995, NMSA published the position paper, *This We Believe: Developmentally Responsive Middle Level Schools*. The position paper by the National Middle School Association and the Turning Points follow-up, *Turning Points 2000: Educating Adolescents in the 21st Century* served as the means for creating a standard of flexibility within the schools environment and creation of interdisciplinary teams. While these ideas were widely adopted as a result of the National Middle School Association's position paper and the report by Turning Points, these ideas could be traced back to the work by the Carnegie Council on Adolescent Development in early 1980's. At that time the council not only called for smaller middle schools but said, "…the key principle is to create groupings of students and educators small enough to stimulate the development of close, supportive relationships" (Jackson & Davis, 2000, p. 123).

The concept of teaming was born and middle schools began impacting the organization and environment of schools nationwide. During the time span between 1986 to the late 1990's, teams were discussed by middle level leaders and researchers nationwide. The National Middle School Association began investigating schools that had already been implementing the team structure and a focus was placed on identifying the key characteristics of a middle school team. Most agreed that a team was comprised of two or more teachers who all taught a common group of students, however research was based on defining the many other characteristics of a team and determining what would be effective in its implementation. Characteristics such as team size, common planning time, student-to-teacher ratio, and the composition of staff were all discussed and researched. The National Middle School Association has been at the forefront of this research and has issued many recommendations on how teams should be developed within the middle school environment.

2.2 SCHOOL CLIMATE

It is the student's perceptions of competence, value in the school, and their emotional stability that will build or hinder the climate being built. Roeser and Eccles (1998) state that in the middle grades students begin to exercise some independence over their learning and the climate that surrounds them can provide security as they enter this new dimension of learning. A school climate promoting positive achievement, rewarding students for successes, and inviting peer to peer interaction is one that many students in the middle grades will identify with and seek a stronger connection too (Cafasso & Camic, 2002).

The concept and essential elements of effective middle schools and positive middle school climates are so imperative to middle school success that they have been included in *This We Believe: Successful Schools for Young Adolescents,* a position statement by the National Middle School Association (National Middle School Association, 2003). NMSA recognizes a positive school climate as a warm and supportive environment where children feel invited to grow and respond to their own needs. NMSA goes on to further identify this environment as containing adults willing to assist and nurture students and respond to their varied levels and needs. This environment takes a great deal of work to support and grow but with careful attention paid to the surroundings it will flourish into what NMSA refers to as a "successful middle school" (NMSA, 2003). Specifically, this environment comes as a result of teacher beliefs being focused on the needs of middle level adolescents, recognizing and rewarding their achievements, and collaborating to learn more about the students and develop interdisciplinary activities that promote a sense of involvement for all within the school (Anderman, Maehr, & Midgley, 1999).

As the current day middle school has taken place and the transformation unfolded the fact remained that the middle grades are one of the turning points in the lives of American Youth (Jackson & Hornbeck, 1989). The early adolescent has many, often conflicting needs all of which need to be met in a proactive manner. While Van Hoose and Strahan (1988) recognize the focus to often be on security, support, and success, these foundations for middle level achievement and growth ultimately create the school climate. The school climate is felt by the students but also by the adults who work with those students. Students often appear as if they desire to blend into the crowd but during this stage of adolescent development they often need and want attention and recognition for the jobs they are completing. Middle school students

have needs and wants that are specific to them and unique to their abilities and achievements. They are engaging in a life changing period of their life and they are developing their self-definition which often defines their social niche in the world. Therefore, students have a direct hand in creating the school climate. As students enter and exit various developmental stages throughout the middle school years, they place various obstacles in front of their teachers. How the teachers react to these obstacles and how they share information in order to assist other teachers with the same obstacles will help promote student growth and achievement and define the school climate as well.

As a school culture develops and a middle level adolescent grows accustomed to the new environment, it is the teachers' beliefs about motivation and middle level learning that will continue to build the school climate. The growth adolescents are incurring is directly related to the school climate and the adults often attempt to create a climate that is nurturing, welcoming, and promoting of academic success. Mertens and Flowers (2003) researched the climate of various school settings and found that faculty involvement was essential in building school climate and inviting students to become integral pieces of the educational setting. All too often teachers view themselves as educators who are given the task of teaching the students facts about their subject. They focus on the learning aspect without taking into consideration the emotional and psychological factors associated with being a young adolescent. Teachers become frustrated when students fail to master their material and do not understand why students would show a lack of involvement in both their education and the social aspect of the school environment.

School climates may change often as students come and go, but the means for creating positive climates should not change. Mertens and Flowers (2004) identify classroom pedagogy as being directly related to the school climate. Teachers must take note of the students in their

class, they must identify their needs, and analyze their strengths and weaknesses. Pedagogy must constantly evolve in order to meet the academic and psychological needs of the students within the classroom, and it must further evolve as the school year progresses and those needs change.

Often, the aforementioned school climate is also in direct correlation with motivation that is both perceived and demonstrated by students and teachers. While some teachers believe that motivation declines in the middle level grades due to puberty and psychological changes, many believe that it is more closely linked to contextual changes in the students' educational environment (Eccles et al., 1993; Eccles & Midgley, 1989; Midgley & Urdan, 1992). For many students middle school is the first time they change rooms for various content based classes, have more than one or two primary teachers, and are free to make choices that directly impact their day and opportunities within the school. Therefore the school climate can have a significant impact on the student and help determine if they have a positive outlook on school and are in turn motivated to perform and achieve at higher levels. Researchers argue that the decline seen in middle school motivation is not inevitable or uncontrollable. The nature of this motivation is directly linked to the new environment and can be controlled by the teachers.

Along with pedagogy it is recommended that teams of teachers collaborate on lesson planning, interdisciplinary units, and student information. Also, recommendations indicated common planning time be utilized to provide teachers uninterrupted time to meet, discuss, and plan for upcoming events. This time dedicated to teacher teams will permit teachers to work together to improve the classroom and school settings and in turn will work to increase teacher morale and build teacher relationships, all of which are positive impacts in a school (Arhar & Kromrey, 1993). While the middle grades reform effort focused on the school climate and its

potential to alter the environment in which students were learning, it recognized that many other factors existed and may be affected by pedagogy and student interaction with the pedagogy being practiced.

Pajares (1992) believes that a teacher's interaction with students, colleagues, and the curriculum holds a vital role in how the climate is perceived by all within the middle school. Teachers and schools that have visible goals within the building and interdisciplinary teams of teachers working toward common identifiable goals have shown significantly more positive outcomes for students in both the social and academic realms. Patrick et al. (2001) further advanced the study by Pajares (1992) and demonstrated that the practices by teacher teams were directly related to the achievement of students and their perception of the goals set by the building. Patrick et al. (2001) showed that when teachers communicated with one another, shared those communications with the students, and demonstrated and fostered a positive school climate the students made fewer mistakes in their coursework, identified more closely with the school, and indicated they were giving more effort than they previously showed in lower grades. Therefore, it is imperative that teachers build a positive climate within their building and foster an arena for collegial conversation within interdisciplinary teams at the middle school level. It is the climate created first amongst the teachers that will be shared and spread to the students.

2.3 INTERDISCIPLINARY TEAMING

There are many benefits to the organization of teachers in teams. Interdisciplinary teams are a group of teachers from different subject areas who work together to teach the same group of students. These teachers regularly meet to discuss students, identify areas of need for individuals

or groups, and plan activities for the students. This method of scheduling permits teachers to also serve as mentors to the students and then more appropriately inform the following year's teachers about students and their strengths and weaknesses (Walsh & Shay, 1993).

> The aim is to minimize the number of students who feel that no teacher knows them, that the teachers do not know how they are doing in other classes, or that no students know them well enough to accept them as friends…Interdisciplinary teaming helps students build team spirit and improves attitudes and work habits because of the closer, more coherent supervision and caring that occurs on a team. (Epstein & MacIver, 1990, p. 34)

While the focus in schools is academic achievement, educators are also aware that students' social and emotional well-being is often directly related to their academic achievement levels. Middle schools, as an area where much social and emotional growth is occurring, identify ways to nurture that growth and utilize it to complement the educational focus within the building. Interdisciplinary teams offer the ability for educators to build deeper relationships with students and identify student needs at a faster pace in order to help students feel comfortable in the school environment and better prepared to learn.

In structuring interdisciplinary teams, schools have organized teams in countless ways. There is not one acceptable model nor is there a model that has shown any significant difference in affecting student achievement. Some examples of teams include small partner two-teacher teams, multi-teacher teams, and grade level teams. George and Alexander (2003) identify student needs as the key factor in determining how teacher teams are established. George and Alexander recommend school leaders analyze the needs of the students, student to teacher ratio, and the outside responsibilities teachers carry in addition to being a member of the teacher team.

In schools where scheduling conflicts arise from staffing issues, teams may be established by utilizing multiage grouping or creating a school-within-a-school.

Multiage grouping assigns students from various grades to one team. The teachers who share these students are assigned to teach the same content to varying grades, thus having knowledge of the requirements of various grades within the building and having a relationship with all students on the team. The school-within-a-school model is most often seen within larger schools and, in essence, creates autonomous schools within the larger environment, also creating a sense of community within the team (George & Lounsbury, 2000).

For years the National Middle School Association (NMSA) has studied interdisciplinary teams at the middle school level and identified key aspects associated with successful teams. The NMSA recognizes the importance and positive application interdisciplinary teams can have on students; however, they present that teams can also be developed differently. NMSA does not recognize one successful model for teaming, nor do they recognize one manner in which teams should be constructed. Teams can have any number of individuals and can function in a variety of different manners. NMSA acknowledges the research that exists on teams consisting of teachers from the major subject areas and only working with a limited number of students, however, they also identify other research that proves other teaming concepts work equally well. NMSA does provide key principles and characteristics of effective teams that are evident in teams no matter how they are constructed. The NMSA identifies the following principles in organizing an effective team, a) keep teams small in terms of teachers and students, b) provide sufficient planning time, c) allow teams to design or alter student schedules, d) assign teams to their own area of the building, and e) keep teams together for multiple years. These principles are identified as necessary to developing an effective team.

While these are the essential principles to effective teams, there are also characteristics that the team should show if they are to be considered highly effective by the NMSA. These include a) student-centered focus, b) strong commitment to academic achievement, c) collaboration and accountability, d) a feeling of team community, e) regular parent communication, f) a proactive approach, and g) teachers who work professionally (Mertens & Flowers, 2004). Again, the NMSA does not identify how these principles or characteristics should be implemented, rather NMSA supports the various research that says these principles are necessary and often found in successful and effective teams. The principles may be seen in various formats, in varying amounts, and in different utilization patterns. However each is evident in one way or another in effective teams. The evidence supporting the positive effect teams have on middle school students is growing and the number of schools utilizing interdisciplinary teams is following suit. Therefore, NMSA suggests all schools analyze their teams to determine if they are meeting these principles and characteristics.

For interdisciplinary teams to be effective there are conditions that must be met. These requirements have been studied and recognized in successful teams. Key features of successful interdisciplinary teams are:

1) Common planning time

2) Fewer students per team

3) Time to share best practices with team members

4) Team activities linked to classroom instruction

While some of these factors for successful teams are self explanatory, others require closer examination.

Common planning time is a necessary component in the implementation of interdisciplinary teams. A team cannot be expected to work together cooperatively toward common goals if they are never given time to discuss those goals and students. Common planning time is most effective when given for 30 minutes at least four times per week (Flowers, et al., 1999). Teachers can use this time to discuss students, meet with parents, or do any of a number of other duties related to enhancing student experiences.

Fewer students in a team assignment is best. Flowers (2000b) claims a lower student to teacher ratio lends itself to increased individualized attention and more awareness to student issues. Teams with common planning time and less than 120 students experienced fewer discipline problems, more appropriately diagnosed behavior and personal problems, and quicker diagnoses of academic issues (Flowers et al., 2003; Flowers et al., 1999; Hinkcley, 1992).

Other aspects of teaming, such as sharing best practices and linking activities to classroom instruction, are much more easily understood. When teachers have time to share ideas, discuss what has worked in their classrooms, and plan cross-curricular activities to aid in student learning then a better school environment is possible for everyone.

Research further indicates that the length of time a school has been engaged in teaming practices and a specific team has been kept together will serve to positively impact classroom practices (Erb & Stevenson, 1999; Flowers et al., 2003). When teams are provided high levels of common planning time, at least 30 minutes four times per week, they generally implement positive team cultures and the sharing of best practices within two years. As teams are given time to grow together and develop, generally three to five years, their frequency of engaging in positive team actions and planning cross-curricular instruction increases. This leads to more

coordinated efforts, more focus on the students, and more efficient use of team and individual teacher time (Flowers et al., 2000a).

There are also many benefits for teachers, aside from the positive aspects of teaming for students. Teachers who work on interdisciplinary teams are more likely to identify their work environment as a positive climate. Leading researchers state that teachers have an increased sense of security when working with others, they feel more responsible for what they offer their team teachers, and they feel less pressure to improve the life of each student because they are part of a team that is going to work to accomplish that task together. Likewise, team teachers tend to take on more leadership roles within the school and initiate team and school change more frequently (Arhar & Kromrey, 1993; Walsh & Shay, 1993). Research further distinguishes the effectiveness of teams and the satisfaction that teachers feel as a result of teaming by looking directly at certification. Middle level certified teachers have reported the highest level of satisfaction with teacher teams and have shown the highest levels of positive correlation between team sharing of best practices and classroom implementation of said practices, when compared to secondary certified teachers who teach at the middle level (Erb & Stevenson, 1999; Flowers et al., 2003).

Teaming has also been found to increase parental contact and increase student achievement. When working on a team, teachers are not responsible for contacting the parents of all children when there are issues. Teams share the responsibility for contacting parents. This allows for more parents to be contacted, dealing with issues more quickly, and rising student achievement as a result of focused attention on each student. Statistical analyses prove that teaming with common planning time and sharing of best practices is in direct correlation with student achievement results.

Mertens and Flowers (2003) analyzed the Michigan Middle Start program which involved grant money to schools willing to fully implement the interdisciplinary teaming model within the school where the model did not formerly exist. Their study found that the Michigan Middle Start schools showed positive impact on student achievement when teaming was implemented and those results continued beyond the grant funding, at which time the schools chose to continue on the teaming model without additional funds for technical support. The evidence supports the benefits of middle level teaming and indicates a positive correlation for students, parents, and teachers at all levels and engagement in education.

2.4 NASSP POLICY RECOMMENDATIONS FOR MIDDLE LEVEL REFORM

The National Association of Secondary School Principals (NASSP) in conjunction with the National Association of Elementary School Principals (NAESP) has spent years debating education reform and focusing on the areas of greatest need. The debate over education reform has continually focused on the elementary and high school levels and often failed to recognize middle schools as an area of need in the push for education reform. Recently, NASSP and NAESP have shifted their focus to include middle level education in the debate on school reform and are working with policymakers to ensure middle level education receives its place in policy reform acts targeting education and in bills authorizing funds for education reform.

NASSP (2006) evaluated the role that middle schools play in a child's educational career and recognizes that middle schools face a set of unique challenges not faced at the elementary and high school levels. First and foremost, middle school students are in a time of intense adolescent development. For many young adolescents, the years they spend in middle school

involve a developmental period in which they are often insecure and uncertain about themselves and the changes they are experiencing. Beyond academics, young adolescents are undergoing physical and emotional development, they are often faced with new social situations, and family structures often begin changing in which the young adolescent is given more control over his/her actions and decision making. It is during this time that young adolescents often find themselves less motivated in school and less interested in academic achievement (Heller, Calderon, & Medrich, 2002).

As middle school students develop, they are faced with another change in their lives, the structure of the school environment. Elementary schools are largely self-contained classrooms in which students have the same teacher each and every day for every subject. Their educational career is focused around their one classroom and when moving to another location they are often escorted to and from their primary classroom. Middle school represents the first time a student is moving from classroom to classroom and experiencing multiple teachers in the same day. Students are experiencing content based classes, a varying peer support system in each class, and the responsibility to know where and when to be in a specific location. As a result, academics often suffer as students are dealing with the changes associated with becoming a young adolescent as well as the changes in a new school organizational structure. Not surprising then are the results from the 2005 national report card in reading and mathematics which indicated that fewer than one-third of the nation's eighth graders can read, write, or perform mathematics at a proficient level (Perie, Grigg, & Donahue, 2005a; Perie, Grigg, & Donahue, 2005b).

To complement the demands placed on young adolescents at the academic, social, and emotional levels, it must be recognized that they also go through transitions multiple times within a few years. Adolescents at the middle level often experience a transition from fifth to

sixth grade and then again from eighth to ninth grade. The transitions are often complicated by poor vertical alignment of the curriculum, limited teacher interaction to share strategies for assisting students, and poor guidance counseling in helping students choose courses and tracks of study. This often leads students to fear the transition because internally they feel unprepared and destined for a struggle.

NASSP recognizes another challenge that middle level schools face which is that of teacher and school leader preparedness. Young adolescents at the middle level pose unique challenges for educators. However, the teacher preparation system of most universities is based on elementary and secondary teachers and the requirements for teaching at the elementary or high school level. Often we find middle schools that utilize elementary certified staff to teach at the sixth grade level and secondary certified staff, usually grades seven through twelve certified, to teach at the seventh and eighth grade level. Recently states have begun offering middle level certification for grades seven through nine; however, it fails to recognize sixth grade as being contained in most middle schools and also has not translated into a change at the teacher preparation level, rather it is simply a new certification level.

The result is that teachers, and principals, are often lacking in many of the skills and competencies necessary when facing young adolescents at the middle school level. Yet it is the middle school level that is most directly pressed by the requirements of the No Child Left Behind Act (NCLB, 2001). In 2005 the Education Development Center indicated that students in grades five through eight represented 57% of the annual test takers across the nation. Accountability is at the forefront of educational focus and 57% of our students are being taught by educators who are often under-prepared and lacking in professional development opportunities focused on the needs of the students they face each day. NASSP is fully committed to secondary school reform

and believes that the middle level must be included in order to make secondary reform a success. NASSP has stated that when middle level reform is enacted and students are leaving the middle level more prepared for the rigors of high school, only then will we begin to see high school truancy rates drop, graduation rates rise, and college enrollment rates climb. NASSP in partnership with NAESP and the National Middle Schools Association (NMSA), is dedicated to improving middle level education and ensuring that middle schools are both developmentally appropriate and academically rigorous.

In an attempt to inform policymakers of the needs contained within middle level reform NASSP has issued four recommendations (NASSP, 2006):

1. Recognize and support the middle grades as a unique developmental stage set apart from the elementary and high school grades;
2. Strengthen middle level organizational structures, instructional practices, and classroom learning environments;
3. Improve middle level transitions;
4. Identify and promote specialized middle level teacher and school leader competencies.

NASSP (2006) recommends that middle schools be supported and recognized as unique settings and not directly associated with elementary or high school grades. In order to accomplish this, NASSP wants local and state policymakers to work to ensure personalized learning is occurring. NASSP argues that resources be dedicated to the middle level, curriculum aligned and written to focus on what young adolescents need in their development, and teachers, counselors, and principals must be more involved with their students and recognize them each as an individual who is facing many developmental changes.

Increasing student learning relies on knowing each student and having a plan for each student. Education should be tailored to meet the needs of the student and there should be frequent opportunities available to assess progress and monitor data. There have been many misconceptions about how students learn, but at the middle level it is clear that students learn best in personalized situations in which they are free to develop and achieve at a pace and in a manner conducive to a young adolescent (Pelligrino, Chudowsky, & Glaser, 2001).

As young adolescents face the challenges of middle school, policymakers and educators are encouraged to dedicate more resources to adolescent literacy and literacy programs meant to improve the performance of middle level students. Literacy is a facet of education that students face in each content based class at the middle level. Literacy skills are a foundation for success for every student in every school. NASSP recommends allocating more resources toward research based programs designed to improve literacy skills in the middle grades, as well as those meant to build literacy skills at the elementary level, in order to better prepare students for the middle level.

NASSP (2006) recognizes that their first three recommendations will not happen without highly qualified school leaders and teachers interacting with the students each day. Policymakers must work to ensure leaders and teachers are appropriately trained for the demands of middle level education and they are offered professional development opportunities that pertain to middle level students and their needs. Quality leaders and teachers must be facilitators for the students, know how to listen, and be trained in techniques that focus on the learning modalities of young adolescents. NASSP suggests these changes occur in the traditional educational setting, but to be effective these changes also occur at the university level. Universities are being asked to offer classes focused on teaching at the middle level and to work

in conjunction with policymakers and middle level leaders to ensure they are producing teaching candidates who are highly qualified in the areas of middle level education.

The strategies outlined by NASSP (2006) are clear in their implications for policymakers and educators. In working with elementary and secondary schools, NASSP believes these recommendations will assist in creating a more appropriate middle level model and will allow students to develop at an appropriate pace. But NASSP cautions that no one recommendation is more valuable than another, only if fully implemented does NASSP believe these recommendations can be effective.

2.5 DEVELOPMENT OF ADULT LEARNERS

Adult learners face crossroads at which they decide whether or not to learn about a new topic. The adult learner in education is often a teacher, administrator, coach, or someone of a similar position, who has successfully found their career and most likely is performing at a satisfactory level. Therefore, any learning that takes place must come as a result of personal motivation for a topic and application to the learners' professional craft. Drago-Severson (2008) states that the individual or organization promoting adult learning must actively engage and motivate the adult learner in order for the learner to find value within the experience.

Most adults who seek out learning experiences do so to deal with an external change. By dealing with the external change, adult learners are inherently changing their internal character and developing their skills beyond the current level. An external change motivates the adult learner to seek out an opportunity to enhance personal knowledge or skill sets. Job security and career advancement are the external factors most often associated with adult learning and

external motivation, however the ability to solve pragmatic goals or deal with complex situations that arise as part of one's job are also seen to directly effect adult learning (Midgley & Urdan, 1992). Eduard Lindeman (1926), known to many as the father of adult learning, believes that learning is a way to seek meaning and matching experience and education to the demands of life. It is the meaning that stems from the learning that adds intelligence and skills to one's repertoire and fosters the growth of a more capable individual.

There is a struggle between internal and external motivational factors in adult learning. At what point do external factors cause an individual to desire learning as a means for self-improvement? Kegan (2000) states that a significant transformation must occur to cause an adult to seek out adult learning opportunities. The transformation must be genuine and the individual must see the value in the learning experience. It is not sufficient to tell the individual that the learning will be for personal benefit. Rather, the learner must be able to conceptualize its implication in his or her life and know that personal growth should result. For adults who have successfully worked in their jobs for years, it must be evident how the learning experience will improve their quality of life, enhance their skills, or create a workplace environment more conducive to their needs. The adult learner is an intricate individual who often needs guidance, motivation, and an allowance to discover learning and the meaning that is intrinsically motivated to their character (Taylor, Marienau, & Fiddler, 2000).

2.5.1 The Educator as Learner

Research has shown that values, beliefs, and previous experiences are key factors in determining how a teacher educates the students and how that teacher will approach their profession, including curriculum or pedagogy. However, Nieto (2003) believes that the professional

learning of a teacher, can also play a role in how they view their profession and the quality of their teaching. Attitudes and values are engrained, but when results are shown and goals clearly stated teachers often rise to the occasion and seek learning. The adult learning that must take place for an educator to improve should not be focused strictly on teaching students how to take tests, managing budgets, or blindly following district mandates. The adult learner should focus on learning that piques their interest, improves areas of professional weakness, and supports the desire to improve student lives (Nieto, 2005).

There are certain conditions to be met in order to meet the needs of the adult learner. Adult learning has long been associated with professional development and unfortunately with inadequate and irrelevant topics to the individual. The adult learner needs to see value in the experience and know it directly relates to personal needs within the profession. The adult learner must be free to explore and learn in the most conducive manner. They should not be held captive only to reach levels of frustration where learning cannot occur (Nieto, 2003; Nieto, 2005).

To combat the frustration faced by many adult learners, adult education researchers suggest giving choices. True learning occurs when adult learners are faced with situations in which they are able to choose what is best for them and what will most directly effect their professional repertoire. A middle school teacher gains nothing by participating in a professional development activity discussing Advanced Placement exams, however the adult learner will see gains by participating in an activity educating on adolescent brain development. The purpose of adult learning is to improve the individual, so the learning must not be directed at the masses (Freire, 1998; Parsad, Lewis, & Farris, 2001).

As educators move toward more appropriate learning situations, research dictates that certain conditions should be met in order to facilitate the learning opportunities. First, partnerships should be encouraged. Educators are engrossed in their craft and often do not know of the many resources available at their fingertips. Districts should work to compile resources for educators and inform them of local university partnerships, offer courses on campus, and also inform them of the experiences of their colleagues.

Secondly, research suggests an open climate be created to support adult learning. As the educator travels through the learning experience, he or she is encouraged to share insights and participate in the decision making process of the school or district. Teachers are professionals and are encouraged to provide expertise and have a stake in the decisions made throughout the district. Drago-Severson (2008) refers to this as "instrumental learning," where the adult learners sees a direct correlation between their knowledge and its impact on the environment in which they work. Drago-Severson believes that as these learners increase their participation, they will learn not only about themselves but also about those around them, thus creating a community of learners who will hopefully create a cohesive unit sharing and expanding on their growing knowledge base.

Lastly, educators should learn about the students they serve. It is a common belief in education that teachers and administrators understand children because they are with them every day. However, this misconception can serve to create a sense of tunnel vision. Children and society are constantly evolving and the modern day educator needs to follow suite and learn about the experiences of children today and the influences that exist in their lives. Educators need to know what happens in the lives of their students and should dedicate some of their professional development to activities about children, not just pedagogy. This will allow the

educator to experience the realities of their students and develop allies as they will more appropriately be able to communicate with students and their families (Freire, 1998; Nieto, 2005).

2.5.2 Adult Learning and the Middle School Environment

Little research has been done on adult learning specifically in the middle school, however a recent release by the National Middle School Association has identified three key factors to high quality professional learning that they feel will be a direct benefit in middle level education. In order to create an environment conducive to adult learning and high quality professional development, the content, context, and design must be focused on the needs and desires of the middle level educator and the young adolescent (Hawley & Valli, 1999). The National Middle School Association recognizes that professional development activities are often focused on the elementary and secondary levels, leaving middle level educators with little opportunity for adult learning that aims at their specific needs. So, as the demands of 21st Century education take hold, adult learning must focus on the needs of the middle level educator and the students with whom they interact.

The content of professional development should be focused on student learning, as content can make the difference between promoting adult learning and strictly providing a means to satisfy district or state mandates in terms of acquiring professional development hours. Darling-Hammond and McLaughlin (1995) indicate that the most useful tool for promoting adult learning involves making it applicable to the learner and avoiding abstract discussions and mundane activities. The middle level educator should be focused on topics such as adolescent

development, bullying, grouping and differentiation strategies, or similar topics that are of interest to the educator but also applicable to middle level education.

The second factor, context, demands that the adult learning be in line with a focus on school improvement. Doctors, lawyers, and other professionals complete required learning activities throughout their careers, always with the focus of improving their professional skills and adding to those that exist within their organization. Adult learning within the education field should do just that and aid the educator in learning about topics and skills necessary to improve their pedagogy, craft, and school. The learning environment should not be one that promotes isolation, rather it should promote collegial discussion and provide participants with multiple outlets for learning, thus allowing multiple skills and knowledge sets to be brought back to the organization (Freire, 1998; Darling-Hammond & McLaughlin, 1995).

The last essential component to adult learning at the middle school level is that of program design, which should be used to create an active and sustained learning environment. Educators should be encouraged to transform their skills and not simply add new skills on top of the old. Learners must be challenged to see the value in the experience and also challenged to seek meaning on their own. Drago-Severson (2008) refers to this environment as one that promotes socialization and self-authoring. The adult learner should socialize with their colleagues and garner the knowledge they have gained, while challenging their belief in order for all participants to be pushed to higher levels and improve their knowledge and skill sets. Self-authoring allows the adult learner to continually visit areas in which they feel they need more knowledge or development. As the young adolescent changes and societal demands alter the landscape of education, the educator can seek guidance from learning opportunities and adapt with the environment.

Content, context, and design are essential to adult learning and as Darling-Hammond and McLaughlin (1995) point out, should be directly in line with the needs of the middle level educator. All adult learning at the middle level, and other levels as well, should have a content, context, and design that is appropriate to the environment and the learner who is being encouraged to participate.

2.6 PROFESSIONAL LEARNING COMMUNITIES

In 2006 the National Association of Secondary School Principals released a comprehensive publication that greatly influenced middle level reform and discussed how middle level reform had progressed through the recent past. The NASSP publication, entitled *Breaking Ranks* (NASSP, 2006), focused on middle level reform and identified nine strategies, cornerstone strategies, which would outline a vision for school improvement at the middle school level. Among the strategies identified was to "create dynamic teacher teams that are afforded common planning time to help organize and improve the quality and quantity of interactions between teachers and students" (NASSP, 2006, p.10). NASSP recognized the value that teacher teams hold on the transformation of the middle level and they identified the impact teacher teams can have on improving the educational focus for middle level students. This publication and the strategies recognized that teacher teams are an integral component of the middle level system and are most effective when they are comprised of complementary individuals working within a learning community.

NASSP created a framework for the cornerstone strategies and further identified three areas of focus. The first focus area looked specifically at the role of teacher teams, collaborative

leadership, and professional learning communities. NASSP (2006) identified teachers and teacher teams as providing the core leadership essential in creating a network of collaboration throughout the education community. The collaborative network assists in leading toward middle level reform and it redefines the roles teachers play in reforming school environments. The middle school concept, dating back to Eichorn and the 1960's, has always included the notion of interdisciplinary teams and the definition in *Breaking the Ranks* referred to interdisciplinary teams as "small learning communities."

Like teacher teams, interdisciplinary teams are professional learning communities. They fit the definition of a small learning community as they have specific membership requirements and a purpose for their implementation. Individuals work together to achieve goals and objectives and the team receives support from the administrators who created the team. The North Central Regional Educational Laboratory adds that professional learning communities should exist to assess student understanding and learning while also focusing on improving teacher pedagogy. Small learning communities have received an abundance of support in the private sector and NASSP now sees interdisciplinary teams transforming to become a mixture of the original concept of interdisciplinary teams and the new concept of a learning community (Erb, 2006; Oxley, 2001).

School organizations are a complex network of relationships, hierarchies, and events that are constantly changing and remain in motion as individual move into and out of the network. Schools are set-up to focus on student learning and interdisciplinary teams were originally developed to allow teachers at the middle level common time to meet and discuss students and pedagogy. As education has transformed, there is an increasing need for teachers to serve within a learning community, where they can assist one another with ideas, implementation, and move

beyond simple discussions of students and behaviors. NASSP (2006) identifies the modern day interdisciplinary team as already fitting the mold necessary for implementation of the professional learning community and believes middle schools need to re-design their teams to fit this mold. Senge (1990) identifies professional learning communities as an organization designed to acquire and transfer knowledge between members. He continues on to state that professional learning communities are able to adapt and adjust as the members see fit in order to reach the measurable goals the community has set out to achieve. Hoy and Miskel (2005) believe a professional learning community sets out with a common purpose and value system and will modify said purpose and system when appropriate, more often developing more efficient means for reaching the purpose set forth by the group.

In order for the school to be a successful learning environment for the staff, it must set forth with the goal to create just that environment. Middle schools are conducive to professional learning communities as the interdisciplinary teaming concept already serves as the framework for the professional learning community. The challenge the middle school faces is to transform the traditional team into a learning community. The team must be willing to collaborate, develop and foster a positive environment in which ideas are presented and reflected upon, and be confident in discussing pedagogy. DuFour (2007) indicates professional learning communities are only possible when teachers accept the new alignment and leadership is in support of the system.

Professional learning communities at the middle school level can serve as an example for those in other buildings. As a community focused on essential questions for their students or building, they act based on data-driven decision making, common assessments to guide data mining, and a shared sense of continuous improvement from all members of the collaborative

team. The professional learning community may not look much different than the interdisciplinary team or it may contain members outside of the teaching staff. Both are organized in a similar manner and both strive for educational advancement. The difference is that the professional learning community permits educators to act as leaders and direct their organization in a manner they see fit. They are directed by data and essential questions and they serve more as life-long learners who are adapting as necessary. The professional learning community allows them the outlet to direct the time they spend as a team and have a goal in sight. They are moving away from the original concept of an interdisciplinary team and into a community that is more appropriately aligned to the accountability and needs of education today. The professional learning community is focused on increasing student success by looking at all aspects of the school climate, not simply the academic component. As DuFour (2007) states, professional learning communities will not rise or fall based simply on their ideals, they will depend on the collective capacity, commitment, and persistence of the educators involved.

2.6.1 Cultural Shifts for Successful Professional Learning Communities

Robert Eaker and Janel Keating have coached countless teams in making the transformation from interdisciplinary team to professional learning community. Eaker and Keating (2008) find that the first hurdle to overcome with all teams who are receiving their coaching is to agree that an interdisciplinary team and a professional learning community are two separate entities. Eaker believes that many teams are already calling themselves professional learning communities when in actuality they have not made any changes to their original model of interdisciplinary teaming. Eaker and Keating state that professional learning communities are more easily created when a school already has a model of successfully implementing interdisciplinary teaming; however,

that does not make for an automatic shift. There are cultural changes that must occur for the interdisciplinary team to become a professional learning community. Those culture shifts revolve around personal and team belief systems, means for working together, and the outcomes desired by all involved stakeholders. Professional learning communities evolved out of the interdisciplinary team, however in its implementation it has taken on a unique role in the field of education and is currently a driving force behind school reform in many districts. Professional learning communities can help steer a team but only if the cultural shifts are achieved (DuFour, 2007; Hord, 2008).

The first essential cultural shift that must occur is that the community must demand high expectations. Eaker and Keating (2008) refer to this shift as "seismic." Schools and teams must begin to sincerely adopt the goal, mission, and vision of ensuring success for all. The team that comprises the professional learning community must dedicate themselves to creating avenues in support of high levels of learning for all students, not just those who traditionally perform well or those who seek educational success. DuFour (2007) believes that this is the most difficult cultural shift to achieve. This shift must not be a statement on paper but must be a mind-set that is adopted and internalized by all stakeholders. The professional learning community, upon making this shift, will begin to ask different questions and work in different ways. They will be driven to ask questions about cause and effect involved in student learning and means for implementing reform in student learning. They will not simply ask why students learn but seek the answer to how students learn and what drives said learning for all students (Eaker & Keating, 2008; Henderson, 2007).

The second cultural shift is creating a model of collaboration. It is widely accepted that teachers working in isolation will not bring about significant impact on student achievement and

will not lead to measurable gains in achievement. Interdisciplinary teams are formed around a model of collaboration and actively engage teachers as a team centered around a common group of students. The interdisciplinary team utilizes teacher teams to discuss student concerns, review curriculum, and deal with many managerial school needs (Erb, 2006; Heller, et. al., 2002). Professional learning communities seek to build on the collaborative nature that is already in place with the interdisciplinary team, however the community wants to move beyond teacher talk to teacher collaboration. DuFour (2007) believes that teachers spend a significant amount of time talking but not actual making or implementing change for the betterment of the students, staff, and school. The teacher team must learn to utilize their time in a more productive manner and seek to achieve results in the time they spend together. The professional learning community has a goal to do just that.

Henderson (2007) indicates that the cultural shift made when teachers begin to collaborate and not just talk will cause even teachers to see a difference. They will be open to new areas of team building and they will be able to achieve more as they collaborate and bring all issues to the forefront for the team to deal with. The cultural shift towards collaboration may take time to achieve, as barriers to involvement may need time to dissipate, but once achieved, teachers and teacher teams will become immersed in being a professional learning community. They will have allies with whom to plan, change, implement, and work beyond the managerial realm that traps many interdisciplinary teams.

The last cultural shift that assists in launching a professional learning community is a shift to results. As previously stated, many interdisciplinary teams following the National Middle School's model for successful team implementation find their team stuck in a world of managerial tasks and decision making. Teams often become immersed in discussing specific

student issues without looking at the cause of the issue or how those same issues affect similar students. They spend immense amounts of time talking about field trips, attendance, assemblies, and other mundane events that would be better left planned by one or two people, and they spend time managing their meetings not goals (Erb & Stevenson, 1999; NMSA, 2001; NMSA, 2003). The professional learning community strives for a results based focus. While the interdisciplinary model has many benefits associated with its implementation and has been widely studied and shown effective, a shift to the professional learning community model serves to improve the team and their positive involvement on student learning and the school. The professional learning community seeks to find evidence of student learning and in turn utilize that evidence to make decisions on pedagogy as well as team and school wide reform (Eaker & Keating, 2008).

The professional learning community is focused on determining cause and effect relationships within student learning and seeking how changes in student learning can positively effect student achievement. The professional learning community focuses on results and goals when collaborating and they meet specifically to collaborate and make decisions on how to move forward. They are not driven by the period of time in which they meet, rather they are driven by the results and goals they seek to achieve. They re-visit and constantly evaluate the decisions they made and although collaboration and meetings may shift to a new focus or goal, they remain committed to those they are presently pursuing (Drago-Severson, 2008; Oxley, 2001; Senge, 1990). Eaker and Keating describe a professional learning community as, “Their focus shifts from inputs to outcomes and from intentions to results” (Eaker & Keating, 2008, p. 15).

Professional learning communities have their roots in interdisciplinary teams and it would be very difficult for a present day middle school to create professional learning

communities in a culture not presently dominated by interdisciplinary teams. Professional learning communities seek to push interdisciplinary team members to move beyond talk and reach a level of focus and goal oriented conversation. The professional learning community seeks to make members professionally accountable and utilize all members for the expertise they bring to the table. Professional learning communities may be a new trend sweeping through the field of education, but they are a trend most likely here to stay. They make teams more involved in school-wide decision making and they allow for a new dynamic to exist between teachers and administration. The community makes commitments to education within the school and then the principal and teachers become promoters and protectors of the goals being written and the vision for the school. An aura of total collaboration will exist within the school and a culture aimed at achievement will be evident.

2.6.2 Conditions Necessary to Launch a Professional Learning Community

DuFour states, "It should surprise no one that there are faculties throughout North America that refer to themselves as professional learning communities (PLCs) yet do none of the things that PLCs do" (DuFour, 2007, p. 6). DuFour goes on to state that the term professional learning community has been used to describe every imaginable combination of individuals with an interest in education. Professional learning communities are one of the most talked about and implemented techniques in education today. However, many professional learning communities are failing to succeed because they are not launching and focusing their professional learning community around the necessary components. A true professional learning community should follow principles that center on student learning, data analysis, assessing the quality of teaching,

continuous professional learning, and a culture that promotes and builds collaboration of all vested parties.

As schools set out to develop professional learning communities they must first answer critical questions such as: What do we want students to learn? How will we know if they have learned? What does our diverse student population need to achieve success? These questions, and others similar in nature, should be at the forefront of establishing a professional learning community. All potential members should be involved and an equal voice should be shared by all as the answers are discovered. Drago-Severson (2008) states that professional learning communities can be unsettling for many educators, as it is necessary to leave the isolation of the classroom and begin working in an environment of collaboration. That is why the professional learning community must center around questions essential to that community and agreed upon by all. In order to encourage open participation there must be a culture that promotes openness and an understanding that the community exists for the betterment of the students and the school and all are equal partners in its success.

In order for these requirements to reach a stage of implementation, teachers must change their perspectives about the purpose of team meetings. Historically, team meetings were dominated by conversations about ordering supplies, arranging assemblies, discussing student concerns, or managing paperwork (Hord, 2008). No longer can team meeting time be dominated by these activities if a team wishes to transform into a professional learning community. All of the aforementioned activities are essential to a well-run school, but they cannot drive meeting agendas and control time. Of course these tasks must be accomplished, but duties should be delegated and tasks completed by individuals when the entire team is not needed. This will

allow for more available time as a team transforms into a professional learning community to discuss goals, outcomes, and strategies.

While some teams need a greater push to begin this transformation, many have already begun to do so. With the introduction of state standards and assessment many teacher teams recognized the push towards proficiency and the need to discuss with their colleagues how they can assist students in reaching prescribed levels of achievement. As the dialogue in team meetings has shifted, so to has the shift from a traditional interdisciplinary team to a professional learning community. Hord (2008) states, the challenge of administrators is to maintain that shift and promote the use of time and a focus on the principals that should guide professional learning communities.

As the transition occurs to the professional learning community, the staff members must remain committed to the principles that exist based on those communities that have proven successful. One such principle is that staff members must maintain a common vision and purpose to their meetings. Their focus must remain on student success and their value system must remain in line as a community and not as individuals. Furthermore, leadership must be distributed throughout the community. As administrators and teachers come together a level playing field must be created for all to feel empowered and have the ability to enact change. For both of these principles to be achieved the community must also exist under supportive conditions. Ground rules should be created, norms agreed upon, and the school must recognize the importance and value of the team and not infringe on their time (Henderson, 2008; Warren, 2008).

The communities continued focus on student achievement is also essential as a team transitions from the traditional interdisciplinary team to a professional learning community.

Student achievement must not be an arbitrarily defined goal, rather it should be based on data analysis and data driven practices. DuFour (2008) identifies the data accessible by educators in this day and age to be limitless. Educators have the ability to identify and analyze data on all areas of student achievement. Professional learning communities must focus on taking the accessible data, analyzing it, and utilizing the analysis to guide instructional practices in the classroom (Henderson, 2008; Hord, 2008).

Lastly, professional learning communities must include open classrooms so teachers feel welcomed to visit and share. Teachers can no longer exist in isolation. Students and education today carry too many demands. No one individual teacher has all of the answers, but together they can learn more and improve pedagogy. Drago-Severson (2008) says that teachers must learn to trust one another and utilize the expertise of colleagues. Staff members must remain open and honest with one another, welcome visitors, share ideas, and provide advice. When staff members work together in an environment that promotes the aforementioned principles of a professional learning community, schools will begin to see the transformation take place. Teams will become professional learning communities in which professional learning will assist in improving student learning.

2.7 THE ROLE OF LEADERSHIP IN PROFESSIONAL LEARNING COMMUNITIES

School leadership is an ever changing discipline that is fueled by increased measures of accountability impacting school leaders. In today's educational system the administrator is expected to be an instructional leader while also being a decisive manager able to handle the

many tasks associated with operating a well run organization. The administrator must learn to rely on lead teachers and delegate to those capable of assisting in the many tasks necessary throughout the school. Researchers have stated, "…no single individual is more important to initiating and sustaining improvement in middle grades school students' performance than the school principal" (Jackson & Davis, 2000, p.157). Principals hold a unique role in schools and are called upon to lead the staff and students to higher levels of achievement.

The leadership role has transformed throughout time from that of manager to today's definition which includes manager, instructional leader, supporter, and colleague. Now there is a call for leaders to create cultures within school buildings. Leaders are expected to build cultures that support not only student learning, but adult learning as well. Leaders are asked to engage all stakeholders in creating the culture, build upon the strengths that each stakeholder brings to the school, and involve all in the process of moving the school to higher levels of achievement (Louis & Kruse, 1995; Thompson, Gregg, & Niska, 2004). When translating this to the adult learning, school leaders are expected to foster such adult learning as pursuit of advanced degrees, attendance at related workshops and conferences, as well as the implementation of professional learning communities.

The concept of a professional learning community has become a hot topic in education and is a current trend sweeping the field. But, according to Walker (2002), establishing a professional learning community brings with it a commitment to growth, a results oriented approach, and reflective practices and discussion that transcends the faculty and is inevitably bringing about drastic and measurable results in school achievement. Many leading researchers believe leadership in support of professional learning communities promotes a strategy that promises to bring about sustained school improvement in an era of increased accountability

(DuFour & Eaker, 1998; Senge, 1990; Walker, 2002). To promote the development of professional learning communities school leaders must relinquish some control of the school operations and begin functioning as team members and not top-down managers. Prestine (1993) suggests that as leaders adopt this new style it is imperative that they learn to share authority, participate without dominating, and facilitate the work of the staff.

As the school leader promotes the professional learning community, professional collaboration by all members must be an unwavering commitment by all. The leader should assist in focusing the collaboration on student learning and student achievement and should continue to facilitate discussion and not dictate the meaning of learning and achievement. Leonard and Leonard (2001) believe this is evident when teachers and administrators are seen sharing knowledge and equally sharing ideas. This must occur on a regular basis and all should feel comfortable coming to the table and sharing ideas, being open about initiatives, and taking equal stake in developing plans for the organization. Through joint collaboration teachers will become more effective educators and principals more effective leaders, as each draws on the others knowledge base and all work jointly in problem solving and improving the foundations for success.

An indirect goal of the professional learning community should also be to develop teacher leaders. Leadership in schools is a tiring job and one that required the principal to wear many hats throughout the day. Teacher leaders can often assist in the many struggles of the day and allow the principal more time to serve as the instructional leader, rather than building manager. Teacher leaders are committed to the organization as they work in it and utilize it to improve their skills as leaders. As a teacher leader grows more comfortable in that position, they

can be an agent of change, pushing colleagues to improve, and taking initiative as the school moves forward (Louis & Kruse, 1995; Senge, et al, 2000).

Senge (2000) refers to the principal as lead teacher and lead learner in the realm of the professional learning community. As principals move beyond the traditional role of school leader and promote an environment of teacher leaders, they begin to develop professionally and grow as well. These principals are promoting an environment where all feel comfortable learning together and all are working together toward personal and professional improvement. Stakeholders are comfortable challenging one another and seeking answers to challenging questions.

As the era of accountability continues, changing leadership models become ever more important in moving towards systemic change within schools. As the lead teacher and lead learner, principals are demonstrating the learning experiences they wish to see from teachers and students. They are moving into a constructivist dominated leadership style where coherence and growth are essential components of the school based community (Lambert, et al, 2002).

It is not reasonable to believe that one person can create a professional learning community. Professional learning communities are unique entities that must be nurtured and allowed time to develop. However, principals can be the driving force in their initiation and can support the teacher leaders who will help carry the idea to fruition. Professional learning communities allow colleagues to develop as a unit and create a system of thinking and acting that is consistently aimed at student learning. Principals must harness this capability and support the staff in its implementation. Individuals and teams need assistance in changing to meet the new demands of the professional learning community, but through dialogue, team building, and a

supportive, collaborative environment they will have the tools necessary to transform into a professional learning community.

2.7.1 Principal as Lead Learner

Research consistently refers to the principal as the instructional leader, which often conveys a sense of the principal buried within the curriculum and instruction of the school. DuFour and Marzano (2009), leading researchers in principal leadership and professional learning communities, are calling for a new description which they refer to as learning leader. Principals who make the conversion from instructional leader to learning leader will begin asking questions about what was learned and what evidence there is that learning occurred. The principal who is a learning leader will begin asking how we can facilitate greater learning and how we can reach beyond our current skills to help the students having the most difficulty. This shift greatly impacts the role of the principal within the building. No longer should the principal spend countless hours observing and evaluating, now the principal should spend those hours learning about the students and staff and facilitating groups in which adult learning is the goal.

As the principal's role changes, so does the means in which classroom observations are completed. The principal should dedicate time to observing the classroom environment. However, the observations should directly reflect in the meeting of collaborative teams, arranged around common threads of interest and aimed at learning more about themselves, their pedagogy, or the young adolescent. The principal must begin as the facilitator of this community but the goal must be to develop teacher leaders who can take the reigns and guide the learning community in the direction most appropriate to their learning and advancement. When a community struggles the principal should step in to provide resources or strategies and re-direct

the team onto a track that is more appropriate. All teams should not be expected to remain on the same course as adult learning will be most effective when the learners are free to engage in development applicable to their personal strengths and weaknesses (DuFour & Marzano, 2009; Fullan, 2007).

The role of the principal has changed and is transforming from supervisor to capacity builder. This shift will place new demands upon the school leader, as the leader will need to know and understand the staff and students, be able to identify strengths and weaknesses, and be conscious in supporting appropriate learning communities and developing the teacher leaders necessary to facilitate those communities. Evaluation provides only a limited means for improving teacher effectiveness and school achievement. Collaborative teams focused on personal needs and guiding professional learning will open vast doors to knowledge and resources which can be used to aid the school in providing a holistic education aimed at the academic, social, and emotional growth of all students (Fullan, 2007; Reeves, 2002).

3.0 RESEARCH METHODOLOGY

The purpose of this study was to utilize survey methods to examine the principal's perception of the role of the interdisciplinary team and determine if there is a transformation to professional learning communities within the middle school setting. The collection of data allowed the investigator to discover what, if any, transformation was in place to facilitate the transition from interdisciplinary team to professional learning community. This chapter describes the problem statement, theoretical perspective, context, participants, procedures for the study, and the limitations of the study.

3.1 STATEMENT OF THE PROBLEM

The purpose of this study is to examine the perceptions of middle level principals regarding the implementation of professional learning communities within the middle school concept. Specifically, the research focused on the transformation that could occur to alter an existing interdisciplinary team into a professional learning community.

As accountability has increased and teacher pedagogy has changed, many interdisciplinary teams are indirectly performing as professional learning communities as they advance beyond the initial framework of an interdisciplinary team. Although the transformation may not be a conscious one, the researcher wanted to focus on the actions of current middle school teams and determine if this transformation is occurring, regardless of conscious choice to alter the format within which the team existed.

3.2 RESEARCH QUESTIONS

The following table, Research Framework, contains those questions considered by the researcher as this project was envisioned. Once the problem was framed, these research questions were developed and remained the focus of the researcher. The research questions provided the guidance necessary to create depth within the project and draw from the knowledge and experiences of current middle level principals. They were embedded within the survey and provided the foundation from which recommendations and conclusions were drawn.

Table 1. Research Framework

Questions	Methodology	Source	Survey Questions
1. What role does the interdisciplinary team assume within the building?	Survey and Open-Ended Responses	Pennsylvania Middle School Association Western Region Principals	7, 10, 12
2. Are middle level principals transforming interdisciplinary teams into professional learning communities?	Survey and Open-Ended Responses	Pennsylvania Middle School Association Western Region Principals	8, 10, 13, 14, 15
3. What is the relationship between the principal and faculty during the decision making process?	Survey and Open-Ended Responses	Pennsylvania Middle School Association Western Region Principals	9, 11
4. What is the culture of the school building with respect to professional learning, collegial sharing, and reflective dialogue?	Survey and Open-Ended Responses	Pennsylvania Middle School Association Western Region Principals	7, 8, 10, 13
5. How does a principal support interdisciplinary teams focusing on professional learning as opposed to managerial tasks?	Survey and Open-Ended Responses	Pennsylvania Middle School Association Western Region Principals	8, 9, 12, 15

3.3 THEORETICAL PERSPECTIVE

This research study will employ a post-positivist perspective. As I conduct my research I am interested in determining how the participants, those acting as middle level instructional leaders, are coordinating their interdisciplinary teams' actions and how those actions fit within the model of a professional learning community. I am not looking to prove that any of these teams have transformed into professional learning communities, rather I am interested in where teams exist on the continuum of transformation between interdisciplinary team and professional learning community. There are many steps which must be taken to transform an interdisciplinary team into a professional learning community. My research lies in determining where on that continuum middle schools, in the Western Region of the Pennsylvania Middle School Association, exist. In order to make that determination, I will solicit data from the principals to qualitatively analyze how teams are spending their time and what development is occurring.

Paul (2005) describes a post-positivist as, "the inquirer attempts to understand meaning within a given context, seeking a broad range of inputs" (p. 46). This project aligns with Paul's theory of post-positivism as I seek to understand the current state of interdisciplinary teaming and professional learning communities within the context of the individual schools based on principal input. The research will not begin with a defined hypothesis for what outcomes are expected, rather the meaning is expected to unfold as the research is conducted and analyzed. As Paul states, meaning should emerge within the "given context."

A challenging aspect of researching through the post-positivist lens will be to seek the information necessary from the principals in order to uncover their success and actions as the instructional leaders driving their teams' actions (Mertens, 2004). This will be challenging as some individuals may not recognize the deeper meaning of their function or may be humble and

unwilling to publicly admit their dedicated planning. "Researchers must make extraordinary efforts to reveal, or uncover, beliefs and values that guide and generate individual and group constructions" (Paul, 2005, p. 46). Beliefs and values are not aspects that individuals frequently speak of, nor are they often recognized by individuals that hold similar values that are evident in their functioning as a leader and a colleague. It will be a challenge to uncover those beliefs and values.

In Paul (2005) it is stated that, inquiry may be biased and at times culturally influenced. This theory on inquiry and its bias furthers my post-positivist perspective and causes me to further identify my epistemology with that of post-positivism. Knowledge is a product of who we are and what we have learned throughout our lives. There is not a correct knowledge base rather knowledge is constructed as we experience and witness. When analyzing individuals, the knowledge and beliefs of the team may or may not align with the knowledge and beliefs of the individuals when they act alone. Therefore, it is important to utilize a post-positivist epistemology and look at this study through a lens where knowledge is a product of the environment and is influenced by all involved. As a researcher my position is to make statements based on what exists, not based on what may exist (Mertens, 2004).

3.4 RESEARCH DESIGN

This research was completed by utilizing survey methods and data analysis through surveys involving closed-ended and open-ended questions. To construct research questions and answers I returned to the literature and similar studies conducted by leading researchers in the fields of interdisciplinary teaming and professional learning communities. I reviewed pertinent literature

to construct similarities, differences, and key concepts that could be incorporated into the questions and answers for this particular research design. As Fowler (2002) states, surveys have become a special part of research and are an important means by which researchers can collect valuable data.

Patton (2002) suggests that the researcher should immerse himself in the context of change in order to fully understand the change that is occurring. When surveying respondents for a study it is important to gain an understanding of their answers and move beyond the words which are placed on the survey. The researcher has a responsibility to ask questions that solicit responses pertinent to the study and provide data from which conclusions can be drawn (Yin, 2003). Bachor (2000) goes on to explain that a researcher utilizing survey research has a fundamental requirement to design a survey allowing the respondent to provide information from which clear conclusions can be drawn. Likewise, the survey should seek information that is available to the respondent and may be provided in an understandable manner for the researcher.

While Bachor (2000) speaks to some of the requirements of surveys, Bachor's research most often contains case studies. To further the development of my research I reviewed Salent and Dillman (1994) who explain that a survey should be designed to collect data from a few but describe the characteristics of many. Salent and Dillman believe surveys are an excellent tool for estimating characteristics, behaviors, and opinions. Therefore, survey methodology is an excellent source of inquiry for this research study as I seek to determine the characteristics of team function and the role of the leadership in the potential transformation from interdisciplinary team to professional learning community.

To aid in the development of the survey, Mertens (2004) was reviewed for the work cited on surveys and their implications in research. Mertens recognizes three factors that are critical when conducting survey based studies:

1. Identify those who have access to the information.
2. Identify the characteristics of the people who have the necessary experience.
3. Identify the type of information that may help determine the best source of information.

The criteria were all considered in the development of the research survey; however the first and second criteria were especially vital to the research design. I had to be certain that those participating had access to the information and the necessary experience, in this case being the principal of a middle level school. For example a school which housed students in grades six, seven, or eight, but did not consider itself nor function as a middle school would not have the necessary information for this research, nor would a team leader who would not necessarily know the plan of the principal in how the team was evolving over time.

Fowler (2002) states that beyond information and an individual's access to information, the questions are an equally vital component to successful survey research. Good survey research seeks to minimize error and researcher bias while focusing the survey on the topic being examined, asking questions that are consistently understood, and measuring knowledge not simply information. Fowler goes on to state that a well designed survey administered to a small sample population will provide more useable data to the researcher than a flawed survey administered to a entire population. This focus allows information to be presented in context and more complex issues can be uncovered and situations can be more fully investigated before the

researcher reaches a conclusion (Green, 2001; Strauss & Corbin, 1990). The researcher approached these potential shortcomings in survey design by utilizing an administrative sample population to review the survey instrument during development, prescribing to the advice of a university committee of professors who specialize in research design, and analyzing existing surveys within the field which were similar in context and content.

Other leading researchers also state that surveys must identify the information and those who have the information when conducting surveys. However, the researchers also recognize a key source of error as question design and researcher bias (Fowler & Mangione, 1990). Sudman and Bradburn (1974) believe the most common source of error in survey research is question design and the imparting of researcher bias in survey question design. They recommend that researchers ask focused questions which are closely tied to the literature and research questions. Sudman and Bradburn go on to explain that while bias is often inevitable, research design should ensure the respondents are familiar with the topic. This will allow the research to be understood by those responding and the researcher can ask more specific questions without the need to provide explanations or descriptions, both of which can often express bias. In considering these criteria and their implication for the research, it caused me to solicit the assistance of the Pennsylvania Middle School Association in identifying middle level schools who could be invited to participate.

3.5 CONTEXT

3.5.1 Setting

The Commonwealth of Pennsylvania currently has 501 public school districts, and the Commonwealth recognizes approximately 577 public and private middle schools (SchoolTree, 2009). Of those 577 middle schools, students are organized around various grade structures. The traditional middle school is organized in a sixth through eighth grade structure, however recently some districts have altered the standard 6-3-3 educational system to include buildings that house students in grades five and six; six and seven; or seven through nine. For the purpose of this study, the researcher included all schools belonging to the Western Region of the Pennsylvania Middle School Association.

The Pennsylvania Middle School Association, in its pursuit to foster the growth and development of middle level education, has organized its members into five distinct regions across the state. Those regions support middle level schools and educators through professional development, resources, building level programming, and advocacy. For the purpose of this study the focus lies within the Western Region of Pennsylvania and the Western Region Pennsylvania Middle School Association.

Western Region	Allegheny County	Indiana County
	Armstrong County	Lawrence County
	Beaver County	Mercer County
	Butler County	Washington County
	Fayette County	Westmoreland County
	Greene County	

Figure 1. Counties Comprising Western Region Pennsylvania Middle School Association

3.5.2 Participants

The Pennsylvania Middle School Association recognizes middle schools across the Commonwealth. For the completion of this study, the researcher focused on those within the Western Region, as identified by the Pennsylvania Middle School Association. Although some districts within the Western Region contained more than one Pennsylvania Middle School Association member building, the researcher chose to include all members, regardless of district affiliation or grade organizational structure. The researcher felt a district or building level decision to be considered a middle school and operate under the middle school concept should be valued and therefore left that determination to the historical operation of each building and their classification already in existence.

From within the Western Region the sample population was created to include all principals from those schools identified as middle schools. The term principal is meant to include only the lead administrator for each building and does not include those individuals

acting within that capacity but defined under other terms, such as assistant principal, dean of discipline, and so forth. The principal is responsible for the operation and organization of the building and therefore chosen to be the individual surveyed for the purpose of this study. The researcher identified the principal for each member middle school through the assistance of the President of the Western Region Pennsylvania Middle School Association.

3.6 PROCEDURES

3.6.1 Survey Instrument

Data was gathered utilizing Survey Monkey, an internet based tool for completing surveys on-line. Due to the setting of the schools, the timing of the study, and the availability of participants the researcher felt a direct method, such as the on-line instrument, would be most beneficial in gaining participant response. To connect the questions contained within the survey to the research, an instrumentation matrix was developed as seen in Table 1. In order to avoid survey bias and increase reliability, the researcher utilized an administrative sample population to review the survey prior to release, incorporated advice from a committee of university professionals, and analyzed surveys from leading researchers that were similar in content and context.

To complement the survey a letter of introduction was electronically mailed to all participants and was supported by electronic mail from the President of the Western Region Pennsylvania Middle School Association. This is an attempt to solicit the highest possible participation rate and demonstrate support from the association for this research. The principals

will be asked to complete the survey within two weeks of receipt and a reminder message will be sent to participants to remind them of the deadline. Anonymity will be preserved as best as possible. Given the support of the Western Region Pennsylvania Middle School Association, clear connections can be made to those principals invited to participate. However, responses are kept confidential and Survey Monkey does not connect responders to responses, so answers cannot be traced back to specific individuals.

3.6.2 Data Processing and Analysis

The survey instrument is comprised of sixteen questions with an estimated completion time of twenty to twenty-five minutes. The Survey Monkey instrument contains nine closed-ended question and seven open-ended questions. The closed-ended questions focus on demographics, team structure, team focus, and are framed around the five areas considered essential to professional learning communities; deprivatization of teaching practices, opportunities for reflective dialogue, collective focus on student learning, collaborative workplace, and shared norms of operation and core values. The closed-ended questions focused on frequency of occurrence in order to gain a perspective of what opportunities were consuming the time of the team members in various middle level buildings.

The open-ended questions allow for a more detailed analysis of the leadership and any potential transformation that has or will occur from interdisciplinary team to professional learning community. The open-ended questions also allow for context to be explained by the principal and a greater level of understanding to be reached by the researcher. The open and closed-ended questions were designed to complement one another and assist in focusing on the perceptions of middle level principals regarding the implementation of professional learning

communities within the middle school concept, specifically investigating the transformation that could occur to alter an existing interdisciplinary team into a professional learning community.

Once the surveys are complete they will be analyzed for common themes and answers demonstrating a shift from interdisciplinary team to professional learning community. The closed-ended questions will be downloaded directly from Survey Monkey into an Excel Spreadsheet in order to analyze demographics, percentages, and central themes.

The open-ended questions, will be analyzed using a coding system to determine the context within which teams are functioning and the transformation that may be evident within their environment. This data will be compared to the closed-ended questions and analyzed to show correlation between answers and allow for a comprehensive analysis of the information gathered. The codes that were used were based on the work of leading researchers in the field of interdisciplinary teaming and professional learning communities. Research often focuses on five areas of consideration when analyzing a team's function as a professional learning community:

- DTP = Deprivatization of Teaching Practices
- RD = Opportunities for Reflective Dialogue
- FSL = Collective Focus on Student Learning
- CW = Collaborative Workplace
- NCV = Shared Norms of Operation and Core Values

The aforementioned codes were utilized throughout the data collection and analysis of open-ended questions, which were embedded within the survey instrument. These codes were also considered as central themes were identified within the closed-ended data analysis. The codes served as a reference point for quantitative analysis, as they represent research based areas important to professional learning communities.

3.7 VALIDITY AND RELIABILITY OF RESULTS

Survey research methods seek to understand meaning with context specific situations while having respondents respond to pre-set questions. The researcher must be informed of the context and knowledgeable of its implications on the research as the researcher completes data analysis, but also must be aware of the validity and reliability of the findings. Validity, within the context of research, is often defined as the truth and the extent to which research accurately depicts the context to which it is describing. Reliability focuses more on the consistency of which data is analyzed from various sources through various contexts (Hammersley, 1990; Mertens, 2004). Leading researchers suggest using multiple cases to strengthen both the reliability and validity of research results. To accomplish this, the researcher:

- Included all middle schools within the Western Region of the Pennsylvania Middle School Association
- Maintained the same methodologies throughout the study
- Reviewed the literature and similar research when formulating questions and answers in order to develop an instrument similar in content and context to those already accepted by the field
- Utilized an administrative sample population to review and critique the survey
- Solicited the input of a committee of university professionals with expertise in the field

3.8 LIMITATIONS OF THE STUDY

A problem associated with open-ended questions and the data analysis is that the process is ongoing and often personal bias can contaminate the analysis. There are steps to take to avoid as much bias and erroneous results as possible. First, the researcher should not rely on one question to provide the necessary data. Surveys should be created to allow various questions to provide similar data in order to increase the reliability of answers and provide a credible analysis (Mertens, 2004). This study will utilize the surveys with closed-ended and open-ended questions to gather information on the same topics.

Another key issue is that of generalization. When making statements applicable across various groups, the data that supports those findings should be generalized to fit the varying groups. Mertens (2004) suggests using a number of strategies and studies to create more generalized data. This research study utilized multiple middle school sites across Western Pennsylvania, all functioning under the same research format. Because multiple sites were utilized the data can be generalized across teams and should be deemed significant by other researchers.

4.0 FINDINGS

This chapter provides a descriptive analysis of the responses from middle school principals located in the Western Region of the Pennsylvania Middle School Association. The purpose of this study was to examine the implementation of professional learning communities which are a reform effort currently in middle level education. Data from all respondents was retrieved from the on-line survey tool, Survey Monkey. Results were analyzed to determine if a transformation was occurring based on the activities of middle level teams as described by the principal.

4.1 SURVEY PARTICIPATION

As previously described, the researcher built a database of middle school principals in schools that comprise the Western Region of the Pennsylvania Middle School Association. The counties making up the Western Region of the Pennsylvania Middle School Association can be found in Figure 2.

Western Region	Allegheny County	Indiana County
	Armstrong County	Lawrence County
	Beaver County	Mercer County
	Butler County	Washington County
	Fayette County	Westmoreland County
	Greene County	

Figure 2. Counties Containing Middle Schools Invited to Participate

The database consisted of 152 middle school principals who were identified from a variety of sources. This included all schools that considered themselves a middle school, as defined by enrollment in the Pennsylvania Middle School Association, or were organized in a manner that supported the middle school philosophy, and the concept of teaming as previously outlined by the National Middle School Association (NMSA, 1995).

Initial contact was attempted by sending an email to the primary contact for each middle school on the list. An email merge was created between the database and the researcher's email client. Almost immediately, the initial contact provided the researcher with information that needed confirmation. The initial email returned 26 undeliverable messages. The researcher first worked to confirm the information used to construct the database and verify that there was not a computational error in the database, which could cause an undeliverable message. Following a review of the database a search began for an alternative email address for each school and principal. Of the 26 emails initially returned undeliverable, six were rectified by identifying a new principal who had replaced the former principal in the database. Two were rectified by

determining the districts URL code, in the email, had changed from the version being used by the researcher. This meant eighteen messages still remained classified as undeliverable.

Additional attempts were made, by the researcher, to receive current information and deliver the undeliverable messages; however, all 18 remained undeliverable at the completion of this research study. The researcher followed up by conducting an additional internet search for accurate information and attempting a phone contact to the district. This was done to verify information or receive updated information. The researcher concluded that two districts, located within the research area, either do not use email or they do not provide the addresses for use by outside parties. Five were again returned undeliverable even after the information was verified via an internet search, and a phone message was left in each district however none were returned. Eleven were returned to the researcher from the technology department in the respective districts. The eleven returned were identified as SPAM, and while the researcher completed the necessary internet based forms to allow them to be delivered to the district, it seems unlikely that they were as subsequent emails from all eleven districts were also returned as SPAM and the same forms were completed again. Therefore, of the 152 contacts on the initial database, it is more accurate to identify the research study as consisting of 134 viable contacts who presumably received the survey invitation and had the potential to participate.

The results of the outreach yielded 62 total responses for a 46% return rate. However, of the 62 total respondents, only 52 (84%) answered the survey in its entirety. The researcher compared the return rate for this study to studies of comparable work. The researcher determined that comparable work was completed with return rates similar to that of this study and in many cases a 46% return rate was better than that used in comparable work.

Analysis of the ten respondents who failed to complete the survey in its entirety, shows that all chose to leave one or more of the open ended questions blank. The researcher believes there are two plausible explanations for the blank responses. One may be that the principal found one or more of the open ended response questions to be too intrusive, or their answer could provide information that would identify their school. The second possible explanation is that for many, the open ended questions require more time and a greater understanding of the information. Therefore, the principal may choose to skip one or more open ended questions in order to save time, or avoid providing an answer to a question which they do not feel they have the knowledge to answer. While the reasoning by each respondent cannot be determined, as survey completion was anonymous, the data provided by those 10 respondents was included for the portions they did complete.

4.2 DEMOGRAPHIC CHARACTERISTICS

The Western Region of the Pennsylvania Middle School Association includes a vast geographic area of the state, and a wide variety of schools. The researcher first wanted to learn about the demographics of the principals participating in the survey, and the schools they lead. Of the respondents: 40 (64.5%), worked within a suburban setting; 16 (25.8%), within a rural setting; and 6 (9.7%), within an urban setting.

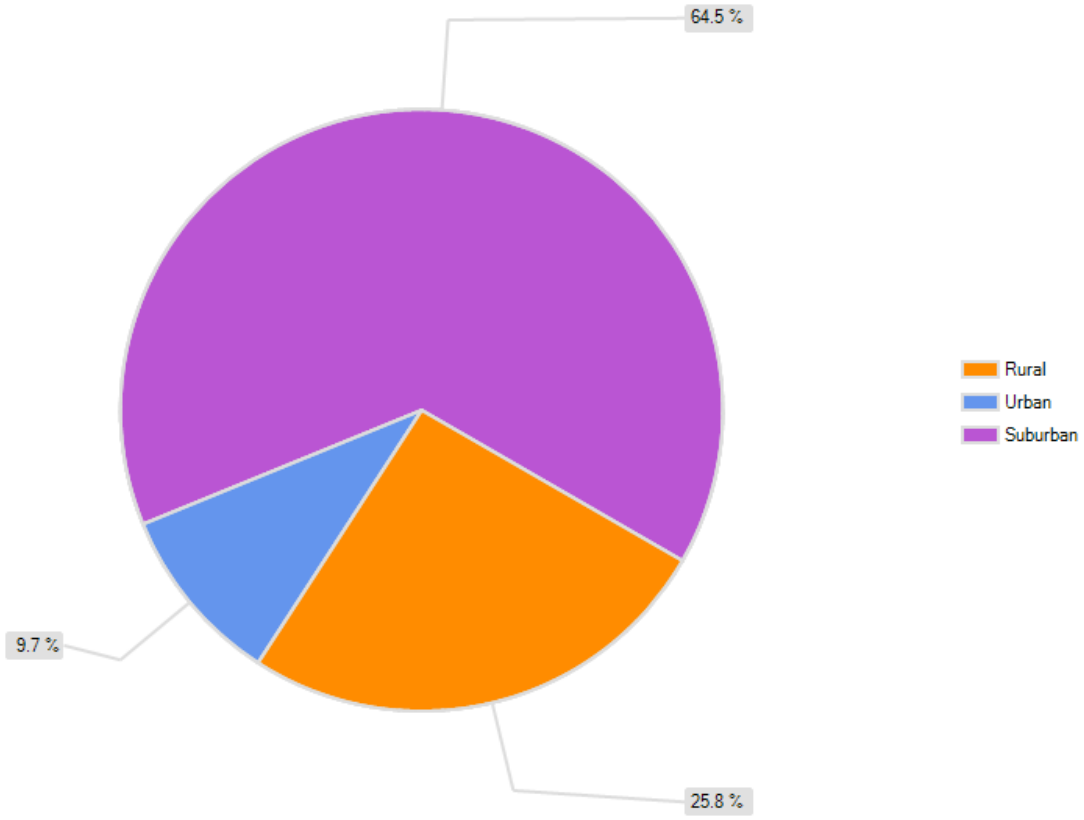

Figure 3. Geographical Location of Schools

When asked about the size of the schools, 9 respondents chose to skip the question. Of the remaining 53 respondents, 11 (20.7%), were in a school containing 100-300 students; 17 (32.1%), had 301-500 students; 15 (28.3%), had 501-700 students; and 10 (18.9%), had over 700 students.

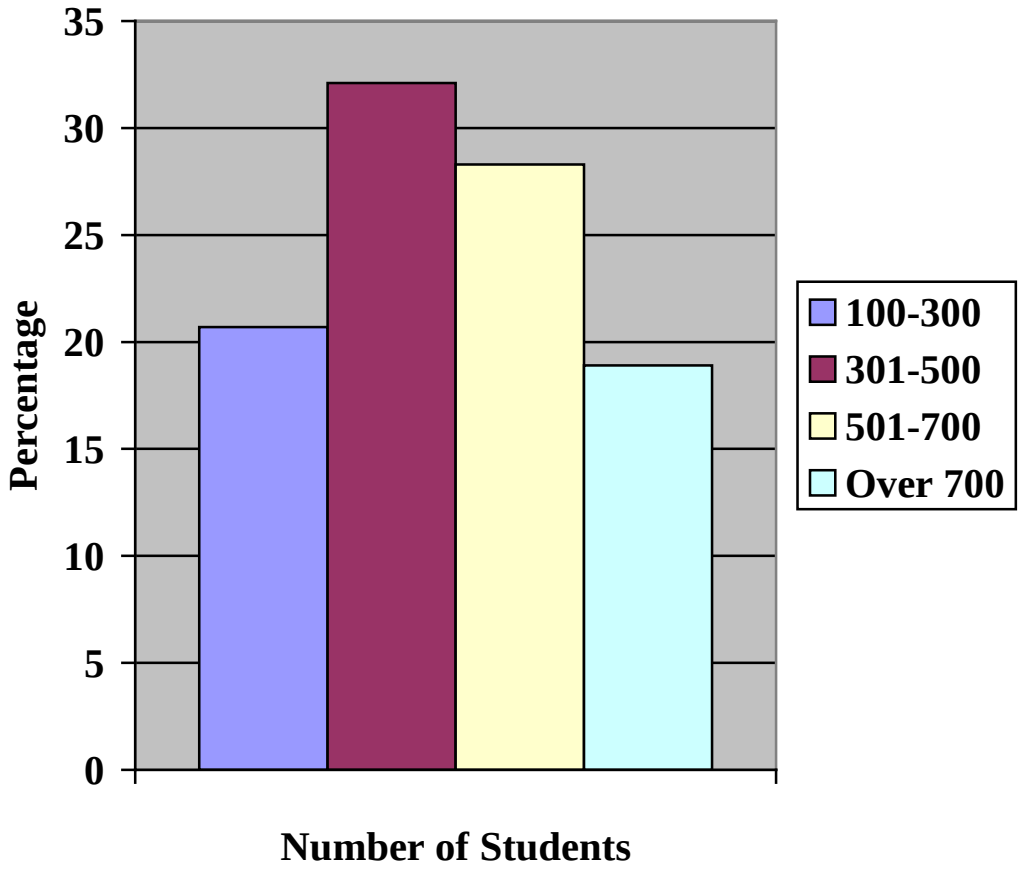

Figure 4. Student Enrollment of Responding Schools

The researcher then asked what grades were included in the middle level school in which the respondent was the principal. All 62 respondents answered this question. The results indicated that 9 (14.5%), were in schools that contained grade 5; 35 (56.5%), in schools that contained grade 6; 57 (91.9%), in schools that contained grade 7; 55 (88.7%), in schools that contained grade 8; 10 (16.1%), in schools that contained grade 9; and 2 (3.2%), indicated "other," and wrote that they were in a school that contained grades 7 through 12.

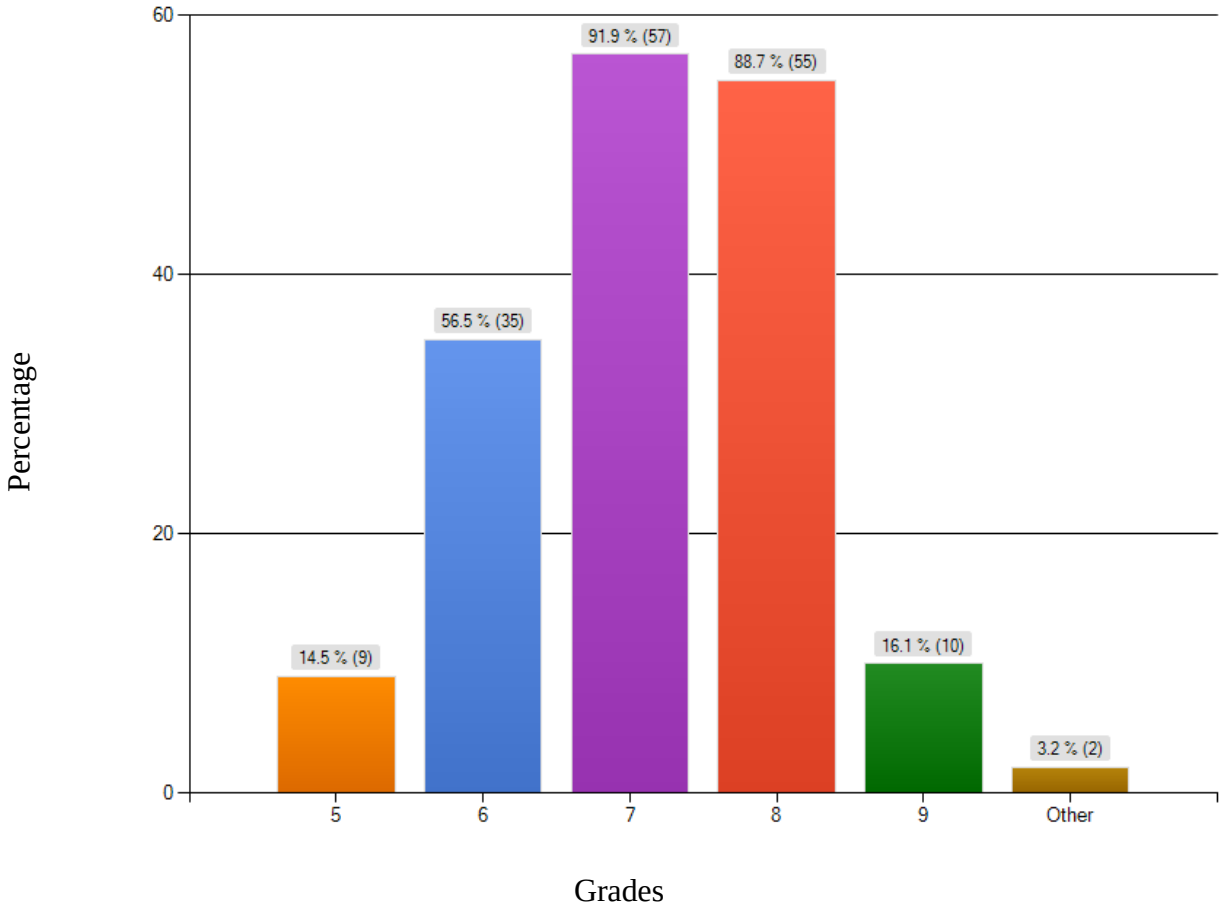

Figure 5. Grades Housed Within the Middle School

While the researcher focused on all schools considered or organized around the middle school concept, the data was further analyzed to determine how many respondents were working within the traditional middle school setting of grades 6 through 8. Of the 62 respondents, 28 (45%), were currently working within a traditional middle school composed of grades 6 through 8.

The researcher went on to ask about the participants experience in education. With respect to years of experience in the K-12 educational setting, 14 (22.6%), were either new or had under 10 years of experience in education; 31 (50%), had between 11 and 20 years of

experience; and 17 (27.4%), had over 20 years of experience. To follow up concerning their years of experience in education, the researcher then asked, "How many years of experience do you have at your current school, including this year?" Of the 62 respondents, 54 (87.1%), had spent less than 10 years as principal of their current school, and 35 (56.1%), had served less than 5 years in their current position.

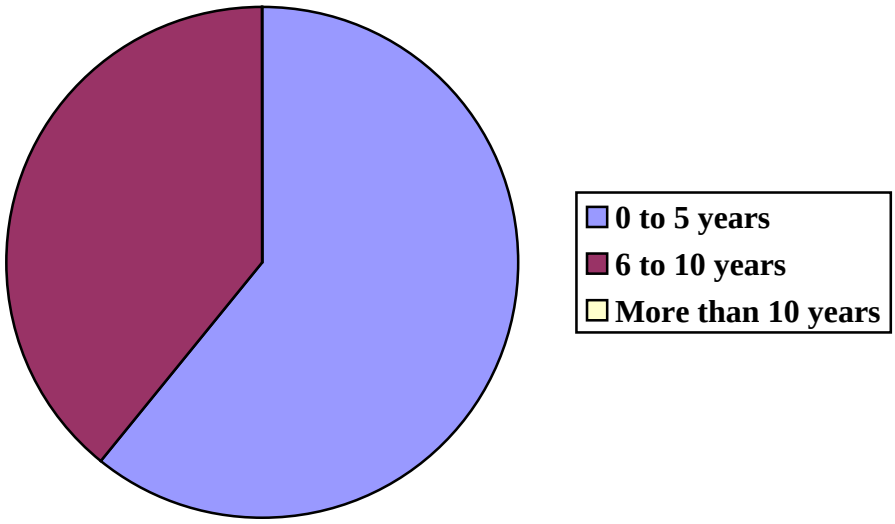

Figure 6. Experience as Principal in Current School

Lastly, the researcher sought to identify the percentage of respondents who had prior middle level experience as a teacher. The responses indicated that 46 (75.4%), had prior experience while only 16 (24.6%), had not previously worked as a teacher in a middle level school.

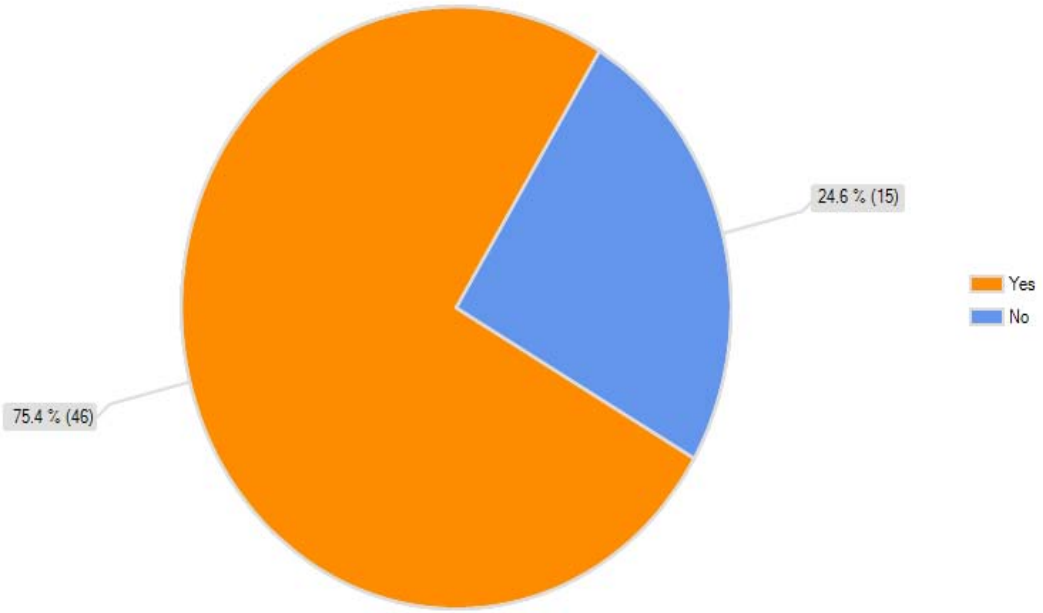

Figure 7. Prior Experience in the Middle Level Environment

4.3 RESEARCH QUESTIONS

The researcher developed five research questions to serve as the research framework for this study. The five research questions provided the basis upon which the survey items were created and the lens through which responses were analyzed. What follows is a presentation of the findings as they relate to each research question.

4.3.1 Research Question #1

What role does the interdisciplinary team assume within the building?

The researcher analyzed responses to the survey relating to the team format within the building, and the role the team assumed within the school environment. The Middle School Philosophy, as defined by the National Middle School Association, identifies teaming as an important component to middle level education, however the researcher was aware that not all middle schools currently organize the staff around the practice of interdisciplinary teaming (NMSA, 2001).

Therefore, the respondents were first asked, "Does your school organize teachers into interdisciplinary teams, with each team containing core content teachers who instruct a common group of students?" Of the possible 62 respondents, 59 responded to the question. Of the 59 respondents, 46 (78%) responded that their school currently organized teachers within interdisciplinary teams, and 13 (28%) responded that their school did not currently participate in this practice.

When the results were cross tabulated to include only those respondents who currently work in a traditional middle school consisting of grades 6 through 8, there were 27 responses. Of those respondents, 23 (85.2%) were organized into interdisciplinary teams while only 4 (14.8%), were not currently organized around the interdisciplinary teaming model. Further analysis revealed that the larger the school, those that contain 501 or more students, the more likely it was to organize teachers around the interdisciplinary teaming model. Respondents who worked in schools meeting this criteria, indicated that 23 (92%) organized the staff into interdisciplinary teams, and 2 (8%) did not practice that approach.

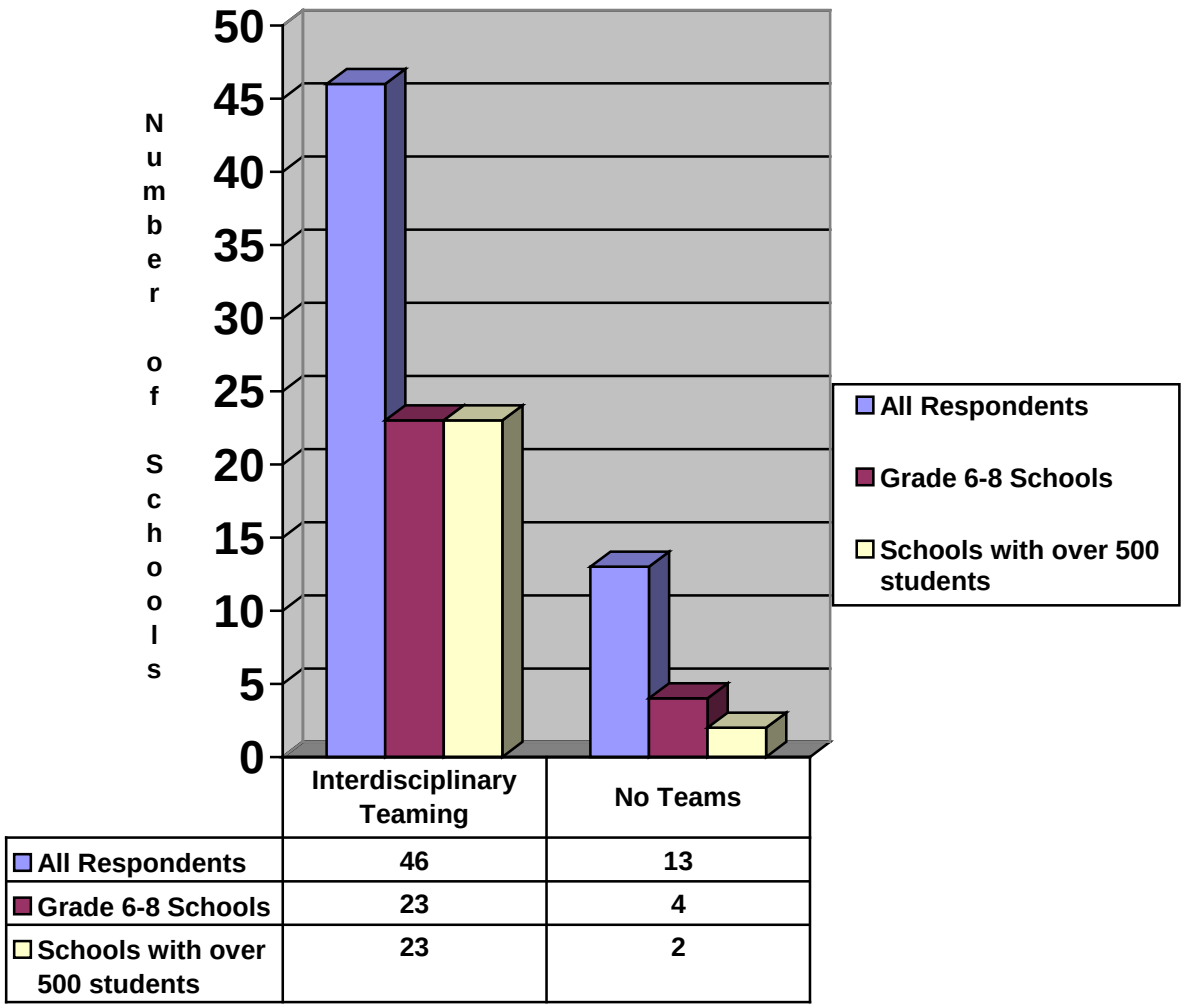

Figure 8. Organization of Teaching Staff

To learn more about the function of the interdisciplinary team within the building, the researcher asked, "From an organizational perspective, what are some of the things that you do

to support the teaming concept?" Of the possible 62 respondents, 49 responded to the question. In order to analyze the responses, the researcher utilized a coding system, as previously described, to compare respondents' answers to the five areas recommended to be considered when analyzing a team's function. Of the 49 respondents, 44 (89.8%) provided responses that supported a Collaborative Workplace, coded CW, for interdisciplinary teacher teams. These responses indicated teams were provided common planning or team time, and this time occurred at a minimum of once per week. Further analysis indicated that 40 of the 44 (90.9%) who supported a collaborative workplace, went on to support a Focus on Student Learning, coded FSL, and provide opportunities for Reflective Dialogue, coded RD. These respondents indicated they did such things as: require time in meetings to center on student needs and pedagogy to enhance learning; require regular education and special education teachers to discuss techniques to be used in the inclusion classroom; and encourage team members to bring new ideas and articles to the meetings during which would be discussed at specific times. Three of the respondents (6.1%) indicated they require teacher teams to observe team members and provide feedback at team meetings which supports Deprivatization of Teaching Practices, coded DTP.

The middle level principals were then asked to rank the occurrence of specific activities during team meetings. Respondents were asked to rank the events on a scale of one, least frequently occurs, to six, most frequently occurs. Of the 62 respondents, 48 participated in the question. The most frequent activity which teams participate in was the discussion of student specific concerns as cited by 28 (75.7%) of the respondents. The respondents then indicated that most of a team's time was spent discussing specific educational challenges and seeking input for solutions, cited by 12 respondents (33.3%). Thirteen of the respondents (28.3%) identified the discussion and development of teaching practices, curriculum, and assessment as a common

practice for interdisciplinary teams. The fourth most common activity, by interdisciplinary teams, was time spent organizing field trips and class activities. Ten of the respondents (27%) identified this as the fourth most common activity. The two least frequently occurring activities were lesson study and team goal setting. Seven respondents (23.3%) identified team goal setting as the second least frequently occurring activity, and 15 respondents (40.5%) recognized lesson study as the least frequently occurring activity for the interdisciplinary team. Lesson study was also rated by three respondents (8.1%) as not applicable which could signify that the interdisciplinary team did not undertake this activity at any time. Figure 9 identifies the average rating for each activity as defined by the respondents.

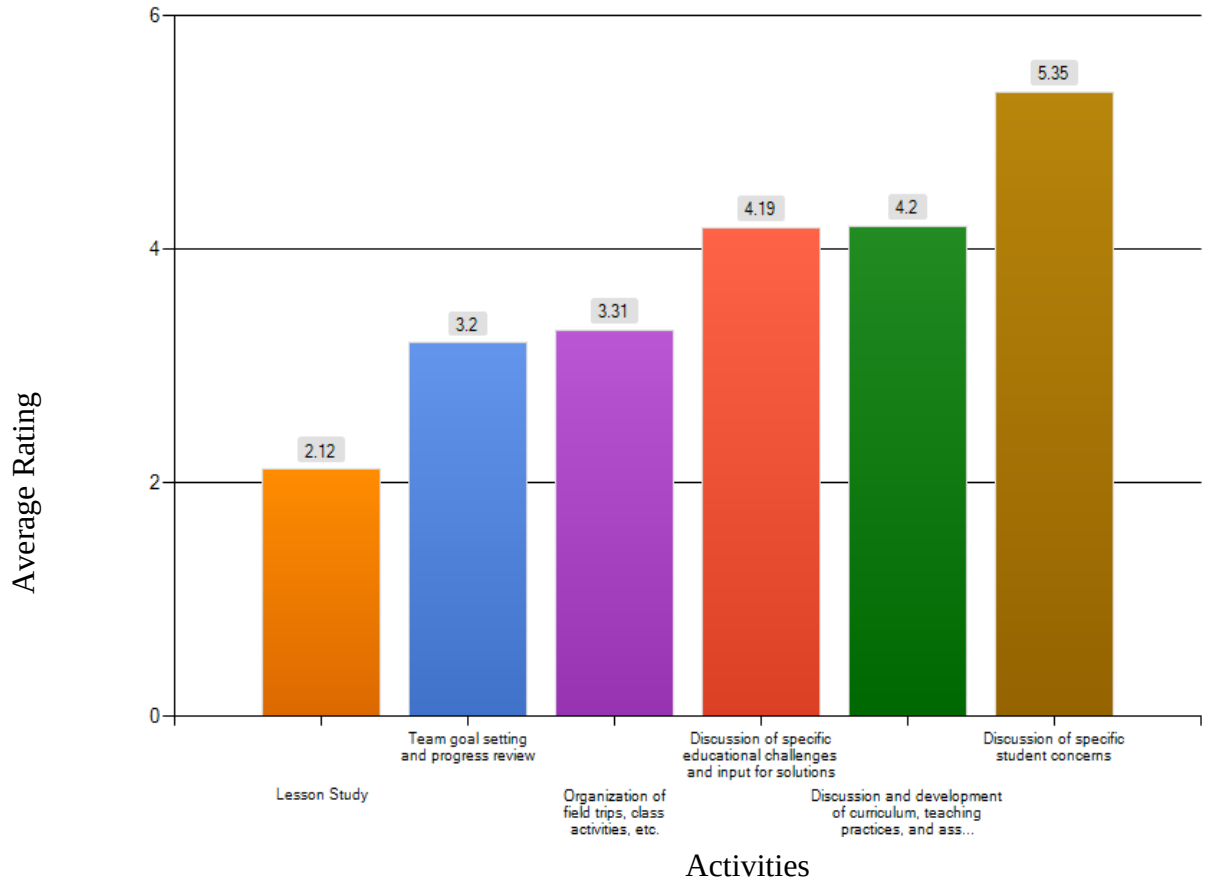

Figure 9. Average Rating of Activities Occurring in Team Meetings

The researcher then asked, “What activities are currently engaging the teams within the school?” This question asked respondents to rate all of the activities listed that were currently engaging teams within their middle level building. This question was answered by 50 of the 62 respondents. Twenty-six respondents (52%) identified the discussion of issues relevant to attendance and school requirements as the most frequently occurring activity, and stated that this occurred on a weekly basis. Respondents also stated that teams provide weekly documentation of their meetings to the administration, as cited by 29 respondents (58%).

When discussing monthly activities, respondents identified the monitoring of student attainment of essential learning standards, and the discussion of teaching methods. Twenty-two respondents (44%) indicated that these two activities occurred on a monthly basis in team meetings.

Respondents were split as to how often teams met to review specific goals, and the time they spent reviewing student work to share and improve instructional practices. Nineteen respondents (38.8%) indicated teams met monthly to discuss team goals while 13 respondents (26.5%) identified this as a bi-annual activity. When referencing the review of student work to share and improve instructional practices, 28 respondents (56%) identified this as a monthly or bi-annual occurrence. When identifying activities that occurred annually, respondents overwhelmingly identified collaboration to create common goals, and a shared vision to guide the team as an annual activity. Twenty of the respondents (40.8%) indicated this activity occurred annually, while another 5 respondents (10.2%) stated that it never occurred, in their situation. Lastly, respondents indicated that time spent by teachers observing peers rarely occurred. Twenty-two respondents (44%) stated that it never occurred and another 10 respondents (20%) indicated it occurred at most once per year.

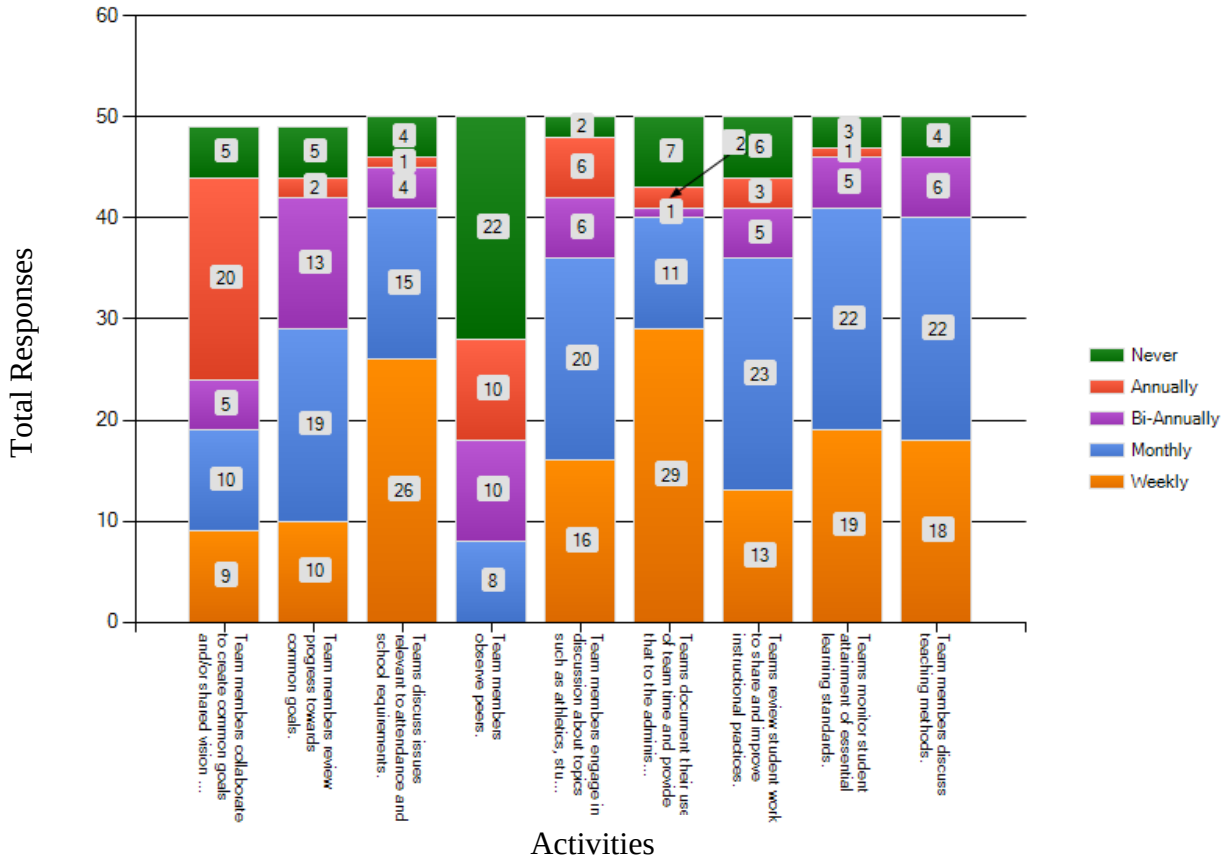

Figure 10. Frequency of Team Activities

4.3.2 Research Question #2

Are middle level principals transforming interdisciplinary teams into professional learning communities?

The researcher asked the respondents about their views on interdisciplinary teaming, and the activities they were undertaking with the interdisciplinary teams in their respective buildings. The researcher looked for information within their answers that could identify their actions as

those pertaining to interdisciplinary teams versus those that would be seen in teams acting as professional learning communities.

Respondents were asked, "In your opinion, what are the major functions of a middle school interdisciplinary team?" Of the 62 possible respondents, 50 answered this particular question. The researcher looked for similarities and differences within their answers. The researcher attempted to separate the answers by those who spoke of managerial tasks, versus those who spoke of actions considered focused, student centered, and goal-based, therefore fitting within the five categories of the coding system. A third and fourth category was added for those answers which either provided insufficient information upon which to make a determination for a specific category, or provided an answer that met both the managerial and student-centered, goal-based categories.

Table 2. Functions of a Middle School Team

Function of Team	n	%
Managerial Tasks	12	24%
Student-centered, Goal-based Actions	19	38%
Managerial & Student-centered, Goal-based	15	30%
Insufficient Data	4	8%

While respondents' answers were coded into the four categories, there were common themes seen throughout. The respondents who provided insufficient data made statements that indicated either teams were not functioning within their environment, or the teaming concept was new and they were currently developing their plan. Examples of managerial responses were:

knowledge of students across the various disciplines

communication between our teachers and common planning time to discuss students

recognize students strengths and weaknesses, discuss student needs

The answers that were coded into the student-centered, goal-based category provided responses such as:

plan, collaborate, and coordinate to develop professionally

analyze student data, build support for that grade level team

share data, share best practices, and collaborate to do what is best for students

The respondents' answers within the two main categories, managerial and student-centered and goal-based, were remarkably similar within these respective categories. Respondents provided brief answers, many of which contained popular educational language heard throughout the field at this time.

The researcher returned to the question which asked respondents to rank those activities which occurred during team meetings based on frequency of occurrence. In analyzing the answers, the researcher looked at three specific responses and their frequency. The specific responses analyzed were: lesson study, team goal setting and progress review, discussion and development of curriculum, teaching practices, and assessment. The researcher specifically chose these responses as they correlate with activities demonstrated by professional learning communities.

Lesson study was the least frequently occurring activity with 14 (40.5%) responses indicating this rarely occurred. It received an average rating of 2.12. Team goal setting and progress review received an average rating of 3.20 on a six point scale, as identified by 10 respondents (33.3%). The last category considered, discussion and development of curriculum, teaching practices, and assessment received the highest rating for frequency of occurrence with an average rating of 4.20 on a six point scale as identified by 13 respondents (28.3%). Also

noteworthy is a total of 33 respondents (68.7%) rating it with a frequency of between 4 and 6 on the 6 point scale, indicating the activity occurred bi-annually or annually for the team.

The researcher then considered responses to the question, "In what ways does your school promote a collegial environment and the sharing of professional development experiences, best practices, etc.?" The responses to this question, as provided by 42 of 62 potential respondents, did not provide much depth. Answers were unable to be coded into the five categories as previously outlined. The answers provided were generic. It appeared that the respondents understood the question; however, their responses sounded very similar. Responses included phrases such as: "team meetings," "email is used to share ideas and best practices," or "time is set aside at staff meetings, team meeting, etc. to share."

The researcher then went and attempted to categorize those who made statements which indicated specific time was set aside for collaboration versus those who provided an answer which indicated collaboration was up to the staff to initiate. Of the 42 respondents, 31 (73.8%) provided answers which identified an established time that was understood by to be used for the specific purpose of collaboration, modeling a new technique, or sharing what was learned at a professional development session. The remaining 11 respondents (26.2%) made statements that identified time that could be used for collaboration by the staff; however, most explicitly stated, it was staff driven. No respondents indicated that this did not occur, or that the culture of the school did not support these activities.

Respondents were then asked to define a professional learning community. Of the 62 participants, 40 responded to this question. The 40 responses were coded to determine their alignment within the five categories of the coding system. Some responses met multiple criteria

within the coding system and were thus credited to multiple categories. Table 3 identifies the coding categories and the number of responses that were coded into each of the categories.

Table 3. Defining a Professional Learning Community

	Deprivatization of Teaching Practices	**Opportunities for Professional Dialogue**	**Collective Focus on Student Learning**	**Collaborative Workplace**	**Shared Norms of Operation and Core Values**
Number of Responses	27	31	17	29	11

As a follow-up to this question, respondents were then asked, "Do you believe teams within your school are functioning as professional learning communities? Please explain." This was an open-ended question. While some respondents provided details, the most frequent answers were yes, no, or a short description of how they were attempting to function in this manner. The responses were categorized based on the response given from the 42 of 62 respondents.

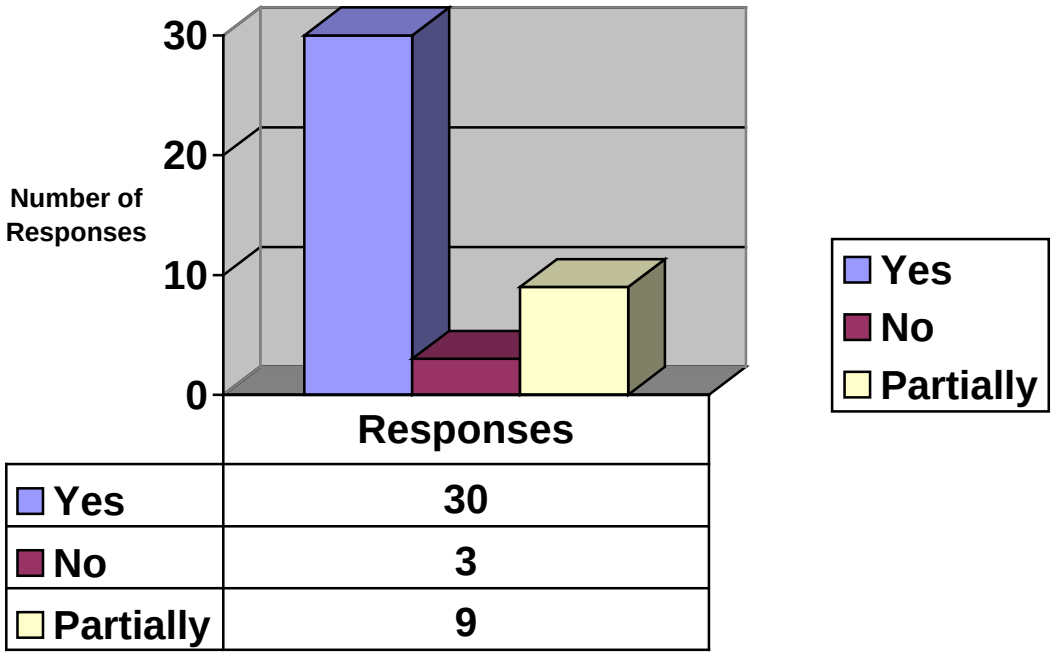

Figure 11. Are Professional Learning Communities Functioning within your School?

4.3.3 Research Question #3

What is the relationship between the principal and faculty during the decision making process?

This question was developed to determine the collaborative nature that exists within the school. The question specifically sought to determine the collaboration between the interdisciplinary team and the administrator. The researcher returned to the question which asked, "From an organizational perspective, what are some of the things that you do to support the teaming concept?" When reviewing the responses, they were analyzed through a lens focused on the areas of a collaborative workplace and shared norms of operation and core values. When the

responses were coded, these two areas were used as they directly related to the relationship that may have existed and the collaboration between the various involved parties.

This question yielded 49 responses from the 62 total participants. The responses that were tabulated indicated that 43 of the 49 respondents (87.8%) mentioned an aspect of their role that supported a collaborative workplace. The most common response was the creation of common planning time for teachers and a minimum of one day per week in which they met. Of the 43 respondents, only 16 (37.2%) specifically indicated that the principal, or an administrative designee, attended the meetings. However, others who did not specifically mention principal attendance, did identify the common planning time as a time for all to participate, which led to the coding of their response as one that supports collaboration.

The 6 respondents (12.2%) who provided information that was not coded within this category, either stated nothing that indicated any sort of team planning or collaboration time, or they indicated that the teaming concept was new to their building and was in the developmental stages.

The second code used for this question was that of shared norms of operation and core values. The researcher found that only 4 (8.2%) of the 49 respondents mentioned assisting in the development of a common philosophy, vision, or goals within the team. The remaining respondents did not mention anything that could be considered aiding in the creation of shared norms and core values.

The respondents were then asked, “When decisions must be made by the team, what is your role and how are those decisions reached?” These responses were viewed through the same lenses as the previous question. Responses most frequently mentioned the words facilitator, collaboration, and equal members. There were 43 responses from a possible 62 respondents, and

39 of the responses (90.1%) were coded to signify a collaborative workplace. Of the remaining three responses, one was thrown out because it did not apply to the question, indicating that the administrator was available to consult when needed or only participates when the team requests participation. While participation when invited does show a separation from the administrator as sole authority, it does not indicate collaboration and all acting as equal parts of the whole in the decision making process.

The next lens used to analyze the results was shared norms of operation and core values. This question yielded a higher rate of acceptance into this code than the previous question. When using this lens to analyze this question, the researcher examined responses to identify remarks that specifically spoke to the operation and values of the team. Forty-three respondents most frequently (67.4%) mentioned facilitation and being an equal team member as being the role they played when decisions must be made. Other respondents indicated that they met at varying intervals with team leaders to discuss: team agendas; important information that needed to be shared; and to bring concerns from the teams that might be relevant to others. Examples of responses placed into this coding category are:

I meet every other week with team leaders to discuss methodology for decisions

Help facilitate discussions and set the agenda with the team leader

Work with team leaders to remain committed to district mission and goals

As the researcher concluded the coding process, there were responses that did not fit within the coding system but deserve mentioning. While the primary lens was collaboration, respondents, 5 of the 43 (11.7%), did mention that the principal would step in and direct a team if a decision was being made that presented a legal issue, potential student conflict, or deviated from the district's plan. These responses could have been counted as not supporting collaboration;

however, the researcher coded them separately as all mentioned positive aspects, however described situations which were specific to their team dynamics..

4.3.4 Research Question #4

What is the culture of the school building with respect to professional learning, collegial sharing, and reflective dialogue?

The researcher sought to determine how the team was functioning within the environment that existed and if that environment was conducive to a professional learning community. Respondents were asked a series of questions that solicited input concerning staff arrangement and if the activities they were completing were arranged in the teaming concept. The researcher first returned to the question, "Does your school organize teachers into interdisciplinary teams, with each team containing core content teachers who instruct a common group of students?" As previously stated, the researcher found that out of the 59 respondents, 46 (78%) did organize teachers into interdisciplinary teams while 13 (22%) did not participate in this practice.

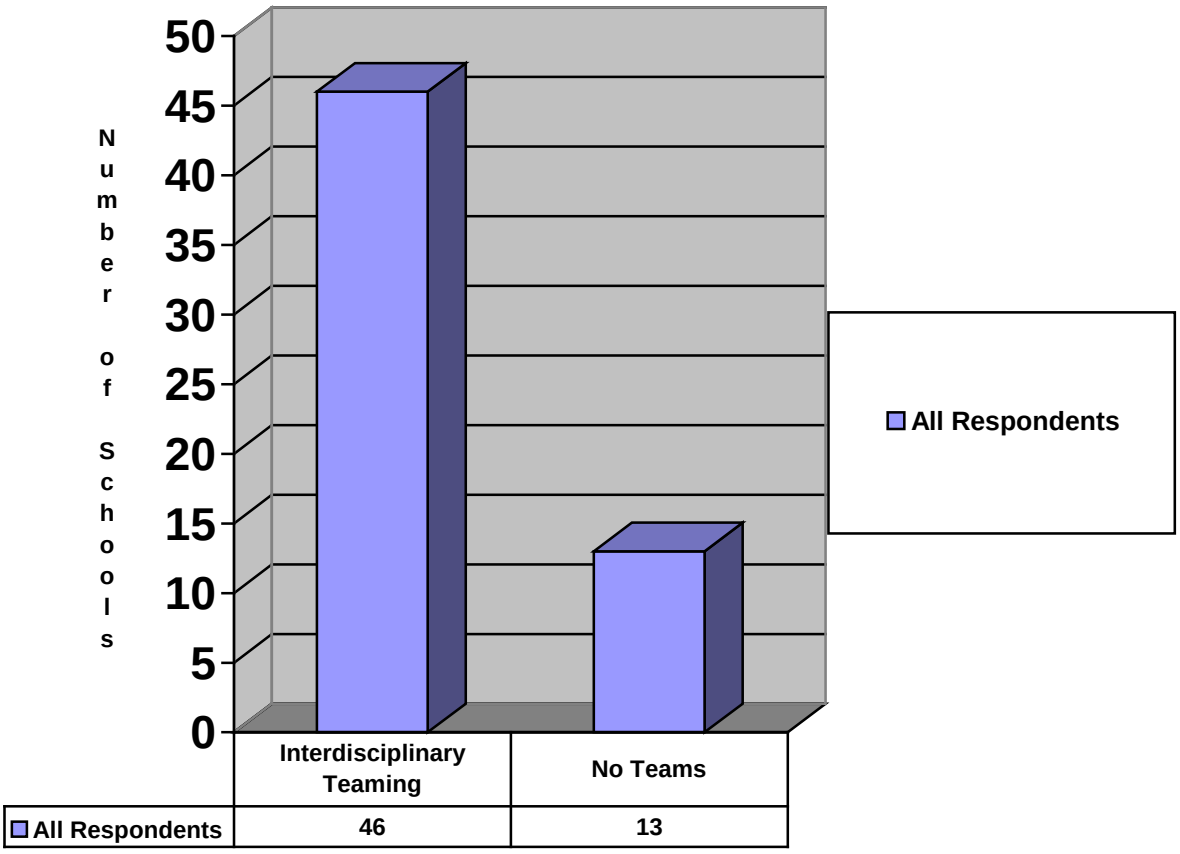

Figure 12. Organization as Interdisciplinary Teams

The researcher followed up by asking what the principal viewed as the major functions of the interdisciplinary team. The question was answered by 50 of a possible 62 respondents. The five area coding system was used, and responses were assigned to one or more areas as the answers dictated.

Table 4. Functions of an Interdisciplinary Team

	Deprivatization of Teaching Practices	Opportunities for Professional Dialogue	Collective Focus on Student Learning	Collaborative Workplace	Shared Norms of Operation and Core Values
Number of Responses	17	46	31	33	9

The responses from the descriptions of interdisciplinary teams and their functions within the school, led the researcher to ask the respondents what activities occurred most frequently when the team was meeting. The researcher analyzed the answers based on the average rating received from the respondents and looked specifically at those activities which would support a collaborative culture and would indicate professional learning and collegiality. Forty-eight chose to respond to this question while 14 refrained from providing data.

Responses indicated that the most frequently occurring activity for the teams was the discussion of specific student concerns. Respondents (81.4%) indicated that this was the most frequently occurring activity within the team. The responses then indicated that teams spent the most considerable amount of time working with the curriculum (52.1%) and discussing and problem solving specific educational challenges (66.6%). The analysis indicated that teams spent the least amount of time setting and discussing goals, as well as, participating in lesson study. Goal setting received an average rating 3.20 (33.3%), and lesson study received an average rating of 2.12 (64.8%) by the respondents.

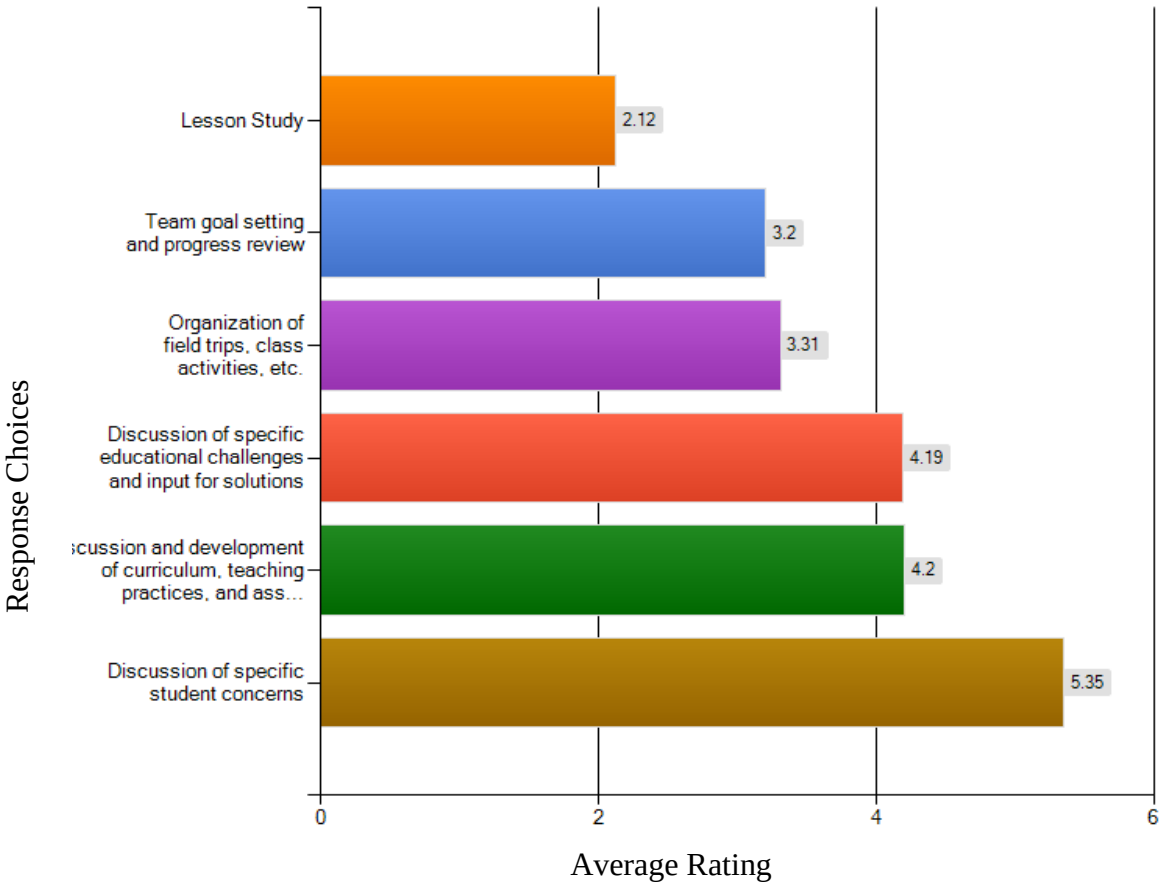

Figure 13. Average Rating of Team Based Activities

Finally, the researcher analyzed the culture of the building with respect to professional learning, collegial sharing, and reflective dialogue by examining the responses to the question, "In what ways does your school promote a collegial environment and the sharing of professional development experiences, best practices, etc.?" Previously the researcher examined this question and found that the answers did not provide depth and were generic in nature. The researcher was not able to code the responses when examining this question in section 4.3.2 Research Question #2. In this instance, the researcher found the same situation. Answers were generic and stated simple phrases such as "team meeting time is allocated," "we meet bi-weekly," or "staff have common planning time to discuss educational topics." Those responses that provided more

depth simply went into more detail about how often teams met, what day(s) of the week, or who set the agenda. Some responses did provide information pertinent to the research study, such as:

> *At all in-services, I turn to the experts – the teachers…We also 'harvest' a great deal from one another."*
>
> *We have seminar time built in to the contract. Teachers often present to their colleagues and bring samples to share.*

Unfortunately, not enough of the responses provided information pertinent to the coding system, nor did they provide information pertinent enough to determine similarities and differences. The researcher determined these responses could not be included in the analysis of this research question.

4.3.5 Research Question #5

How does a principal support interdisciplinary teams focusing on professional learning as opposed to managerial tasks?

Respondents were first asked to respond to a question asking what they saw as the major functions of an interdisciplinary team. The researcher looked at similarities and differences within the answers, and then attempted to code them to determine if the respondents viewed team members as primarily focusing on professional learning or managerial tasks. Of the 62 total respondents, 50 responded to this question. Analysis of the data indicated that 38% of respondents identified student-centered, goal-based actions, as called for by leading researchers when defining a professional learning community, as the desired function of the interdisciplinary team. While 24% identified the team as needing to complete managerial tasks and 30% described a combination of the two.

Table 5. Desired Functions of a Middle Level Team

Function of Team	n	%
Managerial Tasks	12	24%
Student-centered, Goal-based Actions	19	38%
Managerial & Student-centered, Goal-based	15	30%
Insufficient Data	4	8%

The researcher then looked at the way the principal supported the interdisciplinary team focusing on professional learning by asking respondents what they did to support the concept of teaming. Of the possible 62 respondents, 49 responded to the question. In order to analyze the responses, the researcher utilized the five series coding system. This was used to compare respondents' answers to the five areas recommended to be considered when analyzing a team's function. Of the 49 respondents, 44 (89.8%) provided responses that supported a Collaborative Workplace for interdisciplinary teacher teams. The responses indicated teams were provided common planning or team time and that this time occurred at a minimum of once per week. Further analysis indicated that 40 of the 44 (90.9%) who supported a collaborative workplace, went on to support a Focus on Student Learning and provided opportunities for Reflective Dialogue. These respondents indicated they did such things as: require time in meetings to focus on student needs and pedagogy to enhance learning; require regular education and special education teachers to discuss techniques to be used in the inclusion classroom; and encourage team members to bring new ideas and articles to the meetings during which a specific time was meant for discussion of these items. Two of the respondents (4.1%) stated that teams progress through a goal setting process in order to reach a consensus on the team focus for the year. Three of the respondents (6.1%) indicated they require teacher teams to observe team members

and provide feedback at team meetings which supports Deprivatization of Teaching Practices, coded DTP.

Table 6. Organizational Structure Supporting Teaming

	n	**%**
Deprivatization of Teaching Practices	3	6.1%
Opportunities for Reflective Dialogue	40	90.9%
Collective Focus on Student Learning	40	90.9%
Collaborative Workplace	44	89.8%
Shared Norms of Operation and Core Values	2	4.1%

Further analysis led the researcher to ask what activities the teams were spending time focusing on during team meetings. The data, provided by 50 of 62 respondents, was analyzed by reviewing the average response given by the respondent. The lower the average response, the more likely the activity was to be occurring. The more frequently an activity was occurring, the closer its average response rating would be to 1.0.

Responses indicated that teams were most frequently discussing managerial aspects of education as they discussed attendance, planned field trips, or similar activities. Teams spent less time discussing the aspects defined by a professional learning community and being student-centered, goal based activities, such as lesson study, observing peers, or sharing pedagogy.

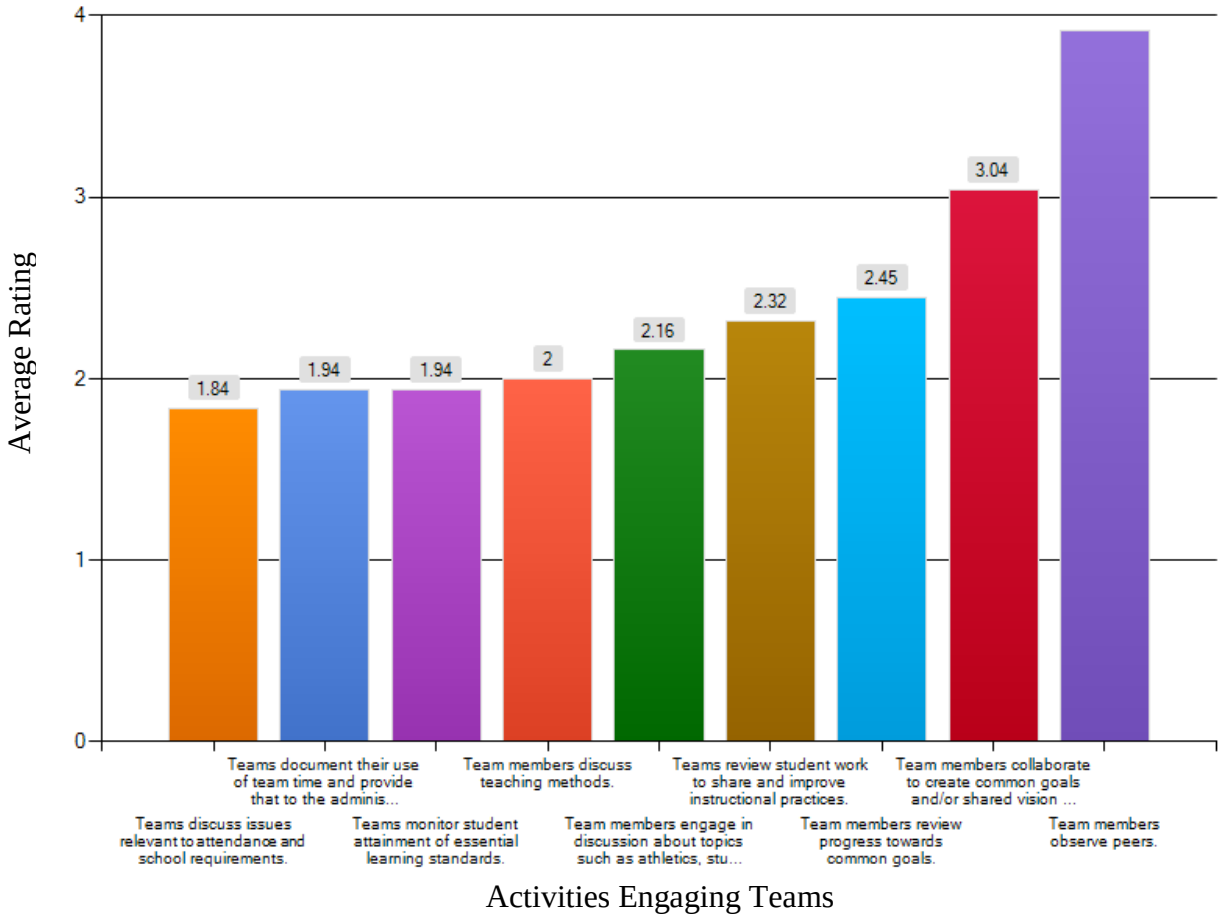

Figure 14. Time Spent on Specific Team Activities

Lastly, the researcher asked the respondents if they thought teams within their schools were functioning as professional learning communities. Responses were not able to be coded using the five area system; they were simply grouped as yes or no. However, further examination revealed that some respondents provided an answer that indicated teams were partially fulfilling this role, so a third category was added. Of the respondents, 30 (71.4%) indicated that, yes, they were functioning in this nature; 3 (7.1%) indicated they were not; and 9 (21.4%) indicated they were partially functioning as professional learning communities.

4.4 FURTHER ANALYSIS OF DATA

Throughout the analysis, the researcher had the intention of cross tabulating the data and further filtering and analyzing it to look at specific sub-groups present within the respondent pool. The researcher was interested in analyzing the responses from respondents working in a traditional middle school, as well as, those responses from respondents with prior middle level experience. However, as the examination of data found, there was no significant difference in the data obtained from the collective group as that obtained when analysis looked at a specific sub-group or at responses based on a specific filter within the data. Analysis and interpretation based on these categories, would then provide redundant information that was not needed to analyze and present the data from the research study. The researcher chose to analyze the data based on the responses from the collective group.

4.5 SUMMARY

This study focused on the transformation that may exist in interdisciplinary teams functioning as professional learning communities, and the role of the building principal in any transformation that may be occurring. Through survey methods, the researcher attempted to gain insight into they way interdisciplinary teams were functioning, within the sample population, and create a picture of the activities in which they were participating as they function within their particular setting.

As previously stated, the role of the interdisciplinary team appears to be changing as education shifts into the 21st Century, and the expectations placed upon the teaching staff

changes to meet the needs of students and the educational profession. The researcher believes, the representative sample utilized within this study, provided the information necessary to draw conclusions about the teaming structure within middle level education. Despite some questions that had a lower response rate, the researcher feels the data is reliable, valid, and provides the depth necessary for proper analysis.

One of the least surprising findings from this study, is that interdisciplinary teams are spending a considerable amount of time dealing with day to day student issues, and other tasks defined as managerial. Respondents indicated that over 75% of a team's time is spent on issues relating to a specific student and solving logistical dilemmas such as attendance monitoring, and the planning of activities. On the contrary, teams are spending less time on the professional actions associated with professional learning communities. Only 15 respondents recognized lesson study as an activity undertaken by the team, 22 respondents indicated observation of peers never occurs, and 14 do not currently work with teams to set goals.

While these functions may not follow suite with what is called for by strict professional learning communities, they are necessary to the overall function of the school and a particular team. Time spent discussing specific students, planning for upcoming events and field trips, and reviewing school and district requirements is necessary and will never go away, as long as, teams are responsible for a core group of students. Without time spent on these areas by the team, the normal function of the team and activities for the entire core group of students seen by the team would not occur. As represented in the data, managerial tasks are necessities of the profession; however, proper management of the time they consume, appears to be the key as to how a team functions outside of these tasks.

Overall, the researcher believes the analysis indicates that a transformation is occurring as interdisciplinary teams begin to function more as professional learning communities. The data shows that principals are defining their teams by tasks often associated with professional learning communities and not the historical interdisciplinary team. Teams find themselves taking part in lesson studies, reviewing curriculum, and setting goals. Nineteen respondents indicated teams meet monthly to review team goals while another thirteen indicated this occurs bi-annually. Furthermore, 28 respondents (56%) indicated review of student work as an important activity during team time. Respondents identified this activity as occurring at least monthly. Principal responses did indicate a move toward professional as opposed to managerial actions by the teams. Lastly, responses indicated that 38% of a team's time is spent on student-centered, goal-based activities and another 30% of their time is spent on a combination of managerial and student-centered activities. This demonstrated a shift from the strict managerial actions teams had become accustomed to completing.

While the student-centered, goal-based actions are not occurring as frequently as the managerial tasks, they provide a clear separation from the tasks historically completed by teams. No longer is it acceptable for a team to lament about a particular student, spend countless hours planning an activity, or cancel meetings due to lack of sufficient material to discuss. Rather, respondents indicated teams are meeting at least weekly, if not more often. They are collaborating during these meetings and providing materials and questions for the group to analyze and discuss, and they are engaging one another in the profession and the pedagogy which goes along with their craft. Again, the data shows that teams are still spending considerable amounts of time on school requirements. Respondents provided open ended responses in which they described mundane meetings and the completion of tasks mandated by

the school or district. Overall there was considerable evidence to show that managerial is giving way to professional learning.

In summary, this study helped unveil the transformation that is taking place within middle level schools in the sample population. It is clear that interdisciplinary teams are engaging more in professional learning and utilizing their colleagues as resources to aid in their personal development and that of the collective whole of the team. The survey was not designed to judge the progress made, or how much more has to be accomplished. However, the researcher feels confident that the data indicates a positive movement towards professional learning communities in a majority of the schools responding. It is clear that interdisciplinary teams are transforming, and that process will continue to occur based on the data provided by the respondents.

5.0 DISCUSSION AND IMPLICATIONS

Throughout the researcher's analysis of the literature and survey results, the role of the building principal, in a transformation process, became clear. The principal, once viewed as a manager of a building, has seen the role expanded to include instruction as much as management. The principal was once primarily responsible for schedules and daily operations; however, now he or she must also lead a staff through change and aid in setting goals and maintaining a focus that enhances the education of all students and the staff. While the focus of this study was to determine if a transformation was occurring from interdisciplinary team to professional learning community, the researcher also learned about the leadership and the role leadership assumes within the school culture.

5.1 DISCUSSION

The focus of this study was to examine the principal's perception of the role of the interdisciplinary team, and to determine if there is a transformation to professional learning communities within the middle school setting. The principals' responses were analyzed to determine what activities teams were focused on during their time together, and to examine how teams performed within the structure established within the school building. The following research questions served as the focus of the study:

1. What role does the interdisciplinary team assume within the building?

2. Are middle level principals transforming interdisciplinary teams into professional learning communities?

3. What is the relationship between the principal and faculty during the decision making process?

4. What is the culture of the school building with respect to professional learning, collegial sharing, and reflective dialogue?

5. How does a principal support interdisciplinary teams focusing on professional learning as opposed to managerial tasks?

Prior to the initiation of the study, the findings from the literature indicated that professional learning communities were sweeping across the field of education. The literature, identified professional learning communities as a means for enhancing professional development (DuFour, 2007; Senge 1990). It also focused on the many aspects of the teaching profession that today, lead to high stakes testing and accountability in public education (DuFour, 2007; NASSP, 2006). Professional learning communities, however, were noted to require a team mentality in which a common focus, student achievement, and deprivatization of the profession was necessary for implementation. Furthermore, Eaker and Keating (2008) identified the middle level as being a prime area for the creation of professional learning communities, as the interdisciplinary team could serve as the host for such a community to exist. The change that would be needed would be in transforming interdisciplinary teams from their original format, which included more managerial tasks, to that of a professional learning community in which common goals, a focus on student achievement, and sharing of best practices would be required. While these themes were evident from the literature review, the researcher also noted that there was minimal research on the implementation of professional learning communities and their existence at the middle level. This study was developed to determine if professional learning

communities are occurring in Western Pennsylvania, and to relate any such occurrence to the literature in order to gauge how it has migrated into the middle level.

Based on data analysis, the researcher believes the proposed transformation is in the midst for many responding school buildings; however, it is not a uniform transformation seen from all respondents. As the data in Chapter 4 showed, principals responded with answers that demonstrated a clear shift from managerial to collegial, and professional learning activities were occurring during team meetings and within the team atmosphere at times other than team meetings. This indicates a shift from teams as managerial cohorts, within the school building, to teams as goal based and achievement focused cohorts who are seeking to develop professionally during their time together. While the data proved this to be true, it was still clear that teams often found their time dominated by the managerial duties of: student attendance; specific issues relevant to only one or a few students; and the completion of paperwork that was required by various sources.

From the information gathered, there were four themes that appeared to the researcher and became evident in determining if a transformation was occurring. It seems that these themes exist within all schools attempting to implement any type of professional learning community, and these themes are faced by all principals. The themes are: time is a requirement; structure must exist within the team; administrative support is a key component; and dedication to the professional learning community must exist.

First, time is a requirement for a professional learning community to exist and flourish within the school environment. Education is often driven by time as teachers watch the clock for the start and close to a period. Principals check the time for observations and watch as buses come and go with students, and the list goes on. However, time for teams to meet, discuss, and

grow is a necessity to the successful implementation of a professional learning community. The data identified time as a key factor in many of the open ended responses by the principals participating in the survey. They identified the time needed for planning meetings, common planning time for all to attend, and the time needed to implement professional learning experiences as key factors as to what was currently occurring within the teams in their school building. For some, this time came as a result of careful planning and district dedication to the teaming concept, but for others it was a boundary which they were struggling to overcome. In many ways, the time factor was out of their control as it was dictated to them by central office, bus schedules, and other duties. Therefore, in order for the professional learning community to exist, time must be considered a primary necessity in the planning phases, and it must be allotted in order for further steps to occur.

Secondly, structure must exist within the team for the professional learning community to develop. While team composition is important, the researcher looked more at the notion that structure must exist within the time allotted for the professional learning community to meet and engage in educationally appropriate activities. The organizational structure of the building should be in line with the goals of the administration in respect to what they envision teams accomplishing throughout the year as they grow professionally.

As previously stated, time can often be an enemy within the field of education, and educators must learn to use time efficiently in order to accomplish their goals. In order for this to occur, the data indicated that structure must exist during the allotted time. Respondents identified a variety of activities associated with professional learning communities as occurring within their building. However, many expressed a concern that these activities took many of their teachers out of their comfort zone and took considerable amounts of time to complete.

Therefore, it is essential that meetings of the professional learning community be dedicated to specific tasks, and a common focus be maintained throughout in order to accomplish the desired outcomes in their given time frame. Furthermore, professional learning communities must recognize that some of the actions associated with their team, will take place outside of the team time. This will require participants to come prepared to share, question, and expound on activities occurring outside of the time dedicated for the team to meet.

The next theme that emerged is that administrative support is vital to a successful professional learning community. Clearly, the administrator has more authority than the teaching staff to schedule common planning times, and to organize teachers into a team format which would be beneficial to the student body. The support, though, extends far beyond scheduling common planning times. Respondents indicated that successful professional learning communities incorporated: administrator support of the program; administrator attendance at meetings in order to be an active and equal participant; and the ability to engage and support teachers in stepping outside of traditional comfort zones in order to share ideas, ask questions, and become transparent in pedagogy in order to learn from your colleagues. These aspects, of professional learning communities, can be challenging for many to accept: therefore, the administrator must support the team and assist in maintaining a focus while pushing the team to explore outside of their boundaries and taking part in activities such as those previously mentioned. The administrator has the ability to control the structures guiding the organization and can adapt those to meet the needs of various teams as they push forward in their pursuit of professional growth.

Finally, there must be dedication to the concept of professional learning communities and their role within the school building. The literature indicates they are the newest wave in

education; however, professional learning communities are receiving significant support and attention by leading researchers and educational specialists (Drago-Severson, 2008; DuFour, 2007). This leads the researcher to believe while it may be a wave, the concept is not going to dissipate as it has the potential to carry substantial results. The principal and the district must be dedicated to the concept and implementation of professional learning communities if they are to find success within the host district. The organizational support becomes a vital component to the success of the community. From the principal through the superintendent, the administration has the ability to set the framework for team success. The administration's organization and development of the building's structural components, i.e. schedules, team members, student-to-teacher ratios, differentiated observation plans, and similar components, will all play a vital role in organizing and aligning a team to meet the demands of becoming a professional learning community.

Again, many teachers step outside of their comfort zone when taking part in various activities associated with the professional learning community. Therefore, the principal must show support and dedication to stand by the implementation of this community even when those participating may be asking for a reprieve. The relationships within the team that will aid the professional learning community in reaching success will take time to nurture and will need attention as team members learn about themselves and the collective whole. Also, there must be a dedication to the goals and vision as determined by each professional learning community within the building. It is not realistic to believe that all communities will have the same goals and vision, but it is realistic to believe all will be student centered and focused on achievement. Therefore, the principal will need to learn about the individual professional learning

communities that may exist and identify the focus guiding each team of educators. This in turn, will begin to identify the activities appropriate for each team and the achievement of their goals.

These themes became apparent as the data was analyzed, particularly as the open ended responses were examined. They are parallel to what the current research says is essential for professional learning communities to thrive in today's school environment. While the researcher was primarily concerned with determining if any transformation was occurring, it quickly became clear that one was and these themes were essential components to the professional learning communities' success or failure.

5.2 RECOMMENDATIONS FOR FURTHER STUDY

From this study, the following recommendations for future research can be established based on the findings of this study and if this study, were repeated with a comparable population:

1. Perform a similar study with the use of more open ended questions and an interview format with the participants. An interview would allow the researcher to learn more specific details about the situations facing the principal and how they moved towards professional learning communities. While interviews and open ended questions pose challenges in data analysis, the information would be vital to learning more about the change process that may be occurring. The interview format would also allow the researcher to ask follow-up questions and discover more depth to the answers provided by respondents.
2. Another study may focus specifically on a small population of middle schools, for example one that is not practicing the teaming concept; one that organizes the

staff onto interdisciplinary teams; and one that identifies itself as hosting teams functioning as professional learning communities. The researcher could analyze student data to determine if there is a positive correlation between student achievement, and the existence of professional learning communities within the school culture.

3. Perform a case study of one school's transition from the interdisciplinary teaming concept to a professional learning community. The researcher could look at the steps taken during the transformation; the role of the principal; and what benefits are identified as a result of the transformation.
4. A comparison study of two districts, both of whom have identified their district as containing professional learning communities. The comparison would be between the size of the schools. The participants would include one school considered smaller in size and containing only one team per grade. The other school would be larger and have multiple teams at each grade level. The researcher would compare the schools, their paths to professional learning communities, how the principal aided in the transformation, and how resistance was dealt with as this all occurred.

APPENDIX A

LETTER TO PRINCIPAL REGARDING STUDY

June 23, 2009

Dear Middle School Principal,

I am currently a doctoral candidate in the Administrative and Policy Studies program at the University of Pittsburgh and the Principal of New Brighton Middle School in the New Brighton Area School District. I am interested in your participation in my research study. It would require you to complete a brief 10-15 minute internet based survey. The survey may be accessed at http://www.surveymonkey.com/s.aspx?sm=MEtYl_2bZN9JuHkZpzkbVGdg_3d_3d, and will remain available June 23 through July 21, 2009. As an experienced educator I believe my research topic will provide benefits to your middle school program as you reflect and identify key aspects of your middle level program.

The purpose of the study is to determine if middle schools are transforming interdisciplinary teams into professional learning communities. The teaming concept has been at the heart of the middle school philosophy since the middle school movement of the 1960's, but the demands of the 21st Century have put a new strain on educators. As accountability has increased and teacher pedagogy has changed, many interdisciplinary teams are indirectly performing as professional learning communities as they advance beyond the initial framework of an interdisciplinary team. Although the transformation may not be a conscious one, I wanted to focus on the actions of current middle school teams and determine if this transformation is occurring, regardless of conscious choice to alter the format within which the teams exist.

While much attention has been given to the philosophy of interdisciplinary teaming, little has been completed on professional learning communities and the transformation from interdisciplinary team to professional learning community. Your participation will prove valuable as I seek to uncover the depths of this transformation within the middle school community of Western Pennsylvania.

Participation in this study is strictly voluntary, there is no financial compensation for participation, and confidentiality will be addressed throughout. To maintain confidentiality neither your name, email address, IP address, nor other identifying information will be submitted with completed surveys. The survey program is designed to transmit responses and not identify respondents. If you have additional questions, please contact me at (412) 299-0846 or at jguarino@nbsd.k12.pa.us. You may also contact my dissertation chair, Dr. Sean Hughes at (412) 648-7165 or at shughes@pitt.edu.

Thank you for your time and participation in this study.

Sincerely,

Joseph A. Guarino
School of Education
University of Pittsburgh

APPENDIX B

FOLLOW-UP CONTACT TO PRINCIPAL REGARDING STUDY

Dear Middle School Principal,

Recently I contacted you regarding a request for your participation in a survey aimed at identifying current practices of middle schools located in our area. First, please let me thank you for your attention to this and thank all who have completed the survey. The responses are excellent and I appreciate the time you have given to complete the survey.

For those who have not had a chance to complete the survey, please feel free to do so at your convenience. The survey will remain open through July 21, 2009. It will take approximately 10-15 minutes to complete and will assist in data collection as I complete my dissertation through the University of Pittsburgh. It is accessible at
http://www.surveymonkey.com/s.aspx?sm=MEtYl_2bZN9JuHkZpzkbVGdg_3d_3d

Again, I thank all for their support. Your professional knowledge and experience is very important to this study. If you have any questions please do not hesitate to contact me and remember the survey is completely voluntary and entirely confidential.

Sincerely,

Joe Guarino
412-299-0846
jguarino@nbsd.k12.pa.us

APPENDIX C

FINAL CONTACT TO PRINCPAL REGARDING STUDY

Dear Middle School Principal,

Recently I contacted you regarding a request for your participation in a survey aimed at identifying current practices of middle schools located in our area. First, please let me thank you for your attention to this and thank all who have completed the survey. I have received excellent feedback and I appreciate your time.

For those who have not had a chance to complete the survey, I wanted to ask for your support and let you know that the survey will remain open through July 21, 2009. It will take approximately 10-15 minutes to complete and will assist in data collection as I complete my dissertation through the University of Pittsburgh. It is accessible at http://www.surveymonkey.com/s.aspx?sm=MEtYl_2bZN9JuHkZpzkbVGdg_3d_3d
Again, I thank all for their support. Your professional knowledge and experience is very important to this study. If you have any questions please do not hesitate to contact me and remember the survey is completely voluntary and entirely confidential.

Sincerely,
Joe Guarino
412-299-0846
jguarino@nbsd.k12.pa.us
http://www.surveymonkey.com/s.aspx?sm=MEtYl_2bZN9JuHkZpzkbVGdg_3d_3d

APPENDIX D

SURVEY

1. Is your community considered rural, urban, or suburban?
    - ▫ Rural
    - ▫ Urban
    - ▫ Suburban

2. How many students are currently enrolled in your school? _____

3. What grades are included in your middle level school? Check all that apply.

    - ▫ 5
    - ▫ 6
    - ▫ 7
    - ▫ 8
    - ▫ 9
    - ▫ Other

4. How many years of experience do you have in K-12 education, including this year? _____

5. How many years have you served as principal of your current school, including this year? _____

6. Prior to becoming a middle level principal, at any time were you a middle level teacher?

   - ▫ Yes
   - ▫ No

7. Does your school organize teachers onto interdisciplinary teams, with each team containing core content teachers who instruct a common group of students?

   - ▫ Yes
   - ▫ No

8. In your opinion, what are the major functions of a middle school interdisciplinary team?

9. From an organizational perspective, what are some of the things that you do to support the teaming concept (e.g. scheduling common planning time, attending meetings, facilitating discussions, etc.)?

10. Please rank the occurrence of the following during team meetings. 1 = Most frequently occurs to 6 = Least frequently occurs.

    ___ Lesson Study

    ___ Team goal setting and progress review

    ___ Discussion of specific student concerns

    ___ Discussion of specific educational challenges and input for solutions

    ___ Organization of field trips, class activities, etc.

    ___ Discussion and development of curriculum, teaching practices, and assessment

11. When decisions must be made by the team, what is your role and how are those decisions reached?

12. What activities are currently engaging the teams within the school? Please rate all of the following.

	Weekly	Monthly	Bi-Annually	Annually	Never
Team members collaborate to create common goals and/or a shared vision to guide the team.					
Team members review progress towards common goals.					
Teams discuss issues relevant to attendance and school requirements.					
Team members observe peers.					
Team members engage in discussion about topics such as athletics, student activities, and field trips.					

Teams document their use of team time and provide that to the administration.					
Teams review student work to share and improve instructional practices.					
Teams monitor student attainment of essential learning standards.					
Team members discuss teaching methods.					

13. In what ways does your school promote a collegial environment and the sharing of professional development experiences, best practices, etc.?

14. How do you define a professional learning community?

15. Do you believe teams within the school are functioning as professional learning communities? Please explain.

16. From a building perspective, what would you like to say about your teams in a year that you cannot say now?

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