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*East Tennessee State University*

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Classroom Environment: Content Analysis Examining Characteristics of Classroom  
Environments That Affect Students' Academic Achievement

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A dissertation

Presented to

The faculty of the Department of Educational Leadership and Policy Analysis  
East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

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by

Lucinda Bellamy

August 2016

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Dr. Virginia Foley, Chair

Dr. Cecil Blankenship

Dr. John Boyd

Dr. Pamela Scott

Keywords: Environment, Learning Targets, Cooperative Groups, Positive Discipline

## ABSTRACT

### Classroom Environment: Content Analysis Examining Characteristics of Classroom Environments That Affect Students' Academic Achievement

by

Lucinda Shaddock Bellamy

The purpose of this qualitative study was to extend the understanding of the characteristics of a classroom environment that impact students' engagement in academics and therefore has the potential to positively impact student achievement scores. Data were collected through content analysis to analyze for reoccurring themes to assess how the characteristics of the classroom environment impact student's achievement. Ten classrooms within the Kingsport City District were observed and analyzed for this study.

Six research questions guided this study, and qualitative data were analyzed for reoccurring themes. Findings from this study suggest that implementing certain characteristics in to the classroom environment can positively impact students' academic success. The development and construction of classroom environments should include such characteristics as positive discipline, well laid out and organized classrooms, accountable talks, collaborative groups, positive teacher student interaction, and learning targets. As a result of this research a recommendation for practice is that districts support the development of classrooms that would positively impact student's achievement.

## DEDICATION

This dissertation is dedicated to my beautiful children, family, and my parents, Dave and Pat. Thank you all for supporting and loving me through this journey. I couldn't have done this without all of you by my side. You are my angels!

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I would first like to say thank you to my beautiful children, “extended” family, and husband, Tucker, Keagan, Bella, Cooper and Leah Taylor. I can never express how much I love you and thank you for supporting “mom” when the hours were long and I was ready to give up. Your strength and love helped me to overcome all the obstacles and complete my journey. I started this journey to show you that you can accomplish anything you put your mind to and to remind you that life is not always easy but so worth the hard work it takes to accomplish your dreams. Remember to always dream big and never stop learning! You all are my world and my heart.

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## CHAPTER 1 INTRODUCTION

*“One looks back with appreciation to the brilliant teachers, but with gratitude to those who touched our human feelings. The curriculum is so much necessary warm materials but warmth is a vital element for the growing plant and for the soul of the child.”*

*Carl Jung*

The classroom environment can be an important part of the academic success of students. Creating a warm inviting area where children can comfortably and safely explore, engage, and learn is the key to their success. There are many ways to construct an inviting classroom by including such characteristics and elements as comfortable lighting, temperature, warm décor, and wall colors and maintaining an organized, safe classroom layout for students to engage in purposeful lessons. Adeymo (2012) reported that by creating a classroom that is welcoming and in which a child feels safe and secure it will positively affect academic performance. The quality of education has been reflected not only in the subjects taught and achievement levels reached but also in the learning environment. Educators and researchers have agreed that the total environment should be comfortable, pleasant, and psychologically uplifting; should provide a physical setting that students find educationally stimulating; should produce a feeling of well-being among its occupants; and should support the academic process (Adeyemo, 2012).

Kayikci (1993) stated that the classroom environment is a vital part of successful and effective instruction. The classroom plays a crucial part in helping students stay engaged and actively involved in their learning. A well-prepared physical environment and order eases the learning and teaching process and can enhance the class participation of students (Kayikci, 1993). Weiss and Pasley (2004) reported that part of creating a successful environment is presenting purposeful and engaging lesson plans, creating an environment that is optimistic and

positive, and developing an area that is safe and secure for the wellbeing of the students. High quality instruction that is rigorous, aligned with content standards, and uses instructional strategies to meet the academic needs of all students is a key factor in promoting a culture of engagement and achievement in the classroom.

The physical environment refers to the physical characteristics of a classroom such as the size of the room, layout and organization, the lighting and temperature of the room along with the main elements, the students and the facilitator. The classroom environment also includes such elements as classroom management, discipline techniques, well organized lesson plans, and the creation of a safe and secure environment for the students. Burns (2009) reported that when students feel that they are welcome in a classroom, they feel are safe and secure, and that if the atmosphere is positive and optimistic, they will perform better academically. Researchers have found that school environment affects more than academic performance, it influences students' emotions and health behaviors as well (2009). The importance of creating an engaging classroom environment is vital to the academic success of the students who occupy that space every day.

### Statement of the Problem

The purpose of this qualitative study was to extend the understanding of the characteristics of a classroom environment that impact students' engagement in academics and, therefore, has the potential to positively impact student achievement scores. The classroom environment can either enhance or impede a student's ability to learn and to feel safe and comfortable as a member of his or her classroom. Students spend an average of 7.5 hours per day in the classroom. With this much time spent in one place, how does a classroom environment affect students' potential achievement? Can having a classroom that is unorganized, cold, and

unwelcoming interfere with student learning? Erlauer (2003) stated that students need to feel welcome, safe, and a part of their classroom environment in order to succeed academically. When a classroom is poorly designed and does not address the physical and emotional needs of the students, the academic achievement of the students can be adversely affected. Poorly designed and laid out classrooms can also cause chaos and distraction from the learning that should be taking place. Erlauer also stated that a classroom's physical design can improve or worsen children's academic performance by as much as 25 % in their early years.

### Research Questions

To examine the characteristics of a classroom that impact student's achievement scores, the following research questions were asked:

- 1.) How are teachers implementing discipline practices in their classroom in order to support student achievement?
- 2.) How does the teacher's organizational design of the classroom support student achievement?
- 3.) How do teacher expectations motivate students to learn?
- 4.) How do teacher and student active collaboration and use of cooperative groups support student achievement?
- 5.) How do the teacher's classroom temperature and lighting support student achievement?
- 6.) How does the teacher's use of different teaching techniques support student achievement?

### Significance of the Study

The significance of this study was to gain an understanding of the importance of creating classroom environments that are engaging, supportive, and that help students reach their full potential academically. The study also focused on the importance of developing safe, secure environments that support collaborative learning, where students can reach their fullest potential academically. In addition, the study focused on what key elements or characteristics of a classroom such as the classroom layout (tables, chairs, desks, classroom resources) helped to promote academic success in students, the types of classroom management that are used throughout the day (such as positive discipline, consequence and action discipline, Wheel of Choice, etc.), classroom décor (such as wall colors, student works posted, “I can” statements, and Learning Targets, plants, pictures, etc.), the temperature and lighting of the classroom, and finally, motivation (This can include lesson plan activities, cooperative or collaborative learning groups, use of multiple intelligence incorporated into the learning, giving students a voice in their choices and learning, etc.). The study was focused on the importance on creating rooms that successfully promote the academic success of students. Developing classrooms that are designed around collaborative learning allows the teacher to become the facilitator who watches over and guides the students. The students then become the instructor and are able to voice thoughts and views on any given subject matter. This type of collaborative learning environment creates students who are more confident and who become conceptual learners. Opdenakker and Minnaert (2011) reported that learning environments are important to student learning, cognitive outcomes, and motivation, when those environments combine traditional aspects of structured teaching, a supportive, warm, and responsive teacher, aspects of constructivists approaches, and good classroom management.

### Definitions of Terms for This Study

- 1.) Accountable Talks-refers to a way that students communicate to each other about the learning that is taking place. Marzano et al. (2003) stated that talk is on topic and the students are attentively listening to the speaker adding on to the ideas and thoughts of others respectively and purposefully.
- 2.) Conceptual learner-refers to a student's type of learning where he or she synthesizes and analyzes his or her understanding of knowledge taught and transfers that knowledge to other subject areas. The student is able to take his or her learning to an in-depth level instead of just surface level knowledge.
- 3.) Cooperative groups-refers to a group of students who are partnered together to work collaboratively and collectively on a project or lesson. The students each have a responsibility or part to contribute to the group as they are working. The collaborative groups encourage independence and leadership in the classroom.
- 4.) Correlated color temperature-refers to a specification of the color appearance of the light emitted by a lamp, relating its color to the color of light from a reference source when heated to a particular temperature. The Lighting Research Center (2004) stated that correlated color temperature is a specification for white light sources used to describe the dominant color tone along the dimensions from warm to cool.
- 5.) Environment-refers to the conditions and circumstances that surround someone. Merriam-Webster (2016) states that environment is the conditions and influences that affect the growth, health, progress, etc., of someone or something.
- 6.) Facilitator-refers to the teacher taking a passive role in the classroom as the facilitator and allowing the student to become the leader or the teacher to his or her peers. The teacher

takes a backseat to the directing of the learning and only steps in to guide or assist in the students learning student's friendly form so that the student can fully comprehend what the standard means.

- 7.) "I can" statements-I can statements are statements posted by the teacher to allow the students to understand what they are expected to be able to do after the lesson or concept has been taught. The statements are based on the state standards and are usually written in student- friendly form so that the student can fully comprehend what the standard means.
- 8.) Learning Targets-Learning targets are the content standards for curriculum that is being taught and are the ending goals or objectives of the lesson. The learning targets allow the students to see what the final destination or goals of the lesson are and help the students see the purpose of their learning.
- 9.) Multiple Intelligences-refer to the various types of learners that may be in a classroom such as spatial-visual learner, kinesthetic learner, interpersonal and intrapersonal learners and linguistic learner. Gardner (2006) states that people have different strengths and intelligences so instruction which is designed to help students develop their strengths can also trigger their confidence to develop areas in which they are not as strong.

#### Delimitation and Limitations

Certain limitations existed regarding this study due to the population that was chosen to participate. The population was limited to 10 teacher classrooms located in a single school system in Kingsport, Tennessee. Only 10 teachers in this school system were invited to participate. The weaknesses can be limited by having the researcher not make early assumptions on data and let the themes and pattern emerge through the collection of the data. In grounded

theory there are no rules to follow for identification of categories. Also, it is important to allow time for the collecting of data to happen and not rushing or creating bias of the data by trying to rush the process along in any way.

In grounded theory research some validity and reliability checks are achieved by constantly checking findings that are emerging as the data are being collected and comparing theories and analysis. Another check would be making sure that the data that are being collected are accurate and free of as much bias as possible. The data collection process on descriptive information (such as the classroom environment) needs to be accurately reported and journaled by the researcher in order to lessen confusion and researcher bias.

As with any research study, there can be a degree of bias within the data. In this study the potential of bias could come through the observation methodology that is being used to gather data from the willing participants. Bias can come in the form of the researcher making assumptions on observations or incorporating his or her own feelings into the observations. Bias could come from the teacher who is being observed feeling he or she should put on a show or act unnaturally when the researcher is observing the classroom. Bias could come from the researcher interpreting lessons and activities either negatively or positively during classroom observations.

The analysis of the observations could have researcher bias in it. Although this may not be the intention of the researcher, feelings and emotions do play a part in the research process and can cause unintentional bias.

## Overview of the Study

This chapter establishes the need and the basis for this research study to be conducted. The chapter includes an introduction to the study, citing research that supported the need for creating warm and secure environments where students can engage and actively participate in their learning. The chapter also includes the statement of the problem; what characteristics of a classroom affect student's academic achievement, and also research questions. Finally the chapter outlines definitions of relevant terms and the delimitations and limitations of the study.

## CHAPTER 2

### LITERATURE REVIEW

Suleman and Hussain (2014) reported that studies on the classroom environment revealed that physical environment plays a vital role in the teaching-learning process. It can affect the performance of both teachers and students. The classroom environment includes many different facets. The environment can include the placement of tables and chairs, lighting and temperature, classroom management, discipline techniques, and engaging lesson plans. Evanshen and Faulk (2011) stated that the way teachers organize early childhood classrooms reflect their understanding of the ways children learn as well as the structures teachers believe will support children in that learning. The physical environment of a classroom plays a part in the ownership students feel about their school and more specifically their class. Bushong and Sheffer (2009) reported that the classroom environment should do as much to foster cooperation and acceptance as the instructional method the teacher uses. The type of classroom environment that a teacher creates and encourages can either increase or decrease a student's ability to learn and feel comfortable as a member of the class. McDaniels (2012) stated that a well-designed and organized classroom can help to improve morale and success of the student. When students feel that they are safe, secure, and comfortable in their environment, they will be more willing to participate and become actively engaged in their learning with a positive attitude. Creating a positive learning environment will optimize student learning, help build a cohesive classroom community, and create a pleasant work environment for both teacher and students. Evanhen and Faulk (2011) stated that if the goals of education are for children to engage in learning, develop higher order thinking skills, reflect, and understand, then those children need opportunities to play with learning in a classroom environment. This environment needs to support each

individual child by engaging him or her in meaningful work that can lead to higher level thinking.

The classroom has evolved throughout the years. O'Neill (2006) reported that classroom environments have gone from self-contained, teacher led rooms where the students learned and memorized facts, to full inclusion environments where the students are actively engaged in their learning and the teacher has become the facilitator. This is largely true in a constructivist model; the teacher's role becomes the facilitator and not just a leader. Instead of telling students the answers, the teacher asks questions to help them discover the answers for themselves. O'Neill suggested that for this type of teaching to be successful the teacher needs to give students time to explore the material and construct meaning from the experience. In early 1950s the classroom teacher was believed to be the leader of the classroom and the instructor of the learning. Students were taught by a series of steps, and the students acquired these steps consecutively gaining knowledge as they navigated through the steps, pulling all the pieces together one at a time. Theorists such as Howard Gardner, Reggio Emilio, and Jean Piaget have all helped to change the thinking of how the student learns and the importance of the classroom environment to the shaping of how a student learns.

Baualdi (1996) reported that Gardner is one theorist who believes that everyone learns in different ways, has different strengths and abilities. Gardner questioned the idea that intelligence is a single entity, that it results from a single factor, and that it can be measured simply via IQ tests. He also challenged the cognitive development work of Piaget. Bringing forward evidence to show that at any one time a child may be at very different stages, for example, in number development and spatial and visual maturation, Gardner (1996) has successfully undermined the idea that knowledge at any one particular developmental stage hangs together in a structured

whole. Baualdi also stated that in order to create classroom environments that can ensure that all learning styles are met it is important to make sure that the teacher is incorporating in his or her lesson plans such components as technology, hands on activities, movement, visually stimulating resources, art, music, numbers, and tasks that encompass the whole child.

Arend (2012) reported that Gardner's theory of multiple intelligences suggests students have a variety of abilities and intelligences. According to Gardner individuals differ in their strengths in the various intelligences. Some may be strong in logical and mathematical reasoning, whereas others may have exceptional musical talent or physical dexterity. Peters (2010) stated that according to the multiple intelligence theory identifying each student's intelligences has strong ramifications in the classroom. Creating classrooms where all types of learning styles are incorporated will allow for each style to grow and prosper academically, socially, and intellectually. Supporting students both behaviorally and academically begins with meeting their needs. Peters also reported that by developing lessons that draw on a variety of different intelligences, teachers can hope to better meet the needs of many more students than through one method alone.

Garrett (2013) reported that the theorist Reggio Emilio sees children as very competent protagonist and initiators who interact with their environment. The teacher, parent, and child are all collaborators in the process of learning and the environment of the school is seen as the third educator. In a Reggio school classrooms and students are given independence and the chance to experiment all while learning. Klein (2002) stated that educators in Reggio schools collaborate and purposefully set up the environment so there is a clear message inviting children to take part in new explorations and to look at what they have done in the past, helping them make deeper inquiries. Experiences such as these encourage revisiting (Klein, 2002). The classrooms are set

up so students can become hands on learners and the teacher acts as their guide or the facilitator of that learning. The students learn independence and are engaged in their surroundings and activities. New (2007) stated that characteristics such as support, openness to experimentation and innovation along with pride and a sense of optimism come directly from the features of Reggio early childhood services but respond to needs that know no cultural boundaries. These characteristics are fundamental to inspiring and inspired learning environments.

McLeod (2015) stated that Piaget's theory is that children developed and learned through a series of stages. His theory was based on biological maturation and stages. According to Piaget's theory children should not be taught certain concepts until they have reached the appropriate stage or cognitive development. Piaget (1974) stated that children must be active learners who explore and learn to solve problems through their exploration. The use of active methods that give broad scope to the spontaneous research of the child or adolescent and requires that every new truth be learned be rediscovered or at least reconstructed by the student and not simply imparted by the student. McLeod (2015) reported through their exploration children become independent problem solvers. Within the classroom learning should be student centered and accomplished through active discovery learning. The role of the teacher is to facilitate learning rather than direct teaching. Piaget (1974) suggested that the teacher as the organizer remains indispensable in order to create the situations and construct the initial devices that present useful problems to the child. The teacher will cease being a lecturer, satisfied with transmitting ready-made solutions, and his or her role will turn to one of a mentor stimulating incentive and research.

A final theorist, Dewey, had a view on education in the 1900s that was very progressive. His theory was that children and people learned through an approach of hands-on activities and

experiences, they learn through life skills. Children should be excited about their learning and interested in the concepts being taught. Within Dewey's theory the school becomes a place where students become socially evolved with others and learn through an approach of hands-on activities and experiences. Dewey (1915) reported that children become active with types of occupations that reflect the life of the larger society and permeate through with the spirit of history, art, and science. When the school successfully trains and introduces into society and community children who are saturated with the spirit of service and strategies of self-direction, the larger society will gain individuals who enhance that society. In education the learning should be integrated where the students become the leaders of their learning. Dewey's research showed that both the student and the educator would explore in their environment, but the role of the educator would become one of the guide or the observer, interjecting thoughts and questions as needed. Dewey's approach was child centered. A child-centered approach to education places the emphasis of learning on the needs and interests of the child. In Dewey's view children should be allowed to explore their environment.

With all of these theorists there is a central theme of the importance of the classroom environment and the role it plays in students' learning. The classroom becomes a place where a student can become an active participant in his or her own learning. The students learn to build relationships and concepts that will guide them to being problem solvers and conceptual learners through classroom environments that support, encourage and nurture all types of learners.

Kovalik and Olsen (2009) reported that learners come in all shapes and sizes and from all types of family backgrounds. An enriched environment is a learning environment that focuses on all the senses on the concept or skill to be learned. The teacher needs to keep in mind the needs of students from all type of economic and social backgrounds in order to make sure that all

learners are included in the classroom. For example, students who come from poverty can have totally different needs than those who come from middle or privileged homes. Socioeconomic backgrounds of children can have a huge impact on students' behavior and academic performance. Jensen (2009) stated that children raised in poverty rarely choose to behave differently, but they are faced daily with overwhelming challenges that affluent children never have to confront, and their brains have adapted to suboptimal conditions in ways that undermine good school performance. The classroom environment is the perfect place for teachers to not only teach children content knowledge but to build positive, caring respectful, learning communities where students can learn valuable social skills that will enhance both their emotional and academic well-being. Comer, Ben Avie, Haynes, and Joyner (1999) reported that when students believe they can learn and have success at learning they develop a healthy disposition that promotes their physiological development.

### Classroom Culture and Collaborative Groups

Sergiovanni (1994) stated that there can be major impact on a student's academic success and motivation based on the climate of a classroom. He also stated that it is very important for the teacher to build teacher-student relationships at the beginning of the school-year. A teacher can build those relationships by communicating classroom expectations and making the student feel welcome the moment he or she walks through the door. Sergiovanni suggested that fostering a sense of community that can bind the teacher and student together can help to bind students together in ways that will lift both students and teachers to a higher level of commitment, performance, and self-understanding. Creating a classroom community that enables them to become a collective group of "we," and not just a group of "I's" allows them to feel that

they belong and that they are a part of the classroom. Dufour, Dufour, and Eaker, (2008) suggested that collaboration and cooperation within the classroom are two ways that a teacher can help build peer relationships. When students come together creating, discussing, and engaging with one another they build self-confidence and social skills they can use throughout their lifetimes. It is important for a teacher to develop classroom norms that will encourage and reflect the student's commitment to the class as a whole and that will bring stability to the daily routine. The norms of the classroom should reflect all members of the classroom and all members should be involved in making those norms.

Iyer (2013) reported that cooperative learning promotes thought provoking and interactive environments for the students. The instruction and activities based on cooperative learning are creative, thought provoking, and interactive and offer ideas for how the children can live the value in practice and find the answers from within themselves. Cooperative learning can be used to enhance and promote higher student achievement. In cooperative classrooms students are able to communicate with one another their thoughts, feelings, and ideas based on the concepts that are being introduced by the teacher. Johnson and Johnson (2009) reported the students become active members in their own learning taking ownership of their thinking and learning that is needed to work effectively with diverse schoolmates. Students learn how to communicate effectively, provide leadership, and help the group make good decisions, build trust, repair hurt feelings, and understand each other's perspective. Cooperative groups provide an arena in which individuals develop the interpersonal and small group skills. Teachers in a cooperative learning classroom will become the facilitators and will allow the students to take charge and become the instructor. Cooperative learning promotes greater efforts to achieve more positive relationships and greater psychological health than competitive and individualistic

learning. Cooperative learning strategies can be used in a classroom to help students reach their potentials. Iyer (2013) stated that cooperative learning has become increasingly influential in the past 20 years and can be a great tool to make students understand their strengths and weaknesses in group-focused activities. Armstrong (1994) reported that cooperative groups provide students with an opportunity to become a social unit, which is an important prerequisite for students to become successful in real life work environments.

Schlechty (2009) reported that cooperative learning is not just about putting children in a group to work but about creating classroom activities and projects that help to promote independence, individuality, communication, social skills, and accountability. In cooperative groups students come together to problem solve and strategize solutions to all sorts of problems. Including cooperative groups in the classroom will enhance the culture of the classroom by motivating the students into doing their personal best. When a student has critical thinking skills, can work collaboratively, and has the skills necessary to work in groups, he or she will have skills that are essential citizenship skills also. Gibbs (2006) stated that essential collaborative skills learned become the foundation for a vital community, working together with others from diverse backgrounds, solving problems, assessing for improvement, and celebrating their achievements. The ongoing practice of these key collaborative skills creates a classroom with high levels of participation on the part of all students and establishes a positive climate for teaching and learning.

Comer et al. (2009) looked at strategies that help to keep collaborative learning a highly effective method of learning. They analyzed several things such as how to prepare students for group work, the teacher's role in the learning, group size and composition, and scaffolding collaborative work on complex tasks. First students must be prepared to work in collaborative

groups by incorporating team building exercises that build mutual respect and group norms. Next, the teacher has a role in the process also. Teachers must become the facilitators and guides allowing the students to work and think for themselves. The teacher's role will be to step in and guide as the group needs. The size and composition of the group was also another strategy that Comer analyzed. The teacher must decide if the groups should be heterogeneous or homogeneously grouped and how many students should make up the group size. Finally, the groups should be scaffold to be able to work on complex tasks. With this strategy there will be times when the groups can begin work without any prior knowledge or teaching of the content to be taught, whereas there will be times when discussions of content will need to take place prior to students beginning their work in order for the groups to be successful. Comer et al. also suggested that collaborative learning is potentially a highly effective method of teaching and instruction. Using methods such as the ones listed above will help to promote productive group processes and provide needed support to students as they engage in complex tasks are likely to be effective.

Coon (1993) outlined and broke down several areas to guide the beginning teacher on how to create and spark new methods, ways to instruct students, and to build successful classrooms. He outlined creative, suggestive ways to build positive classroom environments starting before school opens, through the school year, and ending with a chapter on inspiration and ways to create special events and classroom management. In creating a positive classroom environment, it is instrumental to build students' self-esteem and confidence in order to help them succeed. Students feel more able to learn and succeed when they are relaxed when they are a part of a positive atmosphere. This classroom atmosphere can be created by keeping a positive attitude towards the class as a whole and by designing a functional and cheerful room that is

suited to the learning that is taking place and that minimizes any frustration (1993). Coon outlined the importance of building self-esteem by supporting and making students feel good about themselves by accepting and giving clear guidelines within which they can explore and grow. Students should have their success celebrated and be given support and praise to move on from times of mistakes and stumbles. They should never feel that their mistakes are failures but merely experiences that they can expand and grow from. To help a child develop a positive image a teacher can offer acceptance, set limits on specific actions, offer respect by giving the child more responsibility, allow the child to take risks, and capitalize on the child's strengths. When students feel they are accepted and are learning in a positive atmosphere, they will be more successful academically. Coon emphasized that when a classroom has a comfortable atmosphere and is cheerful students will enjoy learning more.

### Motivation

It is important to establish and keep students motivated and engaged in their learning. Erwin (2004) suggested that when establishing motivation in the classroom a teacher can use such strategies as collaborative learning groups, positive reinforcements, student choice activities, and purposeful hands-on activities. Collaborative learning groups help students learn to work collectively in a group sharing and discussing ideas and problem solving strategies. They are able to take these skills and transfer them into all subject areas of the classroom building their self-confidence and esteem. Kobus, Maxwell, and Provo (2008) studied ways to increase student motivation in the classroom setting. Three grade levels and 80 students were observed during a 5-month motivation intervention. The motivation intervention strategies that were used were providing creative engagement, positive reinforcement, and self-assessments. The targeted

desired behaviors that were being observed were improvements in the areas of off-task behavior, student work quality, and following directions. Behavior checklists, parent checklists, and student checklists were all used to gather data on opinions of both the students and parents concerning schooling. The results of the study showed that the interventions were all effective in motivating all student behavior to some degree. Kobus et al. suggested that because the effects of this intervention were short lived, that it would be very beneficial for teachers to establish strategies to motivate and inspire students from the very beginning of the school year. The study also suggested that these interventions should be changed and revised as the effectiveness wears off in order to keep students fully engaged and motivated throughout the year.

Valerio (2012) noted that motivation is a fundamental element of students learning; teachers can assist in increasing and developing motivation for optimal achievement in the classroom. Through the facilitation of a supportive classroom environment, engaging learning experiences, goal setting, and teacher enthusiasm teachers can empower students to find joy and excitement in their learning. Motivating and engaging students daily are a challenge that most teachers face. Valerio also stated that motivation is a key element to not only keeping students engaged but in keeping classroom behavior issues to a minimum. If students are engaged and motivated in their work and are challenged, there is less time for distractions and behavioral issues. All classrooms have a wide range of learners, so there are several different types of motivation and encouragement strategies that need to be used to ensure that all students are being motivated and engaged. Esquivel (2000) conducted classroom-based research to find out if intrinsic motivation works with special needs students. The researcher, in order to meet the needs of the students, implemented positive discipline into the classroom along with routine class meetings. The teacher became the facilitator guiding the learning while using intrinsic

motivation to keep the students engaged. The researcher administered questionnaires to three targeted SPED students. The questionnaire was given three times during the course of the study. The researcher collected data points from the questionnaire to understand how the targeted students perceived themselves. Using these data points the researcher was able to show growth in the students' perception. Analyses of data supported the conclusion that when children have a positive learning environment where they feel comfortable, they become motivated and begin to grow academically, socially, as well as emotionally.

Stipek and Seal (2001) suggested that another way to create a positive culture in a classroom is creating a supportive caring community where students and teachers build respectful, warm relationships with one another. In order to create these types of environments teachers need to understand how to create and construct them. Students will be self-motivated to learn when they feel capable and skilled, and confident of becoming more so, when they have some choice and control over their learning; and when they feel loved, supported, and respected by their teacher. Johnston (2004) suggested that the language used in a classroom can have a huge impact on students emotionally and in motivating them in their learning. Within productive classrooms children are not just taught skills, they are taught how to be a part of building emotionally and relationally healthy learning communities. These healthy learning communities are helping students become competent, caring, secure, and actively literate beings.

### Positivity and the Power of Words

Johnston (2004) suggested that if teachers establish and create discussions among students by modeling positivity, collaboration, efficacy and carefully choosing their words to communicate the meaning of what they are saying, they become the model of how they want the

student to articulate their thoughts. Teaching children to construct meaning with their words is important to their becoming literate and confident. If a teacher can establish a routine of modeling ways to communicate with others in the classroom, it will make the classroom culture a more positive place where learning can take place. Vygotsky pointed out, that meaningfulness is what makes it possible for children to interact in productive ways, and that children need to be in control of their learning, integrating connections among feeling, thinking, and acting.

Weber (2004) supported the idea that positive words and respectful communication among students in a classroom are vital to the creation of a healthy classroom culture. Weber studied how words can have the power to inflict pain on others when the words are cruel or harsh. But on the other hand, words also have the power to bring communities together and build relationships among people. Weber reported that words have the power to not only hurt or breakdown a person; they also have the power to heal and lift people up. In a classroom environment the communication or way students articulate with one another can have a profound effect on their motivation and academic success. If students are encouraged to praise one another and speak positivity in their classroom environment, they will feel more confident in sharing and discussing their ideas. When students are working in groups on projects and have learned how to use “accountable” talks with one another, their self-esteem grows and they will engage more in their learning. Michaels, O’Connor, Hall, and Rasnick (2013) stated that talking with others about ideas and work is fundamental to learning. Talking with others gives individuals the opportunity to organize thinking into coherent utterances, hear thinking sounds out loud, listen to how others respond, and, often hear others add to or expand on their own thinking. Michael et al. (2013) suggested that the culture in a classroom can be affected greatly by the language being used in it. If students are constantly being yelled at or talked to in a negative way with put downs

and harsh words, they will become withdrawn and self-conscious. But if a teacher establishes early on strategies to help students articulate to one another in positive uplifting ways, it will build a culture of confidence, excitement, caring, and respect. For classroom talk to promote learning it must be accountable to the learning community, to accurate and appropriate knowledge, and to rigorous thinking.

Carpenter (2014) reported that accountable talks are a great way for a teacher to create a positive atmosphere and to foster great communication skills that will enable students to articulate their thinking views and ideas with others in a respectable, caring way. Students talk every day in the classroom about all types of events and things that may have happened to them but getting students to engage themselves and hold conversations that are relevant and on topic takes a lot of practice and modeling by the teacher in order to become normal everyday routine. It is important for teachers to remember that accountable talk is used to make sure that the talking that is happening among the students is about the learning that is presently going on in the classroom. Given that students are in control of authentic discussion and make decisions about important content themes and elements to discuss, it follows that critical content, higher-order thinking skills, and accountable talk are needed for students to engage in dialogic or authentic discussion.

Wolf, Crosson and Resnick, (2006) studied the relationship between the nature of the classroom talk and the degree of the rigor of the lesson task. In particular, they examined both the quality of the teacher's talk and students' talk and the relationship between the two. Further, the study was aimed to closely look at the teacher-student interaction to distill the characteristics of the teacher's talk moves that facilitate a rigorous discussion that reinforces students' understanding of a challenging text or concept and critical thinking (Wolf, et al, 2006). In the

classroom environment to engage students academically and to encourage academic success the students need to be able to articulate and communicate with others about the concepts that are being taught. Students need to be able to answer rigorous questions and expand on the thinking of others. The teacher will need to model and practice these types of accountable talk skills in order for the student to routinely use them in the classroom. Wolf et al. collected data at two different times throughout the study, once in the spring of 2002 and then again the following year in the spring of 2003. The participants consisted of 41 teachers who teach grade levels 1-8. There were 441 students also in the study. The data were collected by using an Instructional Quality assessment tool (IQA tool) that focused on four major aspects to promote student learning. The major aspects were accountable talk in the classroom, academic rigor of the lesson, clear expectations, and found the students' self-management of learning. Classroom observations were used to collect the data using the IQA tool. The results of the study provided a number of implications for classroom interaction for rigorous instruction. It raised awareness of the explicit use of linking talk moves that is vital to creating a community of learning. The next implication was that in order to generate an opportunity for students to expand their logic and knowledge, the educator needs to increase the use of the strategy. Finally, the last implication was that accountable talk needs to be used explicitly and appropriately following through with the appropriate formula of wait time and questioning when being used in the classroom. Through accountable talks students learn to articulate to one another in a way that is respectful and relevant. When the students hear the teacher model this talk the classroom environment becomes one that is respectful and nurturing.

## Classroom Lighting and Temperature

Another characteristic of the classroom environment is lighting and temperature. Having enough light to read and a comfortable temperature to work in is very important to the focus and engagement of students. If a classroom is too hot or cold, it can be a distraction to the learning process. The lighting could also deter students from the learning process. Having a classroom that is overly bright or dark could cause students to be overstimulated or struggling to concentrate. Kotaik and Olsen (2009) studied how lighting in schools has been examined from various points of views over the past 50 years. Sufficient light to easily read a book, see work on one's desk, and see the board have long been the accepted standards for classroom lighting.

In a study investigating whether daylight and other aspects of the indoor environment in elementary school student classrooms have an effect on student learning, the Heshong Mahone Group (2003), tested 8,000 students from 450 classrooms grades 3-6 looking at the relationship between daylight and student performance. Regression analysis was used to examine the effects of daylight on students learning. The results of the study showed that the visual environment is extremely important for student learning. The findings showed that things such as direct sunlight that is penetrating through unshaded south or east facing windows caused both thermal and glare discomfort. When teachers do not have control of their windows, student performance is negatively affected. When a classroom environment has good and ample view out a window, better results of student learning were found. The study also found that the acoustic environment was very important for learning. Excessive noises, annoying sounds, and classrooms with poor acoustics had negative effects on student performance. One other factor that affected student performance negatively was poor air quality and ventilation.

The Heshong Mahone Group's (2003) finding of the study also found that in order for the classroom environment to support and enhance student learning issues such as quiet ventilation systems and thermostat controls that the teacher can control should be accessible. Also window shades should be provided to eliminate glare and direct sunlight from entering the windows at an overwhelming amount. Lastly, better classroom design and materials that would help to eliminate noise would be extremely effective in supporting student learning and success.

Pulay (2015) examined whether a higher correlated color temperature of fluorescent lighting in an elementary school classroom influenced student on-task behavior compared to fluorescent lighting with a lower correlated color temperature. The findings of the research showed that the higher the correlated color of lighting does affect more students and has impact on student's behavior, academic success, and attitude. When the classroom environment has consistent and comfortable temperature and good lighting, the academic success of a student can be enhanced.

### Classroom Management

Classroom management is also a critical part of effective and successful instruction. Effective classroom management, which initiates with well-organized and efficient lesson plans preparation, helps a teacher teach and students learn. Students perform well in an optimistic classroom atmosphere and an environment in which they feel secure, safe, cared for, and involved (Aslam, Sulerman, Zulfigar, Shafaat, & Sadiq, 2014). Keeping students well behaved and on task will allow the teacher to concentrate on the instruction of the lesson being taught and will allow more time for facilitating the learning. Classroom management is a large part of the environment factor of a classroom. Having well behaved and on task students allows for all

students to feel safe and secure in the classroom. In order for students to be able to concentrate and perform well they need to be able to concentrate on their work and not their safety and wellbeing.

For most teachers the beginning of the year is the best time to establish classroom rules and procedures. Because classroom management is crucial to establishing control, consistency, communication, and respect amongst the students and teachers, it is important to make sure that rules and guidelines are created starting the first days of school. Wong and Wong (1998) stated that effective teachers introduce rules, procedures, and routines on the very first day of school and continue to teach them the first week of school. Effective teachers teach responsibility. The success of students and the classroom during the school year will be determined by what a teacher does on the first days of school. Wong and Wong explained how rules and procedures must be established very early on. Student achievement at the end of the year is directly related to the degree to which the teacher established good control of the classroom procedures in the very first week of the school year. Wong and Wong state that in order to be an effective teacher there are three characteristics that a teacher must be proficient in; the effective teacher must have positive expectations for student success, be an extremely good classroom manager, and know how to design lessons for student mastery.

Bushong and Sheffer (2009) suggested that to be most effective a teacher should establish class norms and procedures early on and make sure that those rules and norms are clearly stated and easily understood by the students. Establishing stability and structure in the classroom will allow the students to feel comfortable in their surroundings and be able to navigate confidently while actively engaging in their learning. Bushong and Sheffer explained that creating a warm and inclusive classroom environment while planning for all children to feel welcome and using a

number of methods could help educators create a learning environment that encourages and supports all types of learners. Buchong and Sheffer explain the importance of establishing a classroom environment that is favorable for helping all students work cooperatively in order to learn. Strategies that were outlined as key for establishing a warm inviting classroom were creating an organized space that has easily accessible resources for students and adding color to the classroom in order to bring life to cold, stark rooms. Another suggestion was to create traditions and establish classroom meetings to help students become problem solvers and encourage collaboration and cooperation with the diverse members of the classroom. Finally, Buchong and Sheffer talked about the importance of teaching self-advocacy. If students can articulate their feelings and needs to others, they will be better able to become self-advocates. The classroom environment is a very important place for children to learn, grow, and become better prepared to participate in the world around them.

Northouse (2013) suggested that another way for teachers to be the most effective in the classroom is by recognizing their own skills and management styles and how to effectively use those skills in the classroom. Northouse suggested that there are many ways for people to be effective leaders in any situation. Some of those ways are by having teachers assessing their own characteristics, leadership styles, effectiveness, and attributes they possess. Motivation, personality, and ability are all important attributes that have an impact on leadership skills and knowledge. Northouse stated that educators need to be able to understand their strengths and weaknesses and capitalize on the strengths they have to be able to create classroom environments that will play to the strengths of their students and help lead them to the understanding of their own strengths and weaknesses. Sergiovanni (2007) explained that school leaders did not need to be charismatic or take charge leaders, but rather the schools needed to be consistent in their

purpose and their leaders needed to be ones who preferred not to lead but to support and bring thoughtful actions among all members of the school, both old and young.

Classroom management is largely the role of the teacher. In order to keep students engaged and focused, the teacher needs to be able to maintain an orderly well-managed classroom. Marzano, Marzano, and Pickering (2003) explained that learning cannot take place in a poorly managed classroom nor can effective teachers teach their students. If the learning environment is chaotic, disorderly, and disrespectful, this chaos will become the norm. Breaux (2005) suggested that an organized environment is a breeding ground for learning. The teachers must become masters of organization if they are to become the masters of their classrooms.

There are many ways to maintain classroom management. One of those ways is by establishing classroom rules and procedures. Evertson and Neal (2006) reported that children need to know that there are expectations in their classroom and need to be a part of creating those rules and procedures. One way teachers establish norms of participation is by creating activities that allow students to practice participating in discussion and then recognizing student behaviors, both publicly and privately, that support the norm. Fay and Funk (1995) described techniques that educators can use to reduce and help maintain classroom discipline. The love and logic approach is an approach to helping create discipline and behavior management control in the classroom. Love and Logic is an approach to working with students that puts teachers in control, teaches children to think for themselves, raises the level of student responsibility, and prepares children to function effectively in a society filled with temptations, decisions and consequences. Fay and Funk also suggested that it's important when beginning a new school year and creating a classroom environment the teacher should expect a higher standard of behavior from the students. When students are held accountable for their actions and come up with their own

solutions for problems they become accountable for their behaviors. Giving students the opportunity to understand that they have an opportunity to solve a tough situation will create and build relationships, trust, and understanding. Fay and Funk suggested that a classroom that has fewer behavior issues will waste less instruction time and will allow students to take responsibility in creating a positive learning environment. Students should be offered a choice in their learning and not be demanded to do something to avoid a power struggle. Children who are given demands often make foolish choices and lose the power struggle between the teacher and the student. When a student is given a wide range of choices, that child is then given the opportunity to choose wisely. Fay and Funk also explained how when trying to gain control of a behavior problem in the classroom that it needs to be about shared control. When issues occur in the classroom with a student, instead of having a power struggle with the student, the teacher needs to use such techniques that allow the student to make choices within limits. Choices within limits allow the teacher to set limits without waging war. Giving a child choices and ownership of his or her decisions will give an adult more control. A child with some control over his or her life will spend little time trying to gain more.

Greenberg, Putnam, and Walsh (2014) examined America's traditional teacher preparation programs to see if 122 cited programs offer research based strategies to their teacher candidates to help them better manage their classrooms from the start. Greenberg et al. examined to what degree the programs provided opportunities to practice research-based classroom strategies, techniques, and management. The group identified various ways that the sample could work on classroom management and how much time these programs dedicate to classroom management. Greenberg et al. focused their analysis on classroom management instruction, practice, and training given to each program. The findings of the study showed that while most

programs claimed to teach classroom management, very little time and effort was given to classroom management instruction and management. The study reported that time and effort needs to be placed on providing opportunities for new teacher's preparation programs to teach new teachers how to manage a classroom successfully.

Classroom management is proactive and includes the establishment of appropriate classroom rules and procedures. Students must feel very comfortable and that their input in the learning is valued in order to create learning centered environments where the teaching and learning are valued. (Kaliska, 2002). Kaliska noted it is vitally important for a teacher to plan and set up classroom rules and procedures in order to maintain structure to cut down on discipline issues in the classroom. If students are given a voice and participate actively in creating classroom rules and procedures they will feel more connected to their environment. Campbell (2009) explained that in order to improve the motivation of students, the teacher's master plan must be well-developed in order to deal with discipline problems in the classroom. When students know that their teacher believes in them, then they in turn believe in themselves creating environments of learners who are confident and who have good self-esteem.

In a study conducted by Kolistka (2009) the researcher wanted to determine which management techniques and practices were found to be the most effective in helping to control students' behavior in the classroom. Five approaches to classroom management were researched in the study. Of these approaches the finding was that each approach was not only unique but also had outlined objectives and goals that were concrete and had research data that supported it. The approaches that were studied were the 1-2-3 Magic Approach, the student peer mediation approach, the discipline and dignity approach, the assertive discipline approach, and finally the unified dignity approach. With each approach a common theme is present, consistency and

structure. The students are made aware of expectations. Creating and maintain classroom rules and procedures along with maintaining and communicating expectations are key to creating positive, nurturing classrooms.

### Positive Discipline

Discipline in the classroom is another way to create a positive classroom environment to help build academic success in students. Mendler (2012) suggested that children who feel encouraged and comfortable in their environment will act out less and put forth more effort into their work. It is important to begin each year with rules and procedures clearly outlined and in place. There are many types of discipline that can be used in the classroom to lessen student's misbehavior. One type of classroom discipline is positive discipline. The foundation behind the strategy of positive discipline is the use of encouragement. When students feels encouraged by their teacher they are willing to take more risks and are more confident knowing that they will not be ridiculed or shamed for doing so. There are many ways to foster encouragement in the classroom such as giving praise to students for their efforts and work. Another way is to give positive reinforcements and use accountable talks with the students. With positive encouragement teachers are expressing to the students that they believe in them and that they are proud of their effort. Nelsen, Escobar, Ortolano, Duffy and Owen-Sohocki, (2001) suggested there are many ways to establish positive discipline in the classroom. Nelsen suggested one way is to teach and model the many facets of positive discipline is by using cooperation, mutual respect, kindness and firmness, offering choices, and involving students in the decision-making process. This type of modeling will help students develop the skills and attitudes necessary to become solution oriented (Nelsen, et al., 2001).

Kriet (2002) advised that using the wheel of choice and class meetings are ways to create positive discipline in the classroom. During class meetings students are gathered together at an agreed upon time to talk about problems student issues, ways to problem solve, and to share celebrations, compliments, and successes as a whole group. This time together allows students to get to know each other better, build relationships, and come together as a community to practice social skills. Students learn in morning meeting how to collaborate and cooperate in a social setting. Implementing classroom morning meetings will help to create a classroom environment that is respectful and a climate of trust. The morning meeting can also help to extend the climate of the class far beyond the morning meeting time. The meeting will help to motivate students by addressing two human needs: the need to belong and the need to have fun. The morning meeting will also help to merge emotional, intellectual, and social learning.

Charles and Senter (2005) examined positive discipline in the classroom and how it is used and intended to empower students to become more successful in all areas of their life. Behavior problems can adversely affect the academic success of students. When behavior issues are eliminated from the classrooms the teacher has more time to focus on building relationships with the students and establishing a classroom community of respect and kindness. Charles and Senter identified three empowering perceptions and essential skills that contribute to the benefits of positive discipline: establishing classroom norms, class meetings, and building student-teacher relationships. They used class meetings to develop both the perceptions and essential skills that help to contribute significantly to success in life.

Charles and Senter (2005) identified many ways that teachers show that they care about their students' welfare. Teachers show that they care about their students when they decide to go out of their way to get to know their students as individuals and have faith in their ability to

make meaningful contributions to the classroom. Students know teachers care when they feel that they are being listened to and that their ideas and thoughts matter (Charles & Senter, 2005). Taking time at the beginning of the school year to establish classroom norms, class meetings, and to show the students that they will be an important part of the classroom will help to establish the start of a solid relationship between the students and the teacher, The more comfortable students feel in their school environment the more effort they will put forth into their classwork and academics.

Somayeh, Sayyedmirshah, Sayyedmastefa, and Azizollah (2013) investigated the effect of positive discipline on the learning process by focusing on student's abilities. The researchers investigated the effect of positive discipline on the learning process from teachers and principals' point of view and also to seek solutions. The sample studied was 105 principals and 321 teachers who were selected by stratified random sampling. The data were collected by using a self-administered questionnaire. The questionnaire included three dimensions and 30 questions. There were four main research questions introduced and analyzed in the study. They found that positive discipline had a positive impact on the learning process. When promoting positive discipline on the basic and cultural values and decreasing the discipline references, decreasing the negative outcomes of the students' experiences, increasing the social skills and personal skills and internal and external skills and decreasing failure rate among students. They also found that students' commitment solution was effective in the realization of positive discipline in the learning process. The data indicated that the effect of the student's commitment solution on realization of the positive discipline is more than average level for both teachers and principals. The researchers also found that students' self-control was effective in the use of positive discipline. The data indicated that the effect of the students' self-control solution on realization

of the positive discipline is more than average level for both teachers and principals. Finally, they found that the students' learning solution motivation was effective in realization of positive discipline in the learning process. The data indicated that the effect of the students learning motivation solution on realization of the positive discipline is more than average level for both teachers and principals (Somayeh, et al., 2013).

### Classroom Design

Another facet of creating an effective classroom is the organization or layout of the classroom. A classroom that is well designed and organized will have necessary resources available to students in a readily accessible area. The ongoing impact of the physical environment of the classroom is extremely powerful (Kovalik & Olsen, 2009). Aslam et al. (2014) reported that a disorganized and chaotic classroom can disrupt a student's learning. Proper arrangement of a classroom plays a remarkable role in making instructional process more effective and establishes an atmosphere favorable and encouraging to learning. Aslam reported the quality of the physical classroom setting significantly affects academic achievement of the students. Physical classroom quality promotes effective and successful teaching learning process. Opdenakker (2011) suggested that teachers carry out a number of specific tasks: developing supportive, caring relationships with and among students; organizing and implementing instruction to optimize students' opportunities to learn; using group management methods to encourage students' engagement in learning tasks; promoting the development of students' self-regulation and social skills; and using appropriate interventions to assist students with behavior problems.

Buchong and Sheffer (2009) stated that a warm classroom environment can lead to increased academic achievement and a sense of pride and belonging in the school. A classroom that is warm and inviting may include such elements as natural lighting, comfortable temperature setting, pictures, warm paint colors on walls, and the organizational design of desks and resources. The environment of the classroom should include having all resources and areas of the room accessible to all of the students in the classroom. The students should feel that they are a part of the classroom. A teacher can incorporate family pictures of the students and their families; they can install bookshelves and pillows to create a warm area conducive to learning and exploring. Teachers can also use colors and plants to fill the room with warmth and a homey feel. Students should be allowed to help create classroom rules and procedures at the beginning of the year. This will allow the students to feel that they have a voice in the classroom and that their thoughts and ideas matter. A student who feels secure and confident in his or her classroom environment will more readily express his or her ideas and thoughts during collaborative learning. Classrooms that encourage emotional well-being create an atmosphere for both learning and emotional development. Educational research supports creating an atmosphere of mutual respect where students feel relaxed in asking questions and expressing their thoughts and feelings (Buchong & Sheffer, 2009).

Evanshen and Faulk (2011) suggested that layout and organization of a classroom can also affect student's academic achievement. It is important to have the classroom set up and organized the first day of school. Welcoming students into a room that is clutter free, warm, and inviting can help students ease into the transition of a new school year and keep them excited about learning. It's important to make sure that the desks are placed in a way that a good safe flow of student traffic is possible and that chaos and confusion is kept to a minimum. If students

are crowded together and have no space to call their own or space to work, motivation and effort may be negatively impacted. Another important factor to consider in laying out a classroom is organizing student resources. Class supplies and resources will need to be placed where students can access them quickly and easily. Evershen and Faulk recommended that classrooms be organized so resources are easily accessible to students to cut down on lost time and transition time.

Thompson (2008) suggested that it is important to create a classroom that is inviting and welcoming. Hanging students work up on the walls to celebrate student's success can help to make students feel like they belong and that the classroom is "theirs." Along with using student work on the walls, rules, procedures, and "I can" statements that are created by the class can help to give the students a voice in their classrooms. Students can give suggestions and brain storm rules and ideas for creating structure in the room. Thompson (2008) also stated that creating charts with classroom rules and hanging them in the room will not only remind students of teaching and classroom expectations but will give students pride in what they have created. Students can thrive in environments where teachers take their needs seriously and where they feel valued. Teachers should create classrooms that invite students to join in learning community; they should also reach out to their students in a way that is tangible. An inviting classroom sends a clear message to their students that they are important and that their teacher approves of them.

Denton and Kriete (2000) reported that when the classroom is well organized, warm, and inviting, students will feel more at ease and more able to focus their time and energy on their learning. Classrooms that are organized will encourage students to thrive academically. Children can relax in their daily school life and focus their energy on learning and feel competent when

there is a sense of order and predictability. The classroom needs to meet the physical and emotional needs of the people who spend the most time there. Denton and Kriete stated in order to design classrooms that promote the needs of both the student and teacher the space needs to highlight and tailor the classroom to fit the needs and experiences of the children who spend time there. Walking into a well-lit, cheerful room can help create the mood of the students who spend their day there. Having students work displayed on the walls, the walls painted a warm, cheerful color, and carefully arranged furniture can help to create a positive atmosphere where the students are excited to learn. Dusenbury (2016) suggested that it is important to create environments that make the students feel safe, comfortable, and welcome. Students who feel comfortable in their environment will be more successful academically. Learning will follow when the teacher is conscious of the classroom environment and the way he or she creates a climate of respect and safety. Safety of the students should be one of the first considerations when creating the design of a classroom. Exit signs and doorways should be clearly visible and free of obstructions, enabling the students to enter and exit quickly and safely. Feeling unsafe, however, adversely impacts student motivation, attitude, behavior, and overall functioning in school while also producing lower levels of academic achievement. In order for students and staff to perform at their best, they must feel safe in all aspects of their experiences, which requires a concerted effort on the part of all stakeholders ("Ensure a safe and secure environment," 2011).

Clapper (2010) explored the idea of a safe learning environment from the psychological safety perspective and ways to establish one. Clapper stated that in order to create a safe learning environment there are certain things that must be put into motion. One, the teacher must set the stage for learning, the teacher should create an atmosphere of trust where students feel safe

taking chances and are not afraid to make mistakes. This would mean that the teacher would have to expose students to asking questions and giving input. Two, the teacher would also need to move any from passive means of instruction to more active strategies that energize the learning environment to maximize learning.

Colbert (1996) examined the importance of not only how a classroom looks to the eye but how it functions effectively. The classroom is where children explore, learn, create, and interact with others. The physical setting and the way it functions can dictate how both the students and teacher behave and feel. The classroom needs to meet the physical and emotional needs of the people who spend the most time there. In order to design classrooms that promote the needs of both the student and teacher, the teacher needs to highlight and tailor the classroom to fit the needs and experiences of the children who spend time there.

Colbert (1996) explained how there is a great need for variety and complexity in what the students are doing and how long they will stay engaged in what they are doing. It is important to create rooms that promote independence, on-task behavior, and eliminate dead space. Dead space that is found in the classroom should be replaced with a classroom arrangement that offers clearly accessible activities that will hold the children's interest and provide enough for them to do. When the arrangement of the classroom is set up in this way, the children will be able to proceed with their learning without the help of the teacher. Colbert also expands on how research from the past and present both suggest the importance of classroom design and the impact it has on student development and achievement. Since the 1960s researchers have identified links between the physical environment and the behavior of both children and teachers. Research in the 1990s continues into how changes in the environment influence child development and what is learned in classroom settings (Colbert, 1996).

In another research study Komendat (2010) looked at key characteristics of designing a classroom space, and the rationale for the designs created. In the first part of the study the researcher looks at whether or not it is imperative when creating an environment that the teacher takes the needs of the students into consideration. Should the teacher look at the types of students which will be in the classroom and what type of abilities and disabilities there will be in the classroom? What types of accommodations and modifications will need to be thought of in order to create an environment that works for every child and his or her needs? And finally, will the layout of the desks and chairs allow all students to be able to see and hear the instruction? Komendat reported that when the teacher is deciding here to place desks and tables they needed to take the students future lessons and activity into consideration. Komendat also looked at ways that the design of the classroom should be set up by looking at the developmental appropriateness of the room. When a teacher takes the time to think about how to design space and traffic flow, learning can be positively affected. Does it accommodate the correct stages of the children who will be in the room? Can the layout of the room accommodate behavior and anger issues should they arise and is there an area for quiet time or reflection for the child to go to if needed? Komendat also reported that grouping students together allows for creativity group projects to take place in which students can share ideas and grow as intrinsically motivated teammates. The social needs of the child should also be considered when laying out the design of the classroom. The children should feel comfortable in their space with adequate resources and furnishings that are appropriate for their size and height. Openness and flexibility are important factors to consider when designing classroom spaces not only for supervision reasons but positive effects on learning as well (Komendat, 2010). Other design elements that must be considered when setting up a classroom are the décor and the creating of centers that will

encompass all types of learners and creators. It is important that every type of learner is included in the classroom design and set up to make all children feel welcome and comfortable in their environment. With the décor of the room it is important that student work is visible on the walls and that students are able to create and design some of the spaces. The dimensions of a creative climate are satisfied and a welcoming environment is established, when students' work become part of the classroom design and décor.

In Part II of the study the design is looked at and explained. Komendat stated that in every classroom desks are arranged in a way that promotes teamwork and centers and environment pieces are in place to encourage the teaching and learning of Creative Problem Solving and creativity with core curriculum integrated lessons. In Part II Komendat describes 6 classrooms all of different grade level and considered the placement of such elements as cork boards, rugs, table, desks and chairs, along with semicircular tables for small group activities and a variety of other classroom pieces. Komendat noted how the layout of each piece helps to work together to create a cohesive classroom layout that will encompass all the children and their academic learning styles. In conclusion of the study the researcher found that creating a classroom environment that is conducive to learning is an important job for teachers. Behavior and creative potential are benefitted when serious thought goes into classroom design.

There are many ways to effectively change behaviors in the classroom. One of those ways is by changing the classroom environment. Changing the classroom environment can increase academic engagement and decrease disruptive behavior (Guardino & Fullerton, 2010). When changing the classroom environment one of the most important steps is for the teacher to observe the students in the classroom in order to realize where the changes need to take place and what changes will be the most effective to make. Guardino and Fullerton looked at steps that

can be taken to change the classroom environment. Step one is to observe, step two is to modify, and step three is to follow up. With each step the researcher investigates the relationship between the classroom environment, student behavior, and academic engagement. In step one the researcher is looking for what types of disruptive behavior can occur in the classroom? When do they occur most often? How are the different areas of the classroom used and where is the disruptive behavior occurring? And finally, are students able to work at desks without distractions in group areas? In step two, modifying, Guardino and Fullerton looked for ways to provide areas of personal space, decrease or change placement of stimulating visuals, rearrange the desks, tables, and resources in a way that high traffic areas are clear, and modify classroom climate by adjusting lighting, air flow, and temperature. In step three, follow up, the Guardino and Fullerton looked at “Are you using the modifications correctly? Are you using the modifications consistently? Do any modifications need rearranging, changing, or removal? Do you need to implement additional modifications? The results of the case study showed that before the intervention of the three stages academic engagement was very low with students engaged less than 3% of the time. After the modifications were made, the academic engagement of the students increased to almost 45%. Overall disruptive behavior before the intervention was occurring around 90% of the time but after the interventions the disruptive behaviors immediately decreased. The final thoughts on the study were that when modifications and adjustments were made through an intervention process to help decrease behavioral issues in a classroom where student’s engagement improved.

The classroom environment can be an important factor in the success of students academically. The concepts of good classroom design, listening skills, self-determination, and building class community are transferrable across grade levels. These concepts are not just for

students with disabilities but for all students. Building classroom connections through these concepts can lead to student achievement gains as has been demonstrated in research on school climate and student achievement (Buchong & Sheffer, 2009). The classroom environment can help nurture a student's intellectual and academic growth in many ways. A teacher who creates a room where students are the leaders in their learning and are actively voicing their opinions and thoughts is creating students who will be able to articulate their thoughts and who will be able to problem solve on their own.

There are many different facets that make up the classroom environment. Sanders (2011) suggested that the classroom environment includes not only the physical characteristics such as the tables, chairs, books, and layout but also things such as temperature, lighting, paint colors, teaching techniques, classroom rules, procedures, discipline, and teaching strategies. All of these elements contribute to the classroom environment. Sanders observed architectural and technology features to see how students and instructors used these features. Ten general purpose classrooms were randomly selected for in-room observation in an effort to identify common themes, behaviors, successes, and failures of today's physical classroom space. The findings of the study were that certain principles were considered essential for successful classroom environments. Sanders also suggested that classrooms should be easily accessible and allow ease of use, rooms should be adaptable having both lecture style and group project learning, rooms should have windows with clear views and access to light control, and classrooms should have access to technology and foster effective teacher-student engagement.

Breaux (2005) reported that positive classroom instruction is another way that teachers can help control and manage their class to help enhance academic success. Establishing positive discipline in the classroom helps reduce behavioral issues and disruptions in the classroom

adding positive classroom instruction can also help to instill students with positivity and efficiency. Developing creative and engaging lessons is a great way to keep students attention and to actively involve them in their learning. Teachers need to be well prepared and have lessons ready in order to plan for the success of their students (Breux, 2005). Jones (1987) reported that in order to sustain students' attention during lessons and activities, the teacher needs to be able to structure and articulate the lessons clearly and explicitly while encouraging and engaging the students positively. There are many ways that a teacher can structure lessons that will maximize student learning and minimize failure. Jones explained several strategies that teacher can use to not only produce positive instructional lessons but also how to successfully deliver those lessons to the students. To have structure a lesson must have clear and explicit expectations both at the level of process and content. Jones outlined a three phase structured lesson. The first phase is titled "setting the stage." The stage is broken into three parts, raising the level of concern, review and background, and goals and objectives. The second phase is "acquisition." It too, is broken into three section, explanation, modeling, and structured practice. The final phase is "consolidation." The three sections of this phase are guided practice, generalization and discrimination, and independent practice. The objective of a structured lesson is to be able to transfer a specific competency from teacher to student. Performance, therefore, is the objective. Jones stated that structured lesson properly taught finds its fulfillment in performance, the transfer of a competency from the mind and body of the teacher to the mind and body of the learner. Glasglow and Hicks (2000) reported that building positivity in the classroom is essential to helping students feel comfortable and secure in their environment. Creating rules and procedures are a couple of ways teachers help to create a positive environment. Creating engaging lessons are another way teachers create a positive environment,

but how the teacher delivers the lessons is an important part of helping to not only establish a positive environment but a way to also keep the environment positive. When a child is encouraged in his or her learning and he or she feels confident to express his or her thoughts and ideas he or she will be able to succeed academically. The teacher is a large part of not only creating a positive and successful environment but also the key into maintaining that positive atmosphere.

The classroom environment can be an important part of the academic success of the students. Creating a warm, inviting area where children can comfortably and safely explore, engage, and learn is the key to their success. There are many ways to construct an inviting classroom by including such characteristics and elements as comfortable lighting, temperature, warm décor, maintaining an organized and safe classroom layout for students to engage in purposeful lessons. Hillman (1989) reported that creating a classroom that is welcoming and where a child feels safe and secure will positively affect academic performance. A positive learning climate in a school for young children is a composite of many things. It is an attitude that respects children. It is a place where children receive guidance and encouragement from the responsible adults around them. It is an environment where children can experiment and try out new ideas without fear of failure. It is an atmosphere that builds children's self-confidence so they dare to take risks. It is an environment that nurtures a love of teaching (Hillman, 1989).

## CHAPTER 3

### RESEARCH METHOD

#### Introduction

The purpose of this qualitative study was to extend the understanding of the characteristics of a classroom environment that impact students' engagement in academics and therefore has the potential to positively impact student achievement scores. Do certain characteristics of the classroom environment affect the academic success of students? To address this question the study included 10 classroom observations in the Kingsport City School district. The classrooms were chosen based on the teacher's past student proficiency Tennessee Comprehensive Assessment Program data scores. A grounded theory qualitative methodology was used to compare the classroom environment observations through inductive and deductive analysis. This chapter provides detailed information about the research methodology including research questions that guided the analysis, population, data observations and analysis methods, and credibility, truthfulness, and ethical considerations.

#### Site Selection

The site selection that was chosen for this research study was the elementary schools in Kingsport City Schools. The 10 elementary classrooms chosen were all classrooms with teacher who had a past 2-year record of having high proficient TCAP scores.

### Sample

The population sampled was 10 classrooms from the Kingsport City Schools. The population includes 10 teacher's classrooms. The population included classrooms that had both male and female teachers. The teachers in the classrooms teach a variety of subjects in 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grade.

### Research Questions

The purpose of this qualitative study was to extend the understanding of the characteristics of a classroom environment that impact students' engagement in academics and therefore has the potential to positively impact student achievement scores. Through the researcher's development of the literature review the following research questions were developed.

To examine the characteristics of a classroom that impact student's achievement scores, the following research questions were asked:

- 1.) How are teachers implementing discipline practices in their classroom in order to support student achievement?
- 2.) How does the teacher's organizational lay out of the classroom support student achievement?
- 3.) How do teacher expectations motivate students to learn?
- 4.) How do teacher and student active collaboration and use of cooperative groups support student achievement?
- 5.) How do the teacher's classroom temperature and lighting support student achievement?

6.) How does the teacher's use of different teaching techniques support student achievement

### Researcher's Role

The researcher serves as the instrument in qualitative inquiry (Patton, 2015). The researcher of this study has been a teacher for the past 7 years and has created classroom environments in a variety of ways to try to impact student learning positively. Because of this experience, the researcher has a personal stake in the outcome of the data collected. Additionally, the researcher attempted to collect, present, and analyze data in ways that truthfully assess the impact that the classroom environment has on students' academic achievement. The researcher used classroom observations and photographs of the classroom environment as the data sources. These data were then analyzed by using a coding process to generate categories and group the categories into themes. The researcher has the responsibility to "report and professional and personal information that may have affected data collection, analysis, and interpretation either negatively or positively in the minds of users of the findings" (p.70). The researcher maintained a focus on data to avoid researcher bias.

### Data Sources

The data sources were 10 classrooms from the Kingsport City School District. The classrooms included both classrooms of male and female teachers who teach a variety of subjects in third, fourth, and fifth grade. All of the teachers were willing participants in the research and were chosen based on their past 2 years proficiency TCAP scores found on the Tennessee Report Card. The teachers who were chosen were teachers who had shown repeatedly high student

proficiency TCAP scores over the past 2 years. The teachers were selected in order to find central phenomena or common themes that the teachers' classrooms could have contributed to the high proficiency TCAP scores of their students. The process was to observe 10 classrooms of teachers who have a record of high proficiency TCAP scores over the past 2 years. The teachers were asked prior to the visit (by email) to confirm their willingness to participate in the research and were made aware of the day the observations took place. The observations took place for a one 90-minute block of time for each classroom, but the total observations took place from April 24 to May 16, 2016.

Using a grounded qualitative methodology, content analysis was conducted of the 10 classroom observations. The observation notes served as the data sources for this study. The teachers' classrooms that were observed were selected from the data received on the TN.gov website of the Tennessee report card as teachers whose students scored at proficiency or advanced assessment levels.

#### Data Collection Method

Data collected from the 10 classroom observations from teachers who showed past proficient and advanced TCAP assessment scores were used to develop a qualitative description of findings. A coding approach was used to determine central themes and phenomena of the characteristics of the classroom environment that impacted student's academic achievement. Using a coded method allowed the researcher to sort and process the data to answer the research questions (Hahn, 2008).

In the first level of coding, the researcher read through the classroom observation notes and viewed the classroom pictures to create categories and headings using inductive analysis.

The researcher used an open coding method due to the initial inquiry about the impact the characteristics of a classroom environment could have on students' engagement and academic achievement.

The researcher then developed categories for analysis by reviewing classroom observation notes and photos taken of the classrooms. After the reviewing of the notes and photos and generating the categories, the researcher used thematic coding to group all of the categories into themes. The final step in the data analysis process was the abstraction process. The abstraction process begins when the categories are refined to develop a general description of the research topic. The categories were named and subcategories were grouped together which had similar themes. The generic categories were then placed into main categories. This process continued as long as it was possible and reasonable for the researcher (Elo & Kyngas, 2007). The different levels of coding that were used by the researcher provided documented, well organized answers to the research questions (Hahn, 2008).

The data were collected from the classroom observations. The researcher collected data during the one, 90 minute classroom observations focusing on the physical, visual and audio characteristics of the classroom such as classroom culture and climate, motivation, lighting and temperature, classroom management, classroom layout. The observations took place during the school day and were scheduled in advance. The teachers were given notice before the researcher arrived for the classroom observations. The observations consisted of the researcher spending one 90 minute class block in each of the teacher's classroom in order to collect observations of the classrooms and writing notes in a journal. The journal was coded using a set of numbers given to each classroom to ensure classroom and teacher anonymity. The researcher recorded observations by taking notes. During classroom observations the researcher made notes to

document the classroom environment. Pictures were also taken of the classrooms before the observations to collaborate and enhance the researcher's observation notes. The researcher later compared and analyzed themes and similarities between classrooms looking for a central theme between the classrooms. Weaknesses of this type of collection could be the observer not taking accurate notes or misinterpreting aspects of the room and actions of the teacher. Strengths were in the ability to keep the number of data sources small and having the capability of comparing the classrooms of those teachers who had high proficiency TCAP scores.

### Data Analysis Method

The instrument that was used for data collection in the study was classroom observations. The researcher was looking for such characteristics in the classroom as natural and adequate lighting, comfortable temperature, wall décor, classroom layout and organization, classroom management, classroom climate and culture, and motivation. The observation notes were analyzed and compared using a coding method to look for common themes or phenomenon's of the classroom environments that support the high proficiency TCAP scores of the students. To codify is to arrange things in a systematic order, to make something part of a system or classification, to categorize. When codes are applied and reapplied to qualitative data, this is called codifying – a process that permits data to be “segregated, grouped, regrouped and relinked in order to consolidate meaning and explanation” (Gorbich, 2007, p. 21). Bernard (2006) succinctly stated that analysis “is the search for patterns in data and for ideas that help explain why those patterns are there in the first place” (p. 452). Coding is thus a method that enables the researcher to organize and group similarly coded data into categories or “families” because they share some characteristic – the beginning of a pattern (Saldana, 2001,).

After the observations were completed, the researcher noted ideas and thoughts about categories and relationships that were visible in the observation notes. Common themes became more prevalent as the categories were developed. The researcher was looking for common characteristics in the classroom that led to student's academic achievement. The researcher was looking for; commonalities such as the classroom layout, the types of classroom management being used, the temperature and lighting of the classroom, wall décor, and motivation.

### Credibility and Trustworthiness

In qualitative research a credibility criterion involves establishing that the results of qualitative research are credible and believable from the perspective of the participants in the research ("Research Methods," 2006). In order to enhance the credibility of findings, Patton (2015) suggested using analytical techniques. To begin Patton suggested assessing and generating alternative conclusions and explanations. Implementing an open coding method allowed the researcher to consider alternative explanations and conclusions by consistently going back to the data using multiple levels of coding. Next, Patton suggested using an advocacy-adversary analysis to test the credibility of the conclusion. In an advocacy-adversary analysis both positive and negative evidence is analyzed. The researcher considered evidence that could positively impact student's academic achievement in the classroom environment as well as any evidence that could negatively impact students' academic achievement in the classroom environment.

Finally, Patton (2015) suggested consistently and constantly comparing the data to look for ways they fit into patterns, themes, and categories as well as data that do not fit. Using an open coding method supported the process of constant comparative analysis. Triangulation is a

strategy that facilitates validation of data through cross verification from two or more sources. Using this strategy allowed the researcher to analyze the data in a variety of ways. The researcher compared notes and photographs of the classrooms to look for visual themes. The researcher analyzed the notes to compare observations from one classroom to another. Finally the researcher compared the notes, photos, and discussions (heard and noted in journal) to look for central themes that were similar in all the classrooms. According to Patton, triangulating multiple data sources allows qualitative analysis to overcome skepticism of using single perspectives, lone analysis, or singular methods. Analyzing how each classroom environment impacted student's academic achievement, provided a 10 classroom cross check to support the reliability, credibility, and truthfulness of the findings. The researcher's dissertation committee served as a support in keeping the analysis in context and purpose driven.

### Ethical Considerations

As with any research study, there can be a degree of bias within the data. In this study the potential of bias could come through the observation methodology that was being used to gather data from the classrooms. Bias can come in the form of the researcher making assumptions on observations or incorporating her own feelings into the observations. Bias could come from the teacher who is being observed feeling he or she should put on a show or act unnaturally when the researcher is observing the classroom. Bias could come from the researcher interpreting lessons and activities either negatively or positively during the classroom observations.

The analysis of the observations could have researcher based bias in it also. Although this may not be the intention of the researcher, feelings and emotions do play a part in the research process and can cause unintentional bias.

### Chapter Summary

This chapter includes a description of the research design, population and sample, data collection, and the data analysis methods and procedures used in the implementation of this qualitative study. The purpose of this study was to explore the characteristics of a classroom environment that impact student's academic achievement. Data were collected from participants who had given their consent and who were, at the time of the study, chosen because of their student's high proficiency TCAP data scores. This study was limited to 10 classrooms in the Kingsport City School district.

## CHAPTER 4

### ANALYSIS OF DATA

#### Introduction

The purpose of this qualitative study was to extend the understanding of the characteristics of a classroom environment that impact students' engagement in academics and therefore has the potential to positively impact student achievement scores. The content analysis of the 10 classroom observations of participating teachers and their classrooms was guided by six research questions using a grounded theory qualitative methodology. This chapter provides a detailed analysis of the findings from each research question.

A system of letters and numbers were used to code information found within the classroom observation notes and to keep the participating teachers' classrooms anonymous. These codes were used to sort and categorize information based on the 6 research questions. These categories involved 16 themes that included classroom management, positive discipline, rules and procedures, collaborative groups, clear and clutter free environments, readily available resources, collaboration, cooperative groups, temperature, lighting, learning targets, questioning, rubrics, project based learning, technology, and multiple intelligences. The information reported in this chapter gives a summary of the characteristics of a classroom environment that can impact students' engagement, and therefore, academic achievement from 10 classroom observations in the KCS district. To ensure confidentiality classrooms were referred to as A1, A2, A3, B1, B2, B3, C1, C2, C3, and C4.

### Research Question 1

When examining classroom observation notes from the 10 classrooms, three themes emerged when describing how teachers are implementing discipline practices in their classrooms. These themes included classroom management, positive discipline, and rules and procedures.

Research Question 1: How are teachers implementing discipline practices in their classrooms in order to support student achievement?

Classroom Management: In all of the classrooms some type of signal was given either verbally or physically to announce the beginning of a class or to signal that the class needed to come to order for transitioning or some type of directions. In classrooms A2, A1, B2, C2, and C3 all the teachers began their classroom activity with a manual signal such as a “Give Me Five” hand signal, clap, or lights being turned off and on. The researcher observed that in class A3, the class began with a verbal “Good Morning,” and a request to begin morning duties as the students came into the class. B1 class began with the teacher greeting the students individually at the door and verbally reminding them that morning work was posted on the SMART Board. B3 class began with a rhythmic clapping that the students repeated and then the teacher gave morning announcements. C1 began class with math talks where students came straight to their desk and began discussing the problem of the day that was posted at their group table. C4 began class with a verbal “HEY HEY!” and the students immediately responded “HO HO!” Each classroom used an attention signal to begin class and to bring the class to order. Wait time was also used during this time to ensure that students were focused and ready to begin the activity or to listen to instructions for the day. Wait time lasted anywhere from 25 seconds to 1 minute.

Rules and Procedures: In classrooms A2, A3, B1, B3, and C1-C4 all teachers had rules and procedures posted on doors or walls of their classroom. Of these eight classrooms, seven of these rules and procedures that were posted were student created. In classroom B2, the rules and procedures were created by the teacher prior to the school year beginning.

Rules and procedures were posted in classrooms A2, and A3 that were similar; Raise hands when asking a question, Respect One Another, Do your personal Best, and Listen to Others. B1, B3, C1 and C3 had smart goals listed and posted around the room for students to view and revisit throughout the year. All above mentioned classrooms also had post it notes with mastered goals recognized and posted to keep students focused and on track. These goals along with the students self-posted mastered goal notes showed students' self-accountability on concepts learned.

Accountable Talks: Along with beginning signals, wait time, and rules and procedures, eight classrooms used accountable talks (A1-did not).

Positive Discipline: In all of the classrooms positive discipline was used as a way to allow students to problem solve and be solution oriented in solving their problems.

In classrooms A2, C1-C4, B1, and B3 a Wheel of Choice was displayed for students to view and a reminder for them on what choices are available in order to solve problems on their own. Choices that are available on the wheels included, Go to a cool down spot, Walk away, Count to Ten, Share and Discuss options, Apologize, and Talk it out.

In classrooms A1, A3, and B2 Rules 1-5 were posted. Rules 1-5 were posted in these classrooms for the students to refer to in order stay on track and focused.

In each classroom the researcher recorded discussions between the teacher and student to display how interactions and positive discipline were implemented.

Classroom A1 discussion: Teacher-“Is your game completed?” Student-“Yes.” Teacher-“High Five!” Way to Go! Now you may choose a Can Do activity.”

Classroom B3 discussion: Teacher-“What do you think you could have done differently in that situation?” Student-“I could have walked away or said I was sorry.” Teacher-“Yes, you could have. What do you think you could do now?” Student-“Apologize and fix it.” Teacher-“I would say that’s a great idea.”

Classroom C2 discussion: Teacher-“What’s up? What do you have there?” Student-“We are creating an organizer for our words.” Teacher- “Oooh tell me about it! I like that idea!”

Conversations between teacher and students were consistently positive and words like great, good idea, way to go, I like that, were used throughout the 90-minute block of the classes. The conversations were also solutions focused; however, two students in one class (A1) had to have interventions with the teacher in order to come to a consensus.

### Research Question 2

Three themes were uncovered during the analysis of the organizational layout of the classroom. These themes were collaborative groups, clear and clutter free environment, and readily available resources.

Research Question 2: How does the teacher’s organizational layout of the classroom support student achievement?

Collaborative groups: Ten of the classrooms observed demonstrated the use of collaborative groups in their 90-minute block. The collaborative groups were heterogeneously arranged in A1-A3, B2, B3, C2, and C4. Heterogeneous groups are groups that are arranged with students who have different levels of skills ability such as grouping high skills ability students

with those on a medium and low skills level ability to work collaboratively on a concept. The heterogeneous groups in these classrooms were chosen by the teacher to allow for peer tutoring and varied skills level thinking and collaboration. With these groups activity expectations and rubrics were used to ensure that all students participated. In the last classes, A2, B1, C1 and C3, the collaborative groups were arranged by ability or skills level. These students were also given expectations during the collaborative group activities and the teacher walked around the room giving advice and assistance as needed to these groups.

The classroom layout in all of the classes was conducive to collaborative work with the students. Classrooms A1, A2, and A3 were all set up with long tables that allowed four to six students to sit together. Classrooms C1-C4 were also set up as long tables but C3 and C4 lined their tables side by side in order to hold 10-12 students. Classrooms B1-B3 had individual student desk that were arranged in a square format where the students faced one another and were able to collaborate.

Nine out of 10 of the observed classrooms had plenty of walk space and clear site lines for traffic flow and easy exit and entrances of the students. One classroom, B2, however had a large number of student desks and chairs that caused the traffic flow to be narrow and crowded.

Easy and readily accessible student resources: Seven out of the 10 classrooms A1-A3, C1-C4, had student resources labeled and located in convenient easily reached areas so students could gather materials and prepare to work quickly. The other three classrooms had student resources within easy reach but did not have the materials labeled. The students in these classrooms however were also able to gather their materials quickly and had no trouble locating what they needed to work.

### Research Question 3

Three themes were uncovered during the analysis of teacher expectations motivating students to learn. These themes included learning targets, questioning and rubrics.

Research Question 3: How do teacher expectations motivate students to learn?

Learning Targets: Nine out of 10 of the classrooms used some type of learning target or “I can” statement to connect students to their learning. Learning targets are written expectations conveyed to the students by the teacher the destination or goal of a lesson being taught. What will they learn? How will it be demonstrated? How in depth will the targets be taught? The 10th classroom, A1, did not post these statements but the teacher did articulate them to the students at the beginning of the lesson. These targets are used to provide students with a foundation that aligns and identifies the essential learning for students and that provides direction for instruction. The researcher observed the teachers in all of the classrooms beginning their lessons with an oral acknowledgement of the learning target or “I can” statement to the students. The teachers also revisited the learning targets at the end of the lesson to receive feedback on what the students have learned during the lesson.

Questioning: A focus on questioning was another theme that emerged during analysis. Six of the teachers in classrooms observed all used higher order thinking questions during their delivery of concepts taught and in their collaborative group work. The teacher in classrooms A2, C1, and B2, were seeking reasons and causes to justify and identify solutions. A3, B3, and C4 used questioning strategies to separate relevant and irrelevant information to identify logical reasoning and weighing sources of information based on their credibility. The students were using accountable talks during their work responding to one another asking questions such as; “Would this paragraph be relevant if we used it for this part of the question?” Response: “I agree

with student A because....,” “That does seem to fit here because.....” “Do you think we can use this polygon to create the tower? Or should we use a different one?” Response: “Let’s try them both and see what works best OK?” The researcher observed continued dialogue throughout the lessons justifying and using reasoning and logic to solve problems with one another and the concepts taught.

Rubrics: In all 10 of the observed classrooms, teachers had rubrics or project outlines that the students used in order to guide them through their center activities or projects. Rubrics are used as an evaluation tool to guide and promote the consistent application of learning objectives, expectations, and standards included in the activities presented.

The researcher observed students in the classrooms reading over the rubrics and using the rubrics as a checklist and a guide to help them review their work and check for mistakes or content errors. In classroom C1 the teacher walked around the room during the 90-minute block speaking to the students and assisting them as needed. The teacher also advised students to reread expectations when there was a gap or a student who was straying from the original intent of the project.

#### Research Question 4

Two themes emerged during the analysis of teacher and student active collaboration and use of cooperative groups.

Research Question 4: How do teacher and student active collaboration and use of cooperative groups support student achievement?

Teacher and Student Collaboration: A focus on teacher student collaboration was another theme that emerged during analysis. Within the 10 classrooms there was noticeable use of

cooperative groups and interaction between teacher and student. The teachers in these classrooms shared similarities in their approaches to cooperative groups and teacher-student interaction; however, the interaction between the teacher and students varied in the classrooms.

Again, as reported earlier, 10 of the teachers in classrooms observed demonstrated the use of collaborative groups in their 90 minute block. The collaborative groups in the classroom varied from heterogeneously and homogeneously groups. During these collaborative groups the researcher noticed a varied interaction between students and teachers in each classroom.

In classroom A1 the researcher noticed a great deal of humor and high fives being used during teacher student interaction. The teacher used comments such as “You are the DUDE!” or “You are the DUDETTE!” The students responded to these comments with laughs and smiles. The teacher used these comments as praises when the students completed a task or solved a problem. The teacher also gave high fives when he complimented the students. The students were very receptive to his gestures and comments and would high five back, smile, or reply “Thanks, Dude!” The atmosphere was very light hearted and easy going throughout the 90-minute block.

In classroom A2 the researcher noted that the interaction between teacher and student was different from A1 in that praise and discussions were formal and low key but that the teacher acknowledged a student with words like, “Great job, and “I am proud of you!” The teacher also frequently patted the backs of the students and winked when handing out praise. The students in the classroom were very easy going and happy without many behavior issues.

In classroom A3 the teacher student interaction consisted of the teacher meeting with groups one at a time and guiding students with leading questions and goal setting. The researcher noticed that in this classroom the atmosphere was again more formal but students were very receptive

and responded with Thank yous and used Accountable talks when in their groups and with their teacher.

In classroom B1 the researcher noticed immediately the calmness of this class and the quiet nature of both the students and the teacher. During the 90-minute block the teacher read to the students, worked with small and one on one groups, and had a whole-group discussion during which she maintained a very soft spoken, quiet personality. The students seemed to have copied the soft spoken, quietness of the teacher in this classroom. The researcher also observed the teacher praising students, offering smiles and hugs, and walking quietly around the room placing a hand on students' backs if they became too loud. The teacher never had to vocalize any complaints or reprimands to any student during the block. These gestures and quiet personality seemed to have a calming effect on the classroom environment and students.

In classroom B2 the researcher noticed that the teacher student interaction was very fast paced and positive. The teacher met with several students one on one during which time the teacher gave assistance and asked questions such as "What can we do to solve this?" "What are our next steps?" "Where do we go from here?" The researcher noted that the teacher inserted pronouns such as "we," and "us," to include themselves in the solution. The atmosphere was energetic and fast paced and students were working on several different projects at once.

In classroom B3 the teacher had students working in collaborative groups while the teacher walked around meeting with groups and assisting as needed. An assistant had one group for the entire time lending help with this group through modification of assignments. The interaction between the teacher and students was again more formal and traditional with yes and no responses and thank you, you're welcome responses. The students were focused and used accountable talks with one another and the teacher during discussion times.

In classroom C1 the students and teacher interaction was very energetic and upbeat. The researcher noticed much activity during the center activities along with student cheers and laughter when a student completed a task. The room was noisy, but the talk was on topic and the students were engaged in their center activities. The teacher gave verbal praise often and circulated around the room during the block.

In classroom C2 the researcher noted that the classroom resembled B1's atmosphere. The atmosphere was very calm and relaxing and the students were working individually as the teacher met with students one at a time setting goals and sharing success stories with the students as they met.

In the final two classrooms, C3 and C4 the researcher noted the same level of energy as in C1 and A1. The students were focused and engaged but with very high levels of activity and noise. The teachers met with students and gave frequent verbal praise. The classroom atmosphere was very upbeat and full of activity, laughter, and noise.

#### Research Question 5

Two themes emerged during the analysis of classroom physical characteristics.

Research Question Five: How does teacher's classroom temperature and lighting support student achievement?

Temperature: Seven of the 10 classrooms had a temperature of 72 degrees. One classroom (A3) had a temperature of 67 degrees. Two classrooms (C1 and C4), had a temperature of 71 degrees. Nine of the classrooms temperature was at a level that was comfortable and did not cause distraction to the students. The A3 classroom was 67 degrees and was very cold and uncomfortable. Students had jackets and sweaters on and remarked several

times to the teacher at how cold the classroom was during the 90-minute block. The teacher stated that her thermostat was broken and a work order had been submitted to fix the problem.

Lighting: Four of the 10 classrooms, C1-C4, had wall-to-wall mid floor to ceiling windows that let in substantial natural light and made the classrooms very bright and cheerful. A1, A3, and B3 classrooms also had several windows allowing natural light in to brighten the rooms. Classrooms B1 and B2 had several windows but had shades drawn which darkened the room and caused the room to be somewhat dim and dark. Lamps were used in these classrooms to brighten the room but did not offer as much lighting as the windows could.

#### Research Question 6

Three themes were uncovered during the analysis of the teachers' use of different teaching techniques. These themes that were uncovered were technology, project based learning, and multiple intelligences.

Research Question 6: How does the teacher's use of different teaching techniques support student achievement?

Technology: Every classroom observed use some type of technology during the 90-minute observation period.

A1-A3 classrooms used computers, music and a SMART Board.

B1-Classroom used SMART Board, IPOD music, and computers.

B2-Classroom used projector, calculator, and computers.

B3-Classroom used computers, personal devices, and a SMART Board.

C1-Classroom used SMART Board, and personal devices.

C2-C4 Classrooms used SMART Board and computers.

The researcher noted that all teachers incorporated technology into their classrooms in a variety of different ways such as whole group discussion times, collaborative group time, individual work time, and project-based learning time to engage students in their learning. The technology in all the classrooms was used to create, model, and enhance student work. Students were creating personal finance and travel plans in classroom C1. In B3 students were creating a financial campaign for class president. In C3, B2, C2, and C4 computers and SMART Boards were being used to model strategies and problems, and then students would recreate and solve issues using their own personal devices and computers. In A3, A2, A1, and B1 music was used to complete student projects. Students used computers to create timelines and games that were to be shared at a later date with their peers.

Project Based Learning: A focus on project based learning was occurring in all classrooms except B2. The researcher observed project based learning such as personal financial sheets being created to outline the cost of a family vacation for a family of four (C1). Another classroom created a financial plan and budget for running a presidential campaign (B3). Classrooms C2-C4, were creating an end of the year time line and graphic organizer (whole and small group). B1 was working on themes to go along with his or her favorite music and building a collage with his or her work. A1 and A2 were working on building game boards based on concepts taught, and creating Prezi's and power point presentations to be presented to their peers at a later date. A3 was ending a week and a half long paired project that included writing narratives, illustrations, title pages, time lines, and power point presentations that were to also be presented to peers at a later date.

Multiple Intelligences: The researcher noted that in all the classrooms the multiple intelligences of learners were being incorporated to the 90-minute block. The teachers were

using technology for the visual learners, music for the audio learners, hands on projects and materials for the tactile learners, whole group discussions for the verbal learner, problem solving for the mathematical learners and inter and intra personal activities for those types of learners. Each classroom incorporated activities and lessons that engaged all types of learners and allowed for each type of learner to be acknowledged and challenged.

### Chapter Summary

Summary data from the notes of 10 classroom observations were presented with accompanying analysis in this chapter. Data were collected from observations taken of 10 classrooms in the Kingsport City School District. The classroom observations lasted a total of one 90-minute block period each. The impact of certain classroom characteristics that could impact student achievement was analyzed by six research questions that represented the components of the classroom environment.

Chapter 5 presents an analysis of the results present in this chapter in the form of discussion and conclusions drawn from the findings of each research question. Additionally, Chapter 5 provides implications for practice and further research.

## CHAPTER 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

This chapter contains the findings, conclusions, and recommendations for readers interested in understanding how characteristics of a classroom could impact students' achievement. The study was conducted using a content analysis of classroom observations from 10 elementary classrooms from the KCS district. Results were summarized to report the findings of certain characteristics of a classroom that could impact students' achievement.

Recommendations for practice and further research have been included in this chapter to support districts in the development of classrooms that would positively impact students' achievement scores.

#### Summary

The classroom environment can be an important part of the academic success of students. The quality of education has been reflected not only in the subjects taught and achievement levels reached but also in the learning environment. Educators and researchers have agreed that the total environment should be comfortable, pleasant, and psychologically uplifting; should provide a physical setting that students find educationally stimulating; should produce a feeling of well-being among its occupants; and should support the academic process (Adeyemo, 2012).

A content analysis of the impact of characteristics of a classroom environment that impact students' academic achievement was conducted to extend the understanding of the

characteristics of a classroom environment that impact students' engagement in academics and therefore, has the potential to positively impact student achievement scores.

### Conclusions

An inquiry about how characteristics of a classroom impact students' academic success guided this qualitative content analysis. Six research questions were the focus of this study to address the initial inquiry. Analysis of 10 classroom observations provided insight into classroom characteristics that impact students' academic achievement.

Research Question 1: How are teachers implementing discipline practices in their classrooms in order to support student achievement?

Classroom management, rules and procedures, and positive discipline were key characteristics for implementing discipline practices in the classroom. Establishing and maintaining procedures to implement discipline practices in the classroom was a shared practice in all of the classrooms. Although, there were a variety of practices used in the different classrooms, all of the teachers used discipline practices that were positive in nature and required the student to be solution oriented and accountable for his actions. This is similar to what Fay and Funk (1995) recommended when they suggested that it's important when beginning a new school year and classroom that a classroom environment is created that expects higher standard of behavior where students are held accountable for their actions and where students come up with their actions and where students come up with their own solutions for problems or behavior that they have created.

Classroom management procedures that were observed in the classrooms included oral or manual signals to bring the students to attention or to begin an assignment. Nine of the teachers

posted classroom rules and procedures on the walls for the students to view and discipline practices were all positive in nature and held the students accountable for their actions and words.

Some of the discipline practices found in the rooms consisted of The Wheel of Choice, positive discipline, and Rules 1-5. Each of these practices allowed the students to review and make choices on their own to problem solve issues they may be having in the classroom. The choices ranged from such ideas as talk it out, walk away, and apologize. All of the choices are positive in nature and guide the student in positive ways to work out their frustrations. These findings are similar to those recommended by Johnston (2004) when he pointed out that meaningfulness is what makes it possible for children to interact in productive ways, and that children need to be in control of their learning, integrating connections among feeling, thinking and acting, and feeling.

Rules and procedures were also set up and maintained in all of the classrooms. Of the 10 classrooms, nine classrooms had rules and procedures that were student created that allowed the voice of the students to be heard and helped to create a feeling of ownership within the rooms. This was similar to the findings of Bushong and Sheffer (2009) who suggested that to be the most effective a teacher should establish class norms and procedures early on and make sure that those rules and norms are clearly stated and easily understood by the students. Accountable talks were used in eight of the classrooms. Accountable talks are a way to establish guidelines for students on expectations of speaking to one another and ways to build on their communication with others by thinking about their thinking and by expanding on the responses of others. This is similar to what Wolf et al. (2006) recommended when they suggested that through accountable talks students learn to articulate to one another in a way that is respectful and relevant and hear

the teacher model this talk the classroom environment becomes one that is respectful and nurturing.

Research Question 2: How does the teacher's organizational layout of the classroom support student achievement?

Each of the teachers incorporated collaborative groups, maintained clear and clutter free environments, and had easily accessible resources for students. The organizational layouts of the 10 classrooms observed were varied and differed in styles and décor but did include some similarities. Those similarities included the implementation of collaborative groups during concepts taught, maintaining a clear and clutter free learning environment, and access to readily available resources for student use. All of these elements were conducive to establishing classrooms that supported student achievement. This is aligned with what Evershen and Faulk (2011) recommended that welcoming students into a room that is clutter free, warm, and inviting can help students ease into the transition of a new school year and keep them excited about their learning.

Collaborative groups were observed in all 10 of the classrooms. The groups were arranged both heterogeneously and homogeneously to allow for ability grouping and varied skills level thinking to take place during activities. Collaborative groups were established to provide an opportunity in which students develop skills of communication, cooperation, and building positive relationships with one another, supporting the students in their academic achievement.

While students worked in these collaborative groups the classroom tables and chairs were arranged so that there were clear sight lines and a clutter-free environment for easy student traffic flow and easy access to collaborate within the groups. Tables and chairs were placed in a square formation in some classes in order for students to face one another and support

communication and collaboration. In other classrooms long student tables were set up that accommodated four to six students to work side by side or across from one another to establish areas where groups could work together efficiently and comfortably without distraction. This cut down on loss of learning and instruction time and more time was focused on the actual learning of the concepts taught. This is similar to what Sanders (2011) recommended that classrooms should be easily accessible and allow ease of use, rooms should be adaptable having both lecture style and group project learning, rooms should have windows with clear views and access to light control, and classrooms should have access to technology abilities and foster effective teacher-student engagement.

The majority of the classrooms had student resources that were labeled and located strategically in the classroom for the students to reach quickly and easily. The classrooms that did not have resources individually labeled did have them located in positions around the room that were logical and easily accessible to the students. These resources being easily accessible and readily available helped to allow a natural flow of efficiency for the students. Doing hands on projects where the resources were needed, having them set up in areas that were easily accessible and readily available, helped to support the students academically by cutting down on lost time of learning. This is similar to what Evershen and Faulk (2011) recommended when they suggested that classrooms be organized so resources are easily accessible to students to cut down on lost time and transitions.

Research Question 3: How do teacher expectations motivate students to learn?

Teacher expectations that motivate students to learn included learning targets, questioning, and rubrics. Most of the classrooms observed used learning targets or “I can,” statements in their classrooms to convey written expectations to the students of the goal of a

lesson being taught. These learning targets help to support the direction of instruction and to provide a strong foundation so students can understand how their learning aligns with the instruction of concepts taught. These learning targets not only support student success but allow the teacher to receive immediate feedback on concepts taught when they revisit the learning targets at the end of a lesson. This allows the teacher to see where student gaps and strengths lie with their learning and where mastery has been achieved. These findings are similar to those of Thompson (2008) that suggests that using student work on the walls, rules, procedures, and “I can” statements that are created by the class can help to give the students a voice in their classrooms.

Questioning was also a focus in all the classrooms. Teachers in six of the classrooms used higher order thinking questions during their delivery of concepts taught in their classrooms. The higher order questioning helped support student learning by requiring the students to reflect on their thinking and respond to questions using logical relevant evidence to back up their reasoning. The teachers required students to justify their answers and articulate their thoughts using logical reasoning. This type of in-depth questioning and discussion supports students’ academic success by building their communication and thinking skills. Higher order questioning also requires the student to form thoughtful, purposeful responses to questions asked. These higher order thinking skills will also be useful in making real world connections. These findings were similar to the recommendations of Wolf, et al., (2006). They stated that in the classroom environment to engage students academically and to encourage academic success the students need to be able to articulate and communicate with others about the concepts that are being taught. They will need to be able to answer rigorous questioning and expand on the thinking of others.

Rubrics were another tool used to analyze teacher expectations motivating students to learn. Rubrics used in these classrooms guided students through their center activities and projects. The classrooms had a varied assortment of rubrics that they used but all the rubrics were used by the students throughout the 90-minute block to help them achieve the highest expectation of the teacher on the learning objective being taught. The rubrics supported the students in receiving the highest level of standard on their project by promoting the consistent application of the learning objectives. The rubrics allowed students to be accountable for their work, allowed them to revise and edit their work, and finally helped them to manage the work they had completed. The rubrics allowed the students to be cognizant of their learning and of the expectations of the teacher. All of these skills help to enhance the academic success of students. These findings are similar to Kolistka (2009) who stated that creating and maintaining classroom rules and procedures along with maintaining and communicating expectations are key to creating positive, nurturing classrooms.

Research Question 4: How do teacher and student active collaboration and use of cooperative groups support student achievement?

Collaboration and cooperative groups were used throughout the classrooms to create a varied interaction between students to students and teacher to students. The teachers in these classrooms shared similarities in their approaches to the cooperative group and teacher student interaction. However, the interaction between the teacher and students varied in the different classrooms. Although the interactions varied among the classrooms, the overall atmosphere and interactions were positive and very upbeat. Frequent verbal praise, pats and hugs, high fives, and the use of accountable talks all contributed to classrooms that had students who were engaged, focused, and supported. The groups also promoted the need for building articulation and

communication skills in the students. The students were held accountable for their work and for their ideas and thoughts that they provided during group time. Accountability, communication, and listening skills are all being built during these group times which will help to promote students' academic success.

Cooperative groups were arranged either heterogeneously or homogeneously in the classrooms to create a variety of skills level grouping. The cooperative groups worked together creating projects, discussing strategies and ideas with which to build their projects, and articulated their ideas using accountable talks. During these cooperative group times the teacher would actively visit the groups and give guidance and suggestions to assist the students if needed. The teacher and student interaction at this time consisted mostly of the teacher acting as the facilitator to the learning and the students doing the actual teaching of the concepts being taught. These findings were aligned with the recommendations of Johnson and Johnson (2009) that stated that cooperative groups provide an arena in which individuals develop the interpersonal and small group skills, teachers in a cooperative learning classroom will become the facilitators and will allow the students to take charge and become the instructor. The interaction between the teacher and students was always positive and feedback was provided as needed during the interactions. Students also used accountable talks during their discussion and cooperative group interaction. The students listened to the thoughts of their peers and allowed others to contribute their thoughts and ideas to the project while also providing input and thoughts. This is similar to the recommendations of Iyer (2013) who reported that cooperative learning promotes thought provoking and interactive environments for the students. The cooperative groups had varied skills levels but all members of the group were held accountable for participating in the work. The feedback that the teacher provided also helped the teacher to

see where individual student gaps and strengths may lie and where there may be a need for revisiting concepts already taught.

Research Question 5: How do the teacher's classroom temperature and lighting support student achievement?

The classroom observations noted that all 10 of the classrooms had access to windows and natural light in their classrooms that helped to create bright and cheerful environments. However, two of the classrooms did not use these windows for the natural light but instead used lamps and artificial lighting to establish adequate lighting in the classrooms to brighten the space. The windows in the classrooms not only brightened the space but allowed the students to have ample view out of a window. Along with the lighting, the temperature of the classrooms was noted. Nine of the classrooms had temperature ranges from 71-72 degrees that made the classrooms very comfortable and less distracting environments that supported the academic achievement of the students. This is similar to Pulay's (2015) recommendations that suggest that when the classroom environment has consistent and comfortable temperature and good lighting the academic success of a student can be enhanced. There was one classroom that had a temperature of 67 degrees and the temperature caused students to ask if they could retrieve jackets and sweaters from their cubbies and closet. This caused several distractions and the loss of student learning during the retrieval of the coats. It was noted that the thermostat was broken and a work order had been placed to fix the problem. Having a classroom environment that has consistent and comfortable temperature and good lighting can enhance the academic success of a student.

Research Question 6: How does the teacher's use of different teaching techniques support student achievement?

The teachers in the classrooms observed used a variety of technology and teaching techniques to support the learning of the students. The technology used in the classrooms was very similar from room to room. The technology used consisted of computers, IPODS, IPADS, personal devices, Smart Boards, calculators, projectors, and radios. The incorporation of technology allowed the students to engage in creative and technology based projects that they used to collaborate, create, and enhance their ideas and thoughts. The use of this technology also is important for building real world connections and teaching students how to become career and college ready.

Along with this technology, project-based learning was also incorporated into the classrooms. The use of project-based learning was effective in creating cooperative groups, interactive learning environments, and created learning environments where students are focused and engaged in their learning. The classrooms presented and shared ideas and strategies to create projects that connected with one another and had real word connections. The project based learning was again a great way for the students to be able to make real world connections. Students were able to create projects that were purposeful and that could be used in the real world. This type of learning is very beneficial for the students and helps to support their academic success.

The multiple intelligences were also incorporated into the classrooms. The teacher incorporated all types of learners such as using technology for the visual learners, hands on projects and materials for tactile learner, and music for the audio learner. This integration of lessons that incorporated all types of leaners helped to promote the academic success of all types of students found in the classroom. This is similar to the recommendations of Peters (2010) who stated that according to the multiple intelligence theory, identifying each student's intelligences

has strong ramifications in the classroom. Creating classrooms where all types of learning styles are incorporated will allow for each style to grow and prosper academically, socially, and intellectually.

### Recommendations for Practice

Results of this study indicate the need for districts to incorporate the constructing and developing of classroom environments that promote the academic success of their students. This development and construction of these classroom environments should include such characteristics as:

- Positive discipline/classroom management
- Well laid out and organized classrooms
- Comfortable temperature and proper lighting
- Accountable talks
- Collaborative groups
- Learning targets and rubrics
- Positive teacher student interactions

### Recommendations for Future Research

The study could be expanded in the following ways:

- This content analysis reviewed teacher and student interactions by observations. By creating a survey to give to students and teachers to determine what each perceives as the most important element of teacher student interactions is to them the research could generate specific data.

- This study did not incorporate the use of interviewing human subjects: Further studies could include interviewing teachers and students on what their perceptions are on the most important elements of creating a classroom environment that they feel makes the biggest impact on students' academic success.
- The setup of a classroom environment is typically left up to the teacher to construct before the school year begins. Further studies examining how teachers could incorporate student input more into classroom designs and developing a model or plan through the students input could support the understanding of the importance of constructing classrooms that impact the academic success of students.

### Chapter Summary

Constructing and developing a classroom environment that includes characteristics that support and impact constructing and developing a classroom environment that includes characteristics that support and impact student's academic achievement is important to teachers every year as they begin a new school year. This study was designed to analyze the characteristics of a classroom environment that can impact students' academic achievement. This chapter summarizes findings from the content analysis, and provides recommendations for practice and further research. The research showed that there is a need to establish safe, secure, engaging classrooms that will positively impact students' academic achievement. The research also showed that if a classroom is poorly organized and chaotic it can adversely affect the students' performance academically, mentally and physically. Implementing certain characteristics into the classroom environment that can positively impact student academic success has the potential to ensure that teachers have the knowledge of research data to create

classrooms each year that will help to promote their students' academic success and enhance their learning experience. School districts must support a classroom environment that is constructed and well developed to cultivate a learning environment that will be conducive to the academic success of the learners.

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VITA

LUCINDA BELLAMY

- Education: Ed. D. Educational Leadership, East Tennessee State University, Johnson City, Tennessee 2016  
M.Ed. Early Childhood, Milligan College, Milligan, Tennessee 2011  
B.S. Early Childhood Education, Milligan College, Milligan, Tennessee, 2010  
Dobyns Bennett High School, Kingsport, Tennessee 1987
- Professional Experience: Tennessee Secretary of State Civics Engagement Committee  
Nashville, Tennessee 2015-2017  
Tennessee Educational Voice Fellowship  
Nashville, Tennessee 2016  
Tennessee Department of Education Standards Review  
Nashville, Tennessee 2016  
Teacher Leader, Kingsport City Schools, Kingsport, Tennessee, 2015-2016  
Tennessee Secretary of State Blue Book Committee  
Nashville, Tennessee 2013-2014  
MIST Range Finder Committee  
Nashville, Tennessee 2013-2014  
Teacher, John Adams Elementary School, Kingsport, Tennessee, 2010-2016