The impact of classroom environment on student learning

Amy A. Turano
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ABSTRACT

Amy A. Turano
THE IMPACT OF CLASSROOM ENVIRONMENT ON STUDENT LEARNING
2004/2005
Dr. Marjorie Madden
Master of Science in Teaching

Classroom environment is a concern among almost all educators. This thesis discusses the four major factors of classroom environment: physical environment, time and instructional management, behavior management, and teacher effectiveness. A goal of this study is to contribute to teacher knowledge about how classroom environments impact student learning. A resource center and a first grade classroom were observed and the teachers of both classes were asked to complete a self-evaluation of their classroom’s environment. Both teachers were found to have classroom environments that were conducive to learning.
ACKNOWLEDGEMENTS

I would like to thank several people, for whom without them this thesis would have never been completed. To my mom and dad, thank you for all of your support and encouragement. I could not have made it through the past five years without you. I love you! Wayne, I am so grateful for your patience and continuous encouragement. Thank you from the bottom of my heart for always being there for me. Dr. Madden, thank you for all of your guidance and support throughout this process.
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Chapter One
Introduction to the Study

Sitting at a small table in the back of the room I had a perfect view of the class. When the students entered in the morning they all hurried to get their things unpacked and put their homework in the teacher’s mailbox. One boy in particular shuffled around frantically looking for his science book, glasses and homework. I watched as he looked in his backpack over and over and then glanced back at me with a look of complete fear in his eyes.

“Okay class, you should have all of your things put away by now. Michael, why in the world are you still at your desk searching through your backpack? Hurry up!” the teacher yelled.

Other students were tripping over one another trying to hang up their belongings before she could start to yell at them too. The small area for coats and backpacks was overflowing onto the floor and there was no space for students to maneuver their way back to their desks.

Before most of the students even had their pencils and notebooks out, the teacher began to rattle off a list of things they had to do before gym in a half an hour. The classroom still seemed chaotic and already she was giving out assignments. The assignments weren’t written on the board; students simply had to remember what the teacher was saying.
Michael had hung up his backpack at this point and was at his desk looking confused. Most of the other students were working diligently on the assignments. But others were still trying to figure out what they should be working on. Michael sat for a few seconds and then raised his hand to ask about the list of assignments he had just missed. The teacher looked up from her desk and said, "What Michael?"

He could tell by the tone in her voice that she was mad and he just replied, "Oh never mind." He looked at me as if he were hoping I could save him. My heart just sank because I knew he was afraid to ask his teacher questions, for fear that she would yell at him and embarrass him in front of his classmates.

Research Question

The main focus of this case study is to provide teachers with a better understanding of classroom environment, what it is based on, and if it impacts student success in school. My research question becomes, "What is impact of classroom environment on student learning?" Along with this main question, there are several sub-questions to help guide this study. The questions are as follows:

- What are the factors of classroom environment that can contribute or detract from student learning?
- How can a teacher create an environment conducive to learning?
- How do the two particular classes I am studying fit into the research?

Purpose Statement

The scenario discussed earlier was not fictitious. I experienced this exact situation while completing my practicum experience. This student, and many others in the class, was missing out on many valuable experiences because the classroom
environment was so chaotic. Researchers Marzano and Marzano (2003) believe that students cannot perform and learn to their fullest potential in a classroom that is chaotic and poorly managed. The purpose of this case study is to explore the impact of classroom environment on student learning. “It is imperative that classroom teachers provide a positive learning environment. It is in the classroom that teachers have the greatest control over conditions that affect learning and behavior” (Stewart, Evans & Kaczynski, 1997, p.53). Teachers should be aware of the impact classroom environment can have on students because of the way they conduct their classrooms.

Significance of the Study

The focus of my study is based primarily on the elementary school level. I am hoping that the topic of my research will enable other teachers to expand their knowledge about the impact of classroom climate on their students’ learning. The factors that contribute to classroom environment are relevant in classrooms with students of all ages and grade levels. Thus, my study is one that is based on a condition that is apparent in any classroom.

All classrooms have an environment or climate that could play a serious role in the success of the students. Real learning and conversation do not happen without an environment that fosters that possibility. Classroom environment is an important topic that every teacher should know about because these are issues that take place in every classroom. Although this specific case study and the suggestions I make for the two targeted classrooms may not be applicable to other classrooms because of the location, size and population that I am working with, the information found in my research can be applied to any classroom because classroom environment is likely to affect all students.
Students need to be comfortable with themselves, their surrounding, classmates, and teachers in order to gain the most beneficial education. In a classroom where student learning is fostered by the environment, the overall success of the students becomes positive.

Organization of the Study

This thesis begins with an overview of the case study in chapter one. Chapter two is a review of the related literature about classroom environment. Chapter three describes the context of the study as well as the research design. Chapter four discusses the findings from the data collection. The thesis concludes with chapter five which presents a summary of the findings, conclusions and implications of the study and suggestions for further research.
Chapter Two

Review of the Literature

In order for students to learn in school, it is not only important that teachers are instructing the students on what is in the textbooks, but it is also imperative that the classroom environment is one that allows students to perform to their highest potential. The focus of this chapter is to review current research that pertains to classroom environment and its impact on student learning. First, I review the four major factors that define classroom environment. Next, I will go into detail about each component and what it entails.

Factors that Define Classroom Environment

The classroom environment cannot be pinpointed as one specific entity. The whole environment of the classroom consists of several factors; indeed “it [the classroom environment] is constructed in much the same manner as a quilt—numerous and diverse parts gain distinctiveness through the contribution of each piece to a whole” (Stewart, Evans & Kaczynski, 1997, p.56). Classroom environment can be broken down into four main factors as explained in “Setting the Stage for Success: Assessing the Instructional Environment” (Stewart et al., 1997). The four factors are: (1) physical environment, (2) time/instructional management, (3) behavior management, and (4) teacher effectiveness.

When implemented properly, these four factors can play an important role in contributing to student learning. If one of these four factors is neglected, this could be
detrimental to the learning process. These factors need to be implemented all together in order to make the most positive impact on student learning.

**Physical Environment**

Physical environment is understood as the first step to "creating an orderly setting" for "establishing an environment conducive to learning" (Stewart et al., 1997, p. 53). Creating the physical environment of a classroom includes "designating areas for specific activities, selecting and arranging furniture, arranging seating to facilitate learning, decorating areas for specific purposes, and organizing materials and areas for easy access" (Stewart et al., 1997, p. 53). If the physical environment of the classroom is not "orderly and attractive" it can have a negative effect on "the way teachers and students feel, think, and behave" (Stewart et al., 1997, p. 53).

Furniture should be arranged so that appropriate traffic patterns can be formed and all materials are easily accessible. In order to create more space in a classroom for appropriate traffic patterns, desks can be arranged in groups. This becomes more welcoming and helps students with disabilities because they can move or be moved more easily around the room (Landau, 2004). With the desks set up in groups, teachers are also able to maneuver through the classroom more easily in order to monitor student behavior. Arranging the students' desks in clusters can also create an environment in which students feel comfortable to work cooperatively with their peers and ask them for help if they need it.

Stewart, Evans and Kaczynski (1997) argue that "an orderly and attractive environment can have a positive effect on behavior by improving the level and quality of student interactions, so teachers and students carry out activities efficiently without
excessive noise or interruption” (p. 53). Landau (2004) conurs, noting that “visual learners, for example, do better at any level if the classroom has interesting and appealing items on display” (p. 16). Teachers can make their classrooms visually appealing by having bright, colorful displays or bulletin boards throughout their classrooms. Bulletin board, for example, can enhance a concept being taught by visually representing content in a unit of study (Landau, 2004).

**Time/ Instructional Management**

In order to keep a classroom running smoothly, teachers must create and adhere to schedules for both the classroom and individual student (Stewart et al., 1997). These schedules should allow teachers to have the most time possible for core subject instruction (Stewart et al., 1997). Consequently, teachers who stick to their classroom schedules are less likely to run out of time for other lessons.

“It is helpful to plan a routine to open each day or period so that students know exactly what to do and a closing routine to tie together the school day or period in a pleasant, orderly manner” (Stewart et al., 1997, p. 54). Developing such a plan will enable teachers to cut down on wasted time and allow for more instructional time.

According to Kenneth D. Moore (2001), author of the book “Classroom Teaching Skills”, instructional time is defined as “blocks of class time translated into productive learning activities” (p. 362). Students should be productively engaged for the most part of the school day to allow for maximum learning.

Teachers should be using materials that are relevant and motivating to the students. Students should be provided with long term and short term goals. Having these
goals will increase the likelihood that students are successful in school because they are receiving instruction that matches their educational needs (Stewart et al., 1997).

**Behavior Management**

Behavior and classroom management are the two variables that have the greatest impact on student learning (Marzano and Marzano, 2003). Teachers should develop classroom rules in order to communicate expectations. Stewart et al. argue: “Behavior management and classroom control are central to stimulating learning. Research has shown that teachers who are effective in managing classroom behavior are also effective in improving achievement” (p. 55). Teachers should establish a limit of three to five rules for their classrooms. These rules should be clearly stated in the beginning of the school year, posted, and reviewed frequently (Stewart et al., 1997).

Teachers should use multiple interventions that accommodate the needs of the students. They should also “design and implement a number of incentive plans or rewards for appropriate behavior, and offer individual, frequent, specific, and corrective feedback about performance” (Stewart et al., 1997 p. 55).

**Teacher Effectiveness**

For over thirty years, the behaviors of teachers have been studied to determine the relationship to learner achievement” (Cano, 2001). Marzano and Marzano (2003) have found that “research has shown us that teachers’ actions in their classrooms have twice the impact on student achievement as do school policies regarding curriculum, assessment, staff collegiality, and community involvement” (p. 6). Furthermore, the research on the effectiveness of teachers is on-going, but there are already known factors
which are recognized as having affects on learner success as related to teacher effectiveness" (Cano, 2001).

A large factor in teacher effectiveness is being able to establish positive relationships with students. A teacher, who cannot communicate with his or her students, will not be effective. Research studies have shown the effects of teacher interactions with learners and found that “the degree and frequency of praise, use of classroom time, and the amount of attention given to groups or individuals to have significant positive correlations to a learner’s ability to learn” (Cano, 2001, p. 6).
Chapter Three

Context and Design of the Study

Introduction

In the following chapter, I discuss the research design and methodology I used in my study of the impact of classroom environment on student learning. The research is qualitative in nature and is a case study focusing on a first grade class and a resource center. I conducted my research in the two classrooms in which I completed my student teaching.

A research design that is qualitative has the researcher taking part in several activities at once (Creswell, 1994). The researcher is “collecting information from the field, sorting the information into categories, formatting the information into a story or picture, and actually writing the qualitative text” (Creswell, 1994). During my data collection I was looking for patterns or themes that would help me correlate my information with the research that has previously been done on the topic of classroom environment. My research is considered to be a case study because I was collecting detailed information on a specific group of people “using a variety of data collection procedures over a sustained period of time” (Creswell, 2003, p. 15).

Context of Study

The study that was conducted took place in an elementary school in southern New Jersey. Because I was in these two classrooms for 16 weeks doing my student teaching, I was able to observe the classroom environments and the possible impact they have on student learning. The research was done over a period of ten weeks. I used the first 2-3
weeks to observe the instructional strategies and overall classroom environment implemented by the teacher of the first grade classroom and the teacher of the resource center. The rest of my time spent at this elementary school was devoted to interviews and other observations to collect further data. Since the study was of only two classrooms in one particular school, the findings may not be applicable to all other classrooms. The findings here are only representative of these classrooms and how these classroom environments impact student learning.

School District

The school the study took place in will remain unidentified to ensure the privacy of the staff and students. The elementary school is located in Southern New Jersey. The total population for this area is 4,692 people according to the 2000 Census. This town is a growing area with a variety of new housing developments. There are 281 students enrolled at this elementary school. The grade level at the school is Kindergarten through fifth. According to the National Center for Education Statistics (NCES), in the 2004-2005 school year 86 percent of the students in attendance at this elementary school are Caucasian. Eight Percent of the students are African American. Two percent of the students are Asian and three percent are Hispanic. Twenty-three percent of students at this school receive free or reduced-price lunch.

The average household income in this elementary school according to the 2000 Census is $60,136. The majority of the population is employed in sales and office occupations. Management, professional and related occupations make up another 26.6% of the work force. Another 10.8% of the population works in service occupations. 22.5% of the population work in education and health and social services, while 9% of
the population works in retail. The remainder of the work force is employed in other industry jobs.

Participants

There are 281 students enrolled at this elementary school. The grade level of the school is Kindergarten through fifth. The classes in which my study took place are a resource center taught by a male and a first grade taught by a female.

The resource center teacher has been teaching for twenty-four years. He has been teaching in this district for his entire career. He began teaching in several different self-contained classrooms and has been teaching in the resource center at this school for the past sixteen years.

In the resource center there are eleven students who all have varying needs and capabilities. These students all qualify for either support or replacement in reading, language, and math. Of the eleven students only three are female. Cultural diversity is minimal. One of the students is African American, one student is of Hispanic descent and the other nine students are Caucasian.

The one first grader receives reading, language and math support. The two second graders receive replacement reading and language and in-class support for math. One of the third graders receives replacement reading, language and math. The other third grader receives support for all three subjects. A fourth grade student receives math and language support. All five fifth graders receive replacement reading, language and math.

The first grade teacher has been teaching for thirteen years. She has taught in both private and public school systems. Before teaching at this particular school, she had...
ten years of teaching experience in grades pre-k through eighth. This is her third year teaching first grade at this school.

In the first grade class there are eighteen students, ten girls and eight boys ranging in age from six to seven. Four students are in replacement reading to help enhance their reading skills. One student receives reading, language and math support both in the classroom and in the resource center. One student is in the EXCEL program, for gifted and talented students. Four students are in an advanced reading group that the teacher has created. Racial diversity is minimal in this class; there is one African American student, one Hispanic student and sixteen Caucasian students.

Procedures of the Study

I completed classroom observations of both the first grade and resource center teachers. While I was observing the teachers, I also completed a checklist adapted from one created by Susan C. Stewart, William H. Evans and Dan J. Kaczynski. The checklist is an assessment of classroom environment that includes four sections or four major factors that contribute to classroom environment. The factors include physical environment, time/instructional management, behavior management and teacher effectiveness. Several observations occurred in each classroom. The first observation occurred in the beginning of my placement, one five weeks later and the last observation took place at the close of my placement.

In order to understand full effect each classroom, I planned to videotape several lessons in each room. This would assist me in better identifying some of the components on the classroom environment checklist; however I was not given permission to do so.
Both teachers were asked to complete the classroom environment checklist, according to how they perceive their own classroom environments. They were asked to complete the checklist at the culmination of my student teaching experience (See Table 1).

Table 1: Classroom Environment Checklist

<table>
<thead>
<tr>
<th>The checklist is an assessment of classroom environment that includes four sections.</th>
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<tbody>
<tr>
<td>The items below will be assessed using the following system:</td>
</tr>
<tr>
<td>A (+) means the item was observed in the classroom.</td>
</tr>
<tr>
<td>A (-) means the item was not observed in the classroom.</td>
</tr>
<tr>
<td>A (?) means more attention needs to be given to this particular item by the classroom teacher</td>
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**A. PHYSICAL ENVIRONMENT**

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Arranges physical space to include appropriate furniture and designated areas</td>
</tr>
<tr>
<td>2.</td>
<td>Establishes appropriate traffic patterns: facilitates access to materials and areas</td>
</tr>
<tr>
<td>3.</td>
<td>Arranges seating to facilitate learning</td>
</tr>
<tr>
<td>4.</td>
<td>Makes classroom visually appealing</td>
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<tr>
<td>5.</td>
<td>Emphasizes a sense of ownership of the physical environment</td>
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**B. TIME/INSTRUCTIONAL MANAGEMENT**

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<tbody>
<tr>
<td>1.</td>
<td>Establishes and adheres to classroom/individual schedules</td>
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<tr>
<td>2.</td>
<td>Establishes guidelines for management of daily routines</td>
</tr>
<tr>
<td>3.</td>
<td>Monitors academic learning time carefully</td>
</tr>
<tr>
<td>4.</td>
<td>Manages nonacademic time efficiently</td>
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<tr>
<td>5.</td>
<td>Determines goals and responsibilities</td>
</tr>
<tr>
<td>6.</td>
<td>Emphasizes individual achievement</td>
</tr>
<tr>
<td>7.</td>
<td>Matches instructional needs to curricula</td>
</tr>
<tr>
<td>8.</td>
<td>Implements a variety of instructional arrangements</td>
</tr>
<tr>
<td>9.</td>
<td>Uses relevant, purposeful, and motivating teaching methods, activities, resources and technology</td>
</tr>
<tr>
<td>10.</td>
<td>Monitors progress and provides corrective feedback</td>
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**C. BEHAVIOR MANAGEMENT**

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<tbody>
<tr>
<td>1.</td>
<td>Posts, teaches and enforces rules (positive, concise, fair)</td>
</tr>
<tr>
<td>2.</td>
<td>Administers clear and appropriate consequences</td>
</tr>
</tbody>
</table>
I interviewed both the resource room teacher and the first grade teacher about their views of classroom environment and if they believed environment impacted student learning. They were asked their current classroom environment. Each teacher was also asked for one piece of advice they would give to a future teacher about creating his or her own classroom environment that is most conducive to learning (See Table 2).

Table 2: Interview Questions

1. Do you think classroom environment has an impact on student learning? Why or why not?
2. How did you go about creating the classroom environment that you currently have?
3. What is one piece of advice you would give to a future teacher about creating his or her own classroom environment that is most conducive to learning?

Data Analysis

The data from the teacher surveys was graphed to clearly show the similarities and differences in the teachers’ opinions of their classroom environments with what I
observed in their classrooms. I will compare their self-evaluations to my own and each others’ to analyze their views of classrooms environment. I will discuss both teachers’ answers from the interviews. I will also provide suggestions for possible improvements that teachers could make to create an environment most conducive to learning.

**Limitations**

Due to time constraints from student teaching and the completion of my Master of Science in Teaching courses, I was not able to survey as many teachers as I wanted. With more time I could have surveyed all of the teachers within that school and perhaps in other schools in that district. This would have possibly allowed for the findings to be more applicable to other classrooms.

I have based my case study on two classrooms in one particular school. The school has a small student population and little cultural diversity among the teachers and the students. Consequently, the results of this study are not generalizable. Furthermore, I had been planning on videotaping several class periods in both classrooms, I was not given consent by the superintendent. When the principal asked the superintendent if I would be able to videotape lessons in that school he said he would not be able to grant me permission to do so because has a very strict policy on student privacy and would not allow videotaping. This was a set back in my research because I was not able to pursue one of my data sources. The videotape would have provided me with a better insight on teaching methods and behavior management. This put a limitation on the amount of data I was able to collect from each class.

Teacher feedback on the classroom environment checklists and interview questions was minimal. The teachers were given several weeks to complete both the
checklists and the interview questions. There were no comments written on the checklist so I can only assume that both teachers knew what each item on the checklist meant.
Chapter Four
Results of the Study

In this chapter I discuss the results of the case study that took place in the two elementary classrooms. I compare and contrast the teachers’ self-evaluations with my evaluations of them using the Stewart, Evans and Kaczynski checklist of factors that define classroom environment. I have charted the results from both checklists to show the similarities and differences in opinions (See Tables 3 and 4). The answers from the interviews I completed with the teachers are also discussed in this chapter. I also describe how teachers can go about creating a classroom environment that researchers conclude to be most conducive to learning.

In Tables 3 and 4 the results of the checklist evaluations are shown. Table 3 shows the results of the resource center teacher’s (RCT) checklist in comparison with mine. Table 4 shows the comparison of results from the first grade teacher’s (FGT) checklist with my own. Both will be discussed together section by section. Then I will comment on their results as compared to my own findings.

Table 3: Results of the Resource Center Teacher Checklists

<table>
<thead>
<tr>
<th>Factors of Classroom Environment</th>
<th>RCT</th>
<th>Researcher</th>
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<tbody>
<tr>
<td>A. PHYSICAL ENVIRONMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Arranges physical space to include appropriate furniture and designated area</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
2. Establishes appropriate traffic patterns: facilitates access to materials and areas
3. Arranges seating to facilitate learning
4. Makes classroom visually appealing
5. Emphasizes a sense of ownership of the physical environment

B. TIME/INSTRUCTIONAL MANAGEMENT

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<td>?</td>
</tr>
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<td>2. Establishes guidelines for management of daily routines</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Monitors academic learning time carefully</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Manages nonacademic time efficiently</td>
<td>NA</td>
<td>+</td>
</tr>
<tr>
<td>5. Determines goals and responsibilities</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6. Emphasizes individual achievement</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>7. Matches instructional needs to curricula</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>8. Implements a variety of instructional arrangements</td>
<td>NA</td>
<td>+</td>
</tr>
<tr>
<td>9. Uses relevant, purposeful, and motivating teaching methods, activities, resources and technology</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>10. Monitors progress and provides corrective feedback</td>
<td>+</td>
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C. BEHAVIOR MANAGEMENT

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<tr>
<td>1. Posts, teaches and enforces rules (positive, concise, fair)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2. Administers clear and appropriate consequences</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Provides specific feedback for behavior</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Maintains a 3 to 1 ratio of attention to positive vs. negative events</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5. Uses a variety of interventions and reinforcers</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6. Individualizes intervention</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>7. Scripts out classroom routines</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>8. Uses behavioral rehearsal</td>
<td>?</td>
<td>+</td>
</tr>
<tr>
<td>9. Uses punishment sparingly</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>10. Includes self-management and monitoring techniques</td>
<td>+</td>
<td>+</td>
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D. TEACHER EFFECTIVENESS

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<tbody>
<tr>
<td>1. Maintains high expectations</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2. Knows students and accommodates diversity</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Models and infuses time-tested values</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Likes children and teaching and believes every student can learn</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5. Has a sense of humor, confidence, enthusiasm</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
Table 4: Results of the First Grade Teacher Checklists

<table>
<thead>
<tr>
<th>Factors of Classroom Environment</th>
<th>FGT</th>
<th>Researcher</th>
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<tbody>
<tr>
<td><strong>A. PHYSICAL ENVIRONMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Arranges physical space to include appropriate furniture and</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>designated area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Establishes appropriate traffic patterns: facilitates access to</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>materials and areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Arranges seating to facilitate learning</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Makes classroom visually appealing</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5. Emphasizes a sense of ownership of the physical environment</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>B. TIME/INSTRUCTIONAL MANAGEMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Establishes and adheres to classroom/individual schedules</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2. Establishes guidelines for management of daily routines</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Monitors academic learning time carefully</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Manages nonacademic time efficiently</td>
<td>?</td>
<td>+</td>
</tr>
<tr>
<td>5. Determines goals and responsibilities</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6. Emphasizes individual achievement</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>7. Matches instructional needs to curricula</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>8. Implements a variety of instructional arrangements</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>9. Uses relevant, purposeful, and motivating teaching methods,</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>activities, resources and technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Monitors progress and provides corrective feedback</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>C. BEHAVIOR MANAGEMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Posts, teaches and enforces rules (positive, concise, fair)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2. Administers clear and appropriate consequences</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Provides specific feedback for behavior</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Maintains a 3 to 1 ratio of attention to positive vs.</td>
<td>?</td>
<td>+</td>
</tr>
<tr>
<td>negative events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Uses a variety of interventions and reinforcers</td>
<td>+</td>
<td>+</td>
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<tr>
<td>6. Individualizes intervention</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>7. Scripts out classroom routines</td>
<td>+</td>
<td>+</td>
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<tr>
<td>8. Uses behavioral rehearsal</td>
<td>+</td>
<td>+</td>
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</tbody>
</table>
9. Uses punishment sparingly
10. Includes self-management and monitoring techniques

D. TEACHER EFFECTIVENESS

1. Maintains high expectations
2. Knows students and accommodates diversity
3. Models and infuses time-tested values
4. Likes children and teaching and believes every student can learn
5. Has a sense of humor, confidence, enthusiasm

Physical Environment

The resource center teacher and I agree that the classroom is arranged with appropriate furniture and designated areas. Two resource center teachers share this classroom. This means two different classes can be taking place at once. To partially separate the room, the teachers have set up a folding wall between their two work areas. Both teachers have kidney shaped tables and several desks on either side of the room. Five computer desks are located on the left wall, along with two large metal storage cabinets, a bookshelf and two file cabinets. The storage cabinets are where most of the necessary supplies are held. The majority of the books and learning materials are stored along the bookshelves that line the entire right wall off the room. The supplies and materials that are needed for that particular day are lined up in piles by grade level on the bookshelf.

Because the room is shared between two teachers, it is hard to establish appropriate traffic patterns. The resource center teacher gave himself a plus for that area, but I gave him a question mark. On his side of the classroom there is a moveable easel. This easel is constantly being shifted around to make room for the students or for the teachers to have a clear path to walk around. When the five fifth graders come in, four of
them sit at the kidney-shaped table. The fifth student sits at a desk behind the table. At this time, traffic flow is partially obstructed by the student desk. I think more attention should be given to this matter so that this area is always easy to maneuver through.

The resource center teacher and I both agree that the seating arrangement for the students in this class does facilitate learning. "The size of my classroom as well as the number of students that I have in a group affects the way I physically set up my room" (RCT Interview, 2005). Because it is such a small area, the students sit at the kidney shaped table for all of their lessons. The only group that has assigned seats is the fifth grade group. This is because there were several problems in the beginning of the school year with children not getting along, so the teacher had to change seats around. Four students sit at the kidney-shaped table and one student sits at a desk located directly behind the table.

The classroom is decorated with bulletin boards and other displays. This makes the classroom visually appealing and stimulating. A plus was given for this area by both of us. All of the students take pride in their classroom and have respect for their surroundings.

The first grade teacher and I agreed that she meets all of the physical environment components in her classroom. The teacher arranged the desks in groups by height. When the students came into the classroom in September she had them sit at desks that were an appropriate size for each student. The classroom has a large rug where the students sit for calendar time and other whole class or small group instruction. There is also a specific library area called "The Book Nook." This is sectioned off in the back corner of the room for children to read quietly. The children only keep notebooks and pencils in
their desks. Their textbooks are kept in book bins along the edge of the room. This is so they are not distracted by too much clutter in their desks.

Having the desks arranged in groups also helps facilitate student interactions and cooperative learning and makes it easier to maneuver in the classroom. Each group has a captain who can easily access the textbooks when the time comes.

The classroom has several bulletin boards, full of bright, colorful materials. "A positive colorful, interesting environment adds to the entire classroom experience, therefore improving students’ likelihood of learning" (FGT Interview, 2005). There are two large word walls; one for high frequency words and one for math vocabulary. These take up a large portion of the wall space. There is also a calendar board and a board with the specials schedules. The students’ artwork and academic work is displayed all over the room to make it visually appealing.

The students have a sense of ownership and pride in their classroom. They respect their surroundings and always try to keep their areas neat and clean. One of the three major rules in this first grade classroom is to “Take care of your environment.” This emphasizes the students’ sense of ownership of their surroundings.

**Time/Instructional Management**

When it comes to Time/Instructional Management, the resource center teacher gave several conflicting answers. I did not agree with him that he adheres to schedules very well. I believe more attention needs to be given to that area. This teacher is constantly changing his schedule from what he had written in his weekly plans. Sometimes it is beyond his control because he has to work around the students’ classroom teachers. Other times he just completely changes his original plans because he
changed his mind about what the students needed to work on. The resource center teacher needs to try to adhere to the schedules he develops and provide the students with more stability.

The resource center teacher received pluses in establishing guidelines for daily routines and monitoring academic learning time. When the students arrive in class, they know to come in quietly and place their belongings on the cluster of desks in the center of the room. They bring their homework and notebooks to the kidney shaped table and leave all of their other belongings on the desks so they are not distracted.

The teacher usually has part of the day’s lesson written on the chalkboard or dry erase board. This is done before the students get into the classroom in order to save instructional time. All necessary worksheets are made in advance to also save time. The teacher passes out notebooks, pencils, erasers or any other materials at the beginning of the class period. The teacher really tries to keep the students as on-task as possible. Many of the students lose focus easily and need to be redirected several times during class. The teacher tries to do so quickly so that no valuable time is lost.

The resource center teacher inserted his own response of Not Applicable for the areas of managing nonacademic time and implementing a variety of instructional arrangements. This caused a variance in answers because I gave him pluses in both of those areas. Because there was not written feedback on his checklist, I do not know why he believed these two areas to be not applicable in his classroom. I thought that for nonacademic time, he would consider the transitions between classes. For the most part, transitions are smooth. The teacher does lose several minutes of instructional time at the beginning and end of each class because he needs to pick up and drop off his students at
their regular classrooms, because the principal does not allow them to walk to and from their classes alone.

In the area of instructional arrangements, I noted on my checklist that although he has to follow a strict curriculum of direct instruction in his resource center, he still uses supplemental materials to help reinforce what is being taught in the SRA texts. For example, the fifth graders have direct instruction math, but the teacher brings in relevant games and manipulatives to help further their understanding of the subject. The use of these outside tools helps motivate students to learn.

It is very important for a teacher to monitor their class closely. This entails a teacher constructing activities to monitor student learning and to provide students with feedback on their progress. "Using a kidney shaped table with my small groups allows me to observe my students at work and to draw them into the lesson" (RCT, 2005). The teacher monitors the class by walking around while the students are working independently. He checks to see if the students are on-task and focused on their assignments. He monitors their learning by frequently asking questions about the lesson topic. It is important to ask questions throughout the lesson because the students' responses show if learning is taking place. The students' seatwork and homework are checked daily. This helps the teacher monitor their independent progress. He will return assignments and have children make the appropriate correction if necessary. Because all of the students in this resource center are classified, they have Individual Education Plans (IEP). This IEP determines individual goals and achievements. The resource center teacher creates these goals and objectives for each student, therefore receiving a plus in those two areas.
In the area of Time/Instructional Management, I gave the first grade teachers all pluses. The only section she did not give herself a plus in was manages nonacademic time efficiently. There was also this occurrence with the resource center teacher, so I am curious as to whether or not they understood what nonacademic time meant.

The first grade teacher tries to follow her classroom schedules and routines strictly. Every morning the students enter the classroom and go right into the coatroom, where they take out everything they need for the day. Each student sits at their seat with their binder out so the teacher can collect homework important papers. Then she follows whatever schedule she has on her daily plans. She tries to stay within the time constraints for each subject. If she runs over her allotted time for one subject then she knows she will have to cut another subject short, so she tries to avoid that situation.

For nonacademic time, I considered recess, bathroom breaks and time in the hallways. Teachers all have two or three days of lunch duty a week. Although the first grade teacher likes to have fun with her students on the playground, she still carefully monitors their time outside. The teacher also has time allotted for monitored bathroom breaks. The whole class is taken into the hall and several children are sent to the boys’ and girls’ rooms at once. When traveling to specials, the teacher has the students walk quickly and quietly through the hall so as not to waste any valuable time.

The first grade follows the New Jersey Core Curriculum Content Standards set for each subject. This allows the teachers to follows certain goals that the students should be achieving by the end of first grade. The teacher differentiates instruction as needed. There are leveled reading groups because not all of the students are reading at the same level. Instruction is also varied when needed. The teacher believes in Gardner’s theory
of Multiple Intelligences. She tries to make assignments in the classroom interesting for all learners.

The first grade teacher monitors her class by checking on the students while they are working independently. She monitors whether or not the students are on-task and focused on their assignments. She is constantly asking follow-up questions to ensure that the students have grasped the concepts taught in class. Students receive feedback on homework assignments and in class assignments daily.

**Behavior Management**

Behavior management is an important factor in classroom environment. I observed that the resource center teacher has developed a behavior management plan that is effective and keeps the students on task; therefore I gave him all pluses in this area. The only area in which he did not give himself a plus is in the section having to do with behavior rehearsal. There is a question mark, but no comment as to why he gave himself that mark.

The teacher has the classroom rules posted to the right of the door when you enter the room. The students were advised of the rules at the very beginning of the school year and are informally reminded of the rules continuously throughout the year. The teacher has eight important rules posted. If the rules are broken, there are various consequences. Students can earn checks on the board for poor behavior. Each check is worth five minutes of recess time lost. If the rules are continuously broken recess can be fully taken away or a call home to the parents will be made. The rules are as follows:

1. Be prepared for class.
2. Pay attention.
3. Raise your hand to answer a question. Do not call out.

4. No talking.

5. Follow directions.

6. Participate.

7. Cooperate.

8. Complete and hand in class work and homework.

When students are following the rules of the classroom, they earn pluses on the chalkboard. If a student earns three or more pluses for that day, they get to choose a lollipop to enjoy during their next session in the Resource Center. Their plus for the day gets recorded on the “Powerful Pluses” board. At the end of the week, if a student has earned a plus each day on the board they get to choose a prize from the treasure chest. Students are able to monitor their own progress because the board is posted where they can see it. “The use of a behavior management system to reward good behavior and effort has been helpful in motivating my students to stay focused and to try their best” (RCT Interview, 2005).

The teacher also noticed that the students were being careless with the completion of their homework assignments. He created a “Homework Heroes” chart where he records the completion of homework assignments. In order to earn plus for your homework it must be completed neatly and with 80 percent accuracy. When students earn ten pluses on the “Homework Heroes” chart, they are allowed to choose a prize from the treasure chest.

It is hard to keep track of the ratio of positive versus negative attention. I would say that from my experiences in the class that the resource center teacher is effective in
using positive attention more often than negative. The teacher practices specific behaviors with the students, such as raising their hand and not calling out. This is part of the classroom routine that they have to follow so they develop behaviors that are acceptable in school.

In the first grade classroom there are three specific rules posted in the front of the classroom. These rules were discussed with the students in the beginning of the school year. They are simple and general so that they cover most of the situations that would come up in the classroom. The teacher refers to the rules frequently when someone is breaking a rule. The rules are as follows:

1. Take care of yourself.
2. Take care of others.
3. Take care of your environment.

The teacher has developed one behavior management plan for the entire class to follow. Each student has a bank and can earn money for M & M’s or incentive cards each week. Students can earn money with good behavior and also for good grades. The students only get to see the money in their banks on Friday afternoons. This is when the money is counted and rewards are given out. The teacher very rarely takes money out of the students’ banks. A student must be behaving very poorly to have money taken out of his or her bank.

Once again the 3 to 1 ration of positive versus negative attention was an issue on the checklist. The first grade teacher gave herself a question mark and I gave her a plus. I believe she pays more positive attention to the students than negative. Although I did
not keep an exact record, of I observed that she always tries to recognize the positive aspects of a student’s behavior before the negative.

The first grade teacher only has one behavior management plan, but she does adapt it for certain students. There is one girl in her class who has a bad home life and does not have much money. The teacher tries not to take money from her bank if at all possible because she feels it would have an even more negative effect on the student’s behavior.

Students are able to monitor their behavior when the teacher brings it to their attention. She gives them multiple chances to redeem themselves after misbehaving. The students know the routines in the class when it comes to their behavior. The teacher usually gives at least one warning before taking money from their banks.

**Teacher Effectiveness**

Both teachers received all pluses in the area of Teacher Effectiveness. The teachers always maintain high expectations for their students. They believe teaching and learning can be fun, which in turn allows their students to feel the same way. Having a sense of humor and enthusiasm is a strong value for both teachers too. Students in both classes feel comfortable with their teacher and their surroundings, which enables them to have a classroom environment that is conducive to learning. “Setting a positive, non-threatening classroom environment helps build the students’ confidence and makes them feel accepted” (RCT Interview, 2005). The resource center and the first grade teachers have been teaching for many years and have been able to infuse their time-tested values upon the students in their classes.
Creating Environments Conducive to Learning

A teacher can create an environment conducive to learning by properly implementing the four factors that define classroom environment. Many researchers focus on building effective classroom environments by fostering a sense of classroom community, which is defined as the child’s “sense of connection to, being valued by and having influence with their classmates and teachers” (Schaps, Lewis and Watson, 1997, p.14). It is believed that children “with a high sense of community feel personally known and respected” and have a “significant say in planning, decision making and problem solving” (Schaps et al., 1997, 16). The resource center teacher believes that when students feel “at home” in the classroom, then they are “not afraid to express their thoughts or feelings. They are motivated to participate and try their best” (2005).

In a classroom with a strong sense of community students respect and care for one another, which leads to respect for their classroom and their surroundings. Students will want their classroom to be an organized place for them to work and learn. When students work in a classroom where they "feel liked, accepted and respected by the teacher and fellow students", they are more likely “work harder, achieve more, and attribute more importance to schoolwork” (Schaps, Lewis, & Watson, 1997, p.17). Students will also feel comfortable enough with one another to ask for help in a classroom with this kind of environment.

Conclusions

Overall, the two classrooms, according to the classroom environment checklist and the research I have done, are both environments that are conducive to learning. The teachers have created classrooms where the students feel safe and welcomed. This allows
students to work in a positive learning environment. In classrooms such as these students are able to work to their fullest potential because the classroom environments allow for that success.
Chapter Five

Summary and Discussion

As mentioned in previous chapters there were several limitations that have kept me from completing the research necessary to make this case study more relevant. Although this might not have been a successful research endeavor, it was still a learning experience. From this experience I have come up with several conclusions about each classroom and I am able to make suggestions for further research.

Conclusions

In Chapter Four, I concluded that the teachers in the two classrooms I observed for my case study had classroom environments that were conducive to learning. This of course is a positive outcome, and students in these classrooms are fortunate to have teachers who have created such effective environments.

There were, however, several answers on the checklist that were questionable. The teachers might have interpreted some of the criteria differently; perhaps, this could be the reason that the resource center teacher and I had varying results. He also added his own answer of Not Applicable (NA), which caused a variance in answers. The first grade teacher gave herself a question mark in the area of Time/Instructional Management and one in the Behavior Management section. I gave her pluses in both of those areas, so I am curious as to why she thought she lacked in those two areas. If I had conducted a follow-up interview after they completed the checklists, I would have been able to ask how they interpreted each factor and how they got the results they did. This might have helped me confirm the self-assessments of their classroom environments.
Implications

So what does this research mean and what is the impact it has on the teachers who were involved? These teachers have learned that they were successful in creating an environment where their students are able to learn and grow to the best of their abilities. They have also learned that there exist several areas that could use more attention. This research has allowed them to become more aware of the areas of classroom environment that might be hindering their students’ learning. Teaching is a constant learning process, through which teachers can grow and evolve to become the best facilitators for their students’ educational needs.

Suggestions for Further Research

If another researcher wanted to further explore this topic, it would be best to do a broader study. My research was only done in two classrooms, but had it taken place in more classrooms, I might have found out more on the topic of the impact of classroom environment on student learning. Future researchers could observe several classrooms and then compare student grades and interactions between one another in a classroom that did poorly on the checklist and one that was considered to be conducive to learning. In that case, another researcher might find more relevant information having to do with this topic.

This case study was largely based on a checklist developed by Stewart, Evans and Kaczynski (1997) to assess the four major factors of classroom environment. Some of the components under each of the four factors are hard to measure or can be interpreted in several different ways. If this checklist were to be used in further research, I would suggest that each component be carefully explained to participating teachers, to reduce
confusion and conflicting answers. With a clear explanation of the terms, both the teacher and the researcher would be able to focus specifically on the same characteristics being discussed.

The results from the checklist were developed based on merely my observations and understanding of the classrooms as a student teacher. The research might be more valid if an actual teacher who had several years of experience in the classroom completed it. The outcome of the case studies would still vary depending on the researcher and the participants.
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