IMPROVING CLASSROOM MANAGEMENT SKILLS IN SECONDARY SCHOOL CLASSROOMS THROUGH THE USE OF LIMIT-SETTING, AN INCENTIVE SYSTEM, AND STRUCTURED TEACHING

by

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(ABSTRACT)

Discipline in the classroom has been a concern of educators and the general public for years. Numerous programs have been developed to help the classroom teacher with his/her classroom management. These programs present skills that when properly applied could help to reduce the problems of classroom discipline. One program in particular, the Classroom Management Training Program (CMTP), has stated that the skills of positive instruction and positive discipline will help the teacher to reduce student disruptions, decrease the number of student off-task behaviors, increase the number of students helped by the teacher, and reduce the amount of stress felt by the teacher. Since these claims have not been substantiated at the senior high school level, it was the purpose of this study to determine if the application of the Classroom Management Training Program skills by teachers at the senior

high school level could bring about the aforementioned benefits.

This study was conducted employing 24 senior high school teachers who were presented with a questionnaire and asked to provide information on how the skills of the Classroom Management Training Program affected them and their students. Two of the 24 teachers had an outside observer monitor their first three class periods of the day, for three days per week, for a period of three weeks prior to and after they received training in CMTP. In addition, 113 students were presented with a questionnaire and 24 students of the 113 students were interviewed to determine their opinion of how they saw the program affecting them.

The findings indicated that class disruptions and student off-task behaviors were reduced, and a majority of teachers felt less stress, tension, and exhaustion after applying the skills of CMTP.

DEDICATION

This study is dedicated to my wife, Carolyn, my three children Todd, Brian, and Scott, and my parents. My wife and children, especially, have had to make many sacrifices in order for me to further my education. Their love, patience, encouragement, and cooperation have made it possible for me to complete this major project.

ACKNOWLEDGMENTS

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CHAPTER I - DEVELOPMENT OF THE PROBLEM

Introduction

For many years, educators and the public have been
concerned about discipline in the classroom (Baer, Goodall,
& Brown, 1983; Bell & Stefanich, 1984; Duke & Jones, 1984;
Polakowski, 1984; Seeman, 1984). Educators realize that
control of student behavior is essential for learning
(Neill, 1978). Bell and Stefanich (1984) write, "If
teachers are to teach and students are to learn, discipline
is necessary....Without classroom discipline, learning
cannot take place" (p. 134). In two separate Gallup Polls,
one on the public's attitude toward the public schools and
another on the teachers' attitudes toward the public
schools, sixty percent of the general public and forty-seven
percent of the teachers, respectively, felt that disruptive
classroom behavior occurred most of the time or fairly often
(Gallup, A., 1984; Gallup, G., 1984). In a Nationwide
Teacher Opinion Poll conducted by the National Education
Association forty-five percent of the respondents reported
that student misbehavior interfered with their teaching
(Duke & Jones, 1984).

While studying classroom misbehavior, Fredric Jones
(1979a), a researcher in the field of classroom management,
found that the vast majority of problems can be attributed

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to two types of student behavior: talking and leaving one's seat.

In a study to determine the most serious types of misbehaviors that a child can engage in within the classroom setting, Baer, Goodall, and Brown (1983), surveyed 232 central Illinois middle school teachers, grades 4-6. Their responses indicated that the misbehaviors considered by the teachers to be the most serious were those of laughing, excessive talking, unnecessary walking around the room, showing off, note passing, whistling, other annoying behaviors of a non-physical nature, passive resistance, daydreaming, non-involvement, lack of concentration, and other withdrawal behaviors where the students turned off to the activities of the classroom. Although these behaviors were not acts of provocation, violence, use of obscenities, vandalism, or talking back to the teacher, the teachers felt that these behaviors could inhibit the learning of others, reduce class time for teachers to work with children, and show disrespect for the teachers (Baer, Goodall, & Brown, 1983).

Student disruptions do more than contribute just to classroom problems. Constantly reminding the students to remain in their seats, to be quiet, and to remain on task not only wastes the time of the majority of students in class, but also takes its toll on the teacher. In a survey of teachers from the State of New York, "managing disruptive

children" was cited as the most stressful factor among teachers (Seeman, 1984). Similar results were obtained by Cichon & Koff (1980) in their studies of Chicago teachers.

A student teacher recently observed, "I'm beginning to come out of a slump that started Monday morning. Discipline has been much tougher than I suspected. I can now understand (but not accept) how teachers begin the long, downward spiral toward sterility, cynicism, and authoritarianism" (Bowman, 1983, p.116). This student teacher and other experienced teachers are coming to the realization that they need strategies for classroom management.

In recent years, there have been articles, theories, models, workshops, and different approaches to school discipline and classroom management. "Teachers are urged to be humanistic or behavioristic, to use logical consequences or classroom circle discussions, to reflect feelings, use 'I-messages,' or negotiate behavior contracts" (McDaniel, 1982, p.246). Their style can be one of a Non-Interventionist, an Interactionalist, or an Interventionist (Wolfgang & Glickman, 1980). They can be trained in Lee Canter's Assertive Discipline course, which claims to reduce disruptive behavior by 80%. They may be trained in the Classroom Management Training Program, which claims to reduce classroom disruptions, improve student motivation, improve teaching methods, increase job satisfaction, and

reduce the amount of stress that is felt by the teacher.
Teachers who "want to meet more successfully the everyday
challenges faced in the classroom - motivating, encouraging,
communicating, disciplining, leading groups, meeting special
needs, getting involved" - can enroll in Systematic Training
for Effective Teaching (Dinkmeyer, McKay, and Dinkmeyer,
1980). Teachers can also be involved in Dobson's Dare to
Discipline, Dreikurs' and Cassel's Discipline Without Tears,
Gordon's T.E.T.: Teacher Effectiveness Training, Glaser's
Reality Therapy, Madeline Hunter's Instructional Theory Into
Practice, Project TEACH, and Duke's Systematic Management
Plan for School Discipline.

By no means are these the only theories, programs,
models, or workshops available. With all these different
approaches to classroom management, why has there not been
more widespread agreement among their developers concerning
the most effective ways to manage the classroom and prevent
discipline problems (Duke & Jones, 1984)? Duke and Jones
(1984) assert that the reason for the disagreements are not
always a result of philosophical or technical differences.
The commercialization of classroom management has also
played a part. They state that

> Classroom management researchers, for various reasons,
> have become developers and consultants. As more
> "packaged" approaches have appeared and as resources
> for staff development have dwindled, competition
> between specialists has intensified. The climate,
> unfortunately, is hardly conducive to sharing ideas or
> integrating approaches. (p. 29)

Regardless of the reasons for the diverse opinions of the experts, it is still vitally important for the teacher to obtain skills to aid him/her in effectively reducing or eliminating disruptive behavior and concurrently become a more effective teacher. However, since there is a plethora of programs from which the teacher may choose, it may be worthwhile to isolate the skills from one of the many programs and determine if they improve the teacher's classroom management skills.

The Classroom Management Training Program, developed by Fredric Jones, a psychologist-consultant from Santa Cruz, California, focuses upon the instructional and classroom management skills necessary to enable the teacher to improve his/her management of the classroom. The instructional skills are basic to teaching a successful structured lesson. They include (a) setting the stage for the introduction of new material, (b) teaching to all modalities of sensory input and output (auditory, visual and kinesthetic) (Jones, 1983), and (c) giving corrective feedback to a student. The classroom management skills include (a) developing classroom rules and arranging the teacher's classroom; (b) using non-verbal communication (proxemics, kinesics, paralanguage) so the students know that the teacher "means business"; (c) implementing and using an incentive system to teach students responsibility, whereby they remain on task and do not disrupt the class; and (d) using a back-up system in

response to a severe discipline problem. Dr. Jones claims that these skills will help the teacher reduce student disruptions, decrease the number of student off-task behaviors, increase the number of students helped by the teacher, and reduce the amount of stress felt by the teacher. The Classroom Management Training Program skills have been used at the elementary, junior, and senior high school level. However, the only published supporting data on the success of these skills remains at the elementary level, with no supporting data as to its effect on teacher stress.

Statement of the Problem

Various high school teachers throughout the United States have used the skills provided by the Classroom Management Training Program. However, there has been no documentation of the results of the use of these skills at the senior high level (grades 9-12). This then raised the question: Did the application of the Classroom Management Training Program skills by teachers at the senior high school level bring about the aforementioned benefits?

Purpose of the Study

The purpose of this study was to determine if the application of the Classroom Management Training Program skills by teachers at the senior high school level would result in (a) a reduction or elimination of student disruptions, (b) a decrease in the number of student off-task behaviors, (c) an increase in the number of students helped by the teacher, and (d) a perceived reduction in the amount of stress felt by the teacher.

Research Questions

The following were the questions answered by this study.

1. Did the application of the skills from the Classroom Management Training Program help the teacher reduce student disruptions by 60% to 95%?

2. Was there a decrease in the number of student off-task behaviors due to the application of the skills of the Classroom Management Training Program?

3. Did the precise skills of giving corrective feedback obtained from the Classroom Management Training Program reduce the duration of the helping interaction between student and teacher to an average of 10 to 20 seconds per student?

4. Was there a perceived reduction in the amount of stress felt by the teacher as a result of using the skills obtained from the Classroom Management Training Program?

The percentage of reduction of student disruptions used in research question 1 and the average time for helping interaction between student and teacher used in research question 3 were taken from an overview report by Dr. Frederic Jones on the effectiveness of the skills of CMTP (1979a). The study under investiagtion set out to determine if these limits could be obtained at the secondary level.

Research question 2 did not specify any particular limits on the reduction of student off-task behaviors because none were set forth in the aforementioned report.

Significance of the Study

Ted Gary (1981), an educational consultant for Educational Service District No. 121 in Seattle, Washington, states that the goal of a school program is to help children develop self-discipline. This he feels will not only help the school, but also benefit society as a whole. He further states that "truly self-disciplined people will correct their behavior all the time, not just when an authority figure is present" (p. 18). In order to accomplish this task, teachers need more skill and training in classroom

management. Thus, if this study produced data that
indicated that the skills obtained from the Classroom
Management Training Program improved the teacher's classroom
management, perhaps these skills should be provided to other
high school teachers.

Limitations of the Study

This study was subject to the following limitations:

1. The study was restricted to one senior high school,
grades 9-12, in a large Northern Virginia school system.

2. The study was restricted to observing math and
science classes.

Definitions

1. <u>CMTP (Classroom Management Training Program)</u>--A
program developed by Dr. Fredric Jones that is currently
under study.

2. <u>Corrective Feedback</u>--Interaction between the
teacher and student, whereby the teacher helps the student
correct his/her work.

3. <u>Helping Interaction</u>--Interaction between the
teacher and student, whereby the teacher helps the student
progress with his/her work--one step at a time.

4. Inappropriate Talk--Behavior by a student who whispers, talks to another child nearby, talks across the room, or makes any audible vocalizations to no one in particular.

5. Limit Setting--The use of non-verbal communication (proxemics, kinesics, paralanguage) by the teacher so the students know that the teacher "means business".

6. Multi-Modal Kinetic Teaching--A process by which the teacher teaches to all modalities of sensory input and output (auditory, visual, and kinesthetic). It focuses upon learning by doing.

7. Out Of Seat--Behavior by a student whose body is not planted firmly in a chair.

8. Positive Discipline--Techniques used by teachers to aid them in their management of the classroom. In this study, they included (a) developing classroom rules and arranging the teacher's classroom; (b) using non-verbal communication (proxemics, kinesics, paralanguage) so the students know that the teacher "means business"; (c) implementing and using an incentive system to teach students' responsibility, whereby they remain on task and not disrupt the class; and (d) using a back-up system in response to a severe discipline problem.

9. Positive Instruction--Instructional skills that are basic to teaching a successful structured lesson. These skills included (a) setting the stage for the introduction

of new material, (b) teaching to all modalities of sensory input and output (auditory, visual, and kinesthetic), and (c) giving corrective feedback to a student.

10. Structured Lesson--A lesson format whereby the teacher "sets the stage" for the introduction of new material, teaches to all modalities of sensory input and output (auditory, visual, kinesthetic), and allows the students to practice what they have learned.

11. Student Disruptions--A disruption is an act by a student who disturbs a class through inappropriate talk or being out of one's seat.

12. Time Off-Task--When a student is not directly looking at his/her study material or looking at the teacher during lecture/explanation of the material.

Summary and Outline of Succeeding Chapters

Discipline in the classroom has been a concern of educators for many years. Numerous programs have been developed to help the classroom teacher with his/her classroom management. These programs consist of certain skills that when properly implemented will help in the reduction of various discipline problems. One program in particular, the Classroom Management Training Program, is composed of instructional and discipline skills and claims

to help the teacher reduce student disruptions, decrease the
number of student off-task behaviors, increase the number of
students helped by the teacher, and reduce the amount of
stress felt by the teacher. These claims have not been
substantiated at the senior high school level. It was the
purpose of this study to determine if the application of the
Classroom Management Training Program skills by teachers at
the senior high school level could bring about the
aforementioned benefits.

The review of the literature relevant to the skills of
the Classroom Management Training Program is discussed in
Chapter II. The general approach used in Chapter II is to
(a) briefly describe positive discipline and positive
instruction and their respective elements; (b) show how a
teacher may use these skills in his/her classroom; and (c)
present the essential thoughts, judgements, and/or opinions
expressed in the pertinent literature.

The methodology used in this study is discussed in
Chapter III. Chapter III includes the design of the study,
population and sample, the instruments used in this study,
data collection techniques, and the analysis of the data.

The findings of the study along with an analysis of the
data is presented in Chapter IV.

A summary of the entire study, conclusions,
recommendations, and speculations and implications based
upon the study are included in Chapter V.

CHAPTER II - REVIEW OF THE LITERATURE

Introduction

The purpose of this chapter is to review the literature
relevant to this study. The general approach used is to (a)
briefly describe positive discipline and positive
instruction and their respective elements; (b) show how a
teacher may use these skills in his/her classroom; and (c)
present the essential thoughts, judgements, and/or opinions
expressed in the pertinent literature.

Positive Discipline

"Positive Classroom Discipline integrates into a system
of advanced methods of classroom management that gets
students to quit disrupting and to get back on task" (Jones,
1983, p.103). It is comprised of three major areas (a)
limit-setting, (b) an incentive system, and (c) a back-up
system. However, before a teacher can perform the skills
necessary to get students back on task and to stop
disruptions, there are certain classroom rules and routines
that must be conveyed to the students. The teachers are
informed that it is important to discuss and develop with
the students the rules and procedures of the classroom at

the beginning of the school year (Charles, 1981; Emmer, Evertson, Sanford, Clements, and Worsham, 1984; Goss & Ingersoll, 1981). Studies have shown that effective teachers not only discussed the rules and procedures of the class with the students, but also taught them as if it were a regular classroom lesson (Anderson, Evertson, and Emmer, 1979; Barnes, 1981; Brooks, 1985; Emmer, Evertson, and Anderson, 1980; Evertson and Anderson, 1979; Evertson, Emmer, Sanford, and Clements, 1983; Evertson, Emmer, Sanford, Clements, and Worsham, 1984; Jacobsen, Eggen, Kauchak, and Dulaney, 1981). Madsen, Becker, and Thomas (1968) found that when elementary students were only told what was expected of them, there was no appreciable effect on inappropriate behavior. In addition, teachers are also shown ways to arrange their room to facilitate their easy movement among the students. One effective arrangement appears to be in the shape of a "U" or a semicircle to ease the teacher's movement and to increase interaction among student-student and student-teacher (Rosenfeld, 1977). What does the teacher now do if there is a disruption in the class and/or students fail to be on task? One solution is to apply the limit-setting skills of the Classroom Management Training Program.

Limit-Setting

Discipline, according to Jones (1979b), "is the business of enforcing simple classroom rules that facilitate learning and minimize disruption" (p. 26). The students must know that the teacher is in charge of the classroom and that proper behavior and attention to their studies are of utmost importance. One way for the teacher to accomplish this is through the skill of limit-setting.

Limit-setting is the way in which the teacher responds to classroom disruptions so that the students know that he/she "means business." It is composed of nonverbal communication and the ability to relax one's body when a situation arises. When a student or students disturb the class through talking or by other means, the teacher is taught to turn fully around and face the disrupting student(s) with no emotion on his/her face, obtain good eye contact with the student(s) (to the point of staring), relax by taking two relaxing breaths, say the name(s) of the student(s) clearly, firmly, non-threateningly, relax again through breathing, and motion to them to "get back to work." If this does not immediately solve the problem, the teacher is to walk slowly over to the desk of the biggest trouble maker first, relaxing the entire way, stand close to the desk by touching it with his/her leg, bend over and motion to the student through a visual prompt, verbalize if

necessary, to "get back to work", again relaxing the entire time through proper breathing.   If the student has not started to work at this time, the teacher is then directed to place both palms flat on the student's desk, move his/her shoulders and eyes down to the student's eye level, maintain good eye contact, relax, and remain in the student's "space" until the student resumes his/her work. If the student responds with back talk to the teacher, the teacher is to remain in the student's space without saying a word until the student responds by doing the classwork. Upon compliance by the student, the teacher turns and leaves the student, approaching the next disruptor if there was more than one, repeating the same procedure. Before the teacher resumes whatever he/she was doing before the interruption, he/she is to turn and squarely face the disrupting student, establish good eye contact if the student should look up, and relax through breathing. If the student resumes work, the teacher can now continue with whatever he/she was doing before being interrupted.

The "behaviors" or skills that the teacher must master and use rely heavily upon nonverbal communication and the relaxation techniques of breathing. Studies reporting the interpretation, use, and significance of nonverbal communication as it pertained to human communication did not start to appear until the 1950's (Duncan, 1969). Although anthropologists, psychologists, sociologists, and

psychiatrists have written many articles on the subject, it has been a relatively neglected area in educational research (Schusler,1971). The reason for its neglect may be due to the fact that "there is no system or language of nonverbal communication, and it is interpreted idiosyncratically rather than normatively" (Schusler, 1971, pg. 283). Questions have been raised about the value of nonverbal research as it applies to teaching. Educators have not been provided with a role for nonverbal communication in teaching, nor have they been provided clear directions and priorities for future investigations (Woolfolk and Galloway, 1985). Even though questions remain about the value of nonverbal communication, it does have its advantages. Grant and Hennings (1971) have stated that the use of nonverbal communication tends to remove the disruptive child from the center of attention, making less of an issue out of classroom disruptions. It also allows the teacher to continue with the class activity while attending to the disruptive student. The strength of nonverbal communication is "unmistakable" as described by Charles Galloway (1977):

> When we communicate an entire array of wordless expressions conveys attitudes and feelings. These are clearly portrayed by the face, hands, and body. Words miss their mark when compared to the furrowing of a brow, to the smile of a greeting, or to the wink of a confidante. The power of the nonverbal is unmistakable. (p. 129).

What actually is nonverbal communication? Siegman and Feldstein (1978) define it as "all nonverbal behaviors that

are involved in the transmission of experience or
information from one person to another" (pg 5). Robert Koch
(1971a) defines it simply as "any message we send or receive
outside of words" (pg. 231), while Hall, Rosenthal, Archer,
DiMatteo, and Rogers (1977) define it as the "sending and
receiving of nonverbal cues indicating feeling or attitude"
(p.162). Nonverbal communication can include the areas of
proxemics (the use of personal and social space along with
man's perceptions of them [Hall, 1969]), body motion or
kinesic behaviors (gestures and other body movements,
including facial expression, eye movement, and posture), and
paralanguage (behaviors that accompany speech such as tone
of voice, pitch, speech rate, etc.). The areas of
proxemics, kinesic behavior, paralanguage, and the
relaxation technique of breathing will be discussed as each
pertains to the skills that the teachers acquired from the
Classroom Management Training Program.

Proxemics

The skills used in limit-setting involve, to a great
extent, the areas of proxemics, kinesics, and paralanguage.
While employing the skills of the Classroom Management
Training Program, the teacher uses proxemics more than
kinesics or paralanguage. The term proxemics may be defined

as "the study of how man communicates through structuring
microspace - the distance that man consciously or
unconsciously maintains between himself and another person
while relating physically to others with whom he is
interacting" (Forston & Larson, 1968, p. 109). The term was
coined by Edward T. Hall, and he defined it as "the
interrelated observations and theories of man's use of space
as a specialized elaboration of culture" (Hall, 1969, p.1).
In order to better understand space, one must know exactly
what is meant by it. The concept of space is not new to
ethologists who have studied its use in animals for years
(Altman, 1975). Through the use of these studies, it helped
to show how man's space requirements are influenced by his
environment (Hall, 1969). Both man and animals have what
can be described as personal space. Robert Sommer (1969)
defines personal space as "an area with an invisible
boundary surrounding the person's body into which intruders
may not come...Personal space is not necessarily spherical
in shape, nor does it extend equally in all directions" (p.
26). It is a form of territory, but has no fixed geographic
reference points, as does territory. It moves with the
individual with its body at the center, while the center of
the territory is the home of the animal or man. Animals
will usually fight to maintain dominion space over their
territory whereas if someone intrudes into their personal
space, they will withdraw (Sommer, 1959). Edward T. Hall

sees personal space slightly differently than Robert Sommer. To him it is a series of concentric circles with man at the center (Hall, 1961) Within the circles lie four distinct distances or zones for human interaction: the intimate distance (0"-18"), the personal distance (1 1/2'-4'), the social distance (4'-12'), and the public distance (beyond 12') (Hall, 1969).

Age, sex, culture, personality, how the person relates socially, and the formality of the situation can affect one's personal space, regardless of its shape (Altman, 1975; Fisher & Byrne, 1975; Knapp, 1971). The need to have one's own personal space and the resistance to its invasions are so strong that each person still demands a given amount of space even in a crowd (Fast, 1970). What happens when someone's space is invaded? Depending on the person, situation, and surroundings, the "invaded person" may (a) accommodate himself/herself to the invasion by shifting position, interposing a barrier between himself/herself and the invader, or moving a chair (Felipe & Sommer, 1966; Barash, 1973); (b) become physically aroused (McBride, G., King, M. G., & James, J. W., 1965; Middlemist, Knowles, & Matter, 1976); (c) avoid an act that the person might otherwise perform (Barefoot, Hoople, & McClay, 1972); or (d) move away from the invader and reestablish the personal space boundaries (Felipe & Sommer, 1966; Sommer, 1969).

Evans and Howard (1973) have suggested that the reasons

for the reactions to the invasion of personal space are due to the fact that personal space invasion is stressful, and it is this space that is "a mediating, cognitive construct which allows the human organism to operate at acceptable stress levels and aids in the control of intraspecies aggression" (p. 340).

The invasion of personal space has been used by the police to interrogate suspects. In one textbook on criminal interrogation and confessions, the interrogator is instructed to sit closely to the suspect and prohibit any table or obstacle to come between them. Any kind of obstacle would give the suspect a certain degree of relief and confidence. If a man's territorial defenses are weakened or intruded upon, his self-assurance tends to grow weaker (Fast, 1970).

No research could be found about proximity and the invasion of personal space as it relates to the classroom. One can only surmise what would happen when the teacher invades the personal space of a disruptive student. As the teacher approaches and eventually "camps out" at the desk of a disruptive student, he/she invades that student's personal space. The student may become aroused by the teacher's presence and react to reduce this stressful arousal. This reaction usually manifests itself in a desisting of the inappropriate behavior and a return to work. When the student returns to work, the teacher has no need to remain

around the student's desk and leaves the area. When the
teacher leaves the disrupting student, this is tantamount to
a flight reaction on the part of the student, and, in a
sense, the stressful situation is left behind.

Kinesic Behavior

"He that has eyes to see and ears to hear may convince
himself that no mortal can keep a secret. If his lips are
silent, he chatters with his fingertips; betrayal oozes out
of him at every pore" (Freud, 1905, p. 77-78). This
statement by Sigmund Freud conveys the message of the great
importance that body actions play in the conveying of
information to people. Ray Birdwhistell, the pioneer in the
study of kinesics or body action, believed in the value of
body action (body expression) and stated that

> There is a language of body expression and motion which
> is ordered and structured as the language we speak.
> Like the language we speak it is made up in pieces of
> structure which can be assembled to form orderly
> sequences of message material which others trained in
> the same code can translate and respond to in kind
> (Schusler, 1971, p. 286).

Body action is indicative of a person's emotional state,
background, personality, attitude, and moment-to-moment
reaction to his/her environment and the people in the
environment (Schneider, 1979). It is composed of the areas
of facial expression including eye contact, posture, and

body movements. When messages are transmitted, they are sent with all parts of the body. However, 55% of what is communicated is conveyed by facial expressions (Mehrabian, 1968), and there is good evidence to support the fact that people can make accurate judgements of people's emotions from their facial expressions (Schneider, 1979). According to Ekman and Freisen (1983), every investigator over the last 30 years has been able to determine that the face can convey the emotions of happiness, sadness, surprise, fear, anger, and disgust. In fact, Ekman and Friesen (1983) conducted an experiment and showed observers pictures of psychiatric trainees undergoing a stress interview. The observers judged the facial expressions of those undergoing stress to be more unpleasant than those pictures from a nonstressful part of the interview. Thus it may be possible to determine additional emotions from facial expressions.

However, of all emotions conveyed from the face, the eyes may be the best nonverbal cue of all (Koch, 1971a). According to folk psychology, the eyes are the gateway to the mind. The use of the eyes in literature is seen everywhere. There is the evil eye, the jaundiced eye, all eyes, the gleam in one's eye, the shifty eye, and seeing eye-to-eye (Bakan, 1971). The eyes are powerful because they can both send and receive information (Hall, 1969; Hodge, 1971, Von Cranach, 1971). The strongest message they can send is when they are staring at another individual.

The stare can have several meanings. It can mean that a person wishes to dominate another individual (Argyle & Dean, 1965; Richey & Richey, 1978; Thayer, 1969), that a person wishes to indicate to an individual that he/she is "out of line" and is being warned to get back in line (Goffman, 1983), or that a person wishes to have a response from another individual (Ellsworth, Carlsmith, & Henson, 1972). When a person is stared at, he/she can become aroused (Gibson & Pick, 1963; Kleinke & Pohlen, 1971; Nichols & Chapness, 1971). This arousal indicates to the perceiver that the stare is worth noticing and interpreting (Ellsworth, 1975). According to Ellsworth and Langer (1976), when a person is stared at, he/she becomes aroused and may cast about for an appropriate response. If none occurs, the arousal may remain until he/she is able to escape from the stare. However, if the person is able to interpret what the staring individual wants, then he/she can reduce the arousal by responding. They also state that a stare will not elicit flight if there is some other appropriate response.

The face and its eyes are but one powerful means of nonverbal communication. The rest of the body is also capable of conveying messages. While the face conveys emotions such as anger, sadness, happiness, surprise, fear, disgust, and possibly stress, it provides relatively little information about the intensity of the emotions. On the

other hand, the body does (Ekman, 1965; Ekman & Friesen,
1967). People will generally try to conceal their facial
expressions; however, they will not try as hard to manage
what their bodies are saying (Ekman & Friesen, 1969; Ekman &
Friesen, 1974). For example, one's posture can convey inner
feelings such as weariness, alertness, or relaxation (Koch,
1971a). It is extremely important, therefore, that when a
teacher turns and faces a disrupting student, he/she is
aware of what his/her body expression conveys to the
student. The teacher must also make sure that eye contact
is established. The lack of emotion by the teacher
signifies to the student that the teacher is not becoming
upset over the disturbance. The eye contact is letting the
student know that the disruption must desist immediately.
If it does not, the teacher stares at the student and walks
over to the student's desk. This act, according to the
literature, will cause an arousal within the student. To
stop the teacher's staring and to "get" the teacher out of
his/her space, the student must stop the disrupting behavior
and return to work. The teacher must at all times remember
to send consistent messages with the face, eyes, and body,
for it is possible to send conflicting signals.

Paralanguage

We communicate 55% of our messages by the face, 38% by the voice, and 7% by the spoken word (Mehrabian & Ferris, 1967; Mehrabian & Wiener, 1967). This communication provides people with our emotional feelings. LaFrance and Mayo (1978) state that although the face predominates in emotional expression, feelings are also expressed by way of the voice. The use of all vocal behavior, including silence, beyond the choice and organization of words into syntax is what is meant by paralanguage (Katz & Katz, 1983). Koch (1971a) has written that the "voice seems to be verbal, but interwoven around and among the words are tone, intonation, volume, pitch, hesitation, quivering, silence, etc. Emotions come through such as anger, fear, or enthusiasm" (Koch, 1971a, p. 236). Koch is not alone in his findings. Others, such as Fairbanks and Pronovost (1939), Ostwald (1979), Streeter, Krauss, Geller, Olson, and Apple (1979), and Weitz (1979), have found that the voice can convey a person's emotions.

Messages conveyed by voice also play a role in classroom management. Therefore, when a teacher calls out the name(s) of a disrupting student(s), the voice should be calm and convey no emotion. If the teacher must verbalize with the disrupting student(s), the verbalization should be kept to one or two sentences and only when he/she is next to

the student's desk. The more the teacher speaks, the more the student can infer from the tonal qualities of the teacher.

If the nonverbal communications are contrary to what is being said verbally, the messages will conflict. Then the nonverbal messages will be believed over the verbal messages (Ekman & Friesen, 1969; Koch, 1971b; Mehrabian, 1972). It is, therefore, important that the teacher be fully aware not only of his/her verbal messages, but also of his/her messages communicated through body expressions.

Breathing

According to Havis (1975), poor classroom management can lead to tension within a teacher. He feels that this, in turn, may cause emotional reactions which result in an impulsive reaction to a disruption problem, as compared to a planned reaction. In addition, tension and stress can be read through a person's body language. Therefore, the teacher must slow down and relax. Breathing properly can aid in relaxation. Deborah Bright (1979) advocates the elimination of stress and tension by inhaling very deeply and smoothly, holding the breath for approximately three seconds, and then exhaling slowly and evenly, producing a wave of calm throughout one's body. Arthur Janov (1970),

author of The Primal Scream, also feels that deep breathing
helps relieve tension within the body. The act of deep
breathing results in the emission of an "explosive force,
something which previously had been diffused throughout the
body, in the form of high blood pressure, elevated
temperature, shaky hands, or whatever" (p. 17).

The skills of the Classroom Management Training Program
also advocate the slowing down and relaxation of one's body
through proper breathing. As the teacher faces the
disrupting student(s) and progresses through the various
steps of the limit-setting skill, he/she is constantly
taking two relaxing breaths. By slowing down and relaxing,
the students will not be able to read the tension or stress
within the teacher's body. This breathing, in turn, should
allow the teacher to feel better due to a release of tension
and stress.

In summary, limit-setting employs the use of nonverbal
communication (proxemics, kinesics, and paralanguage) and
the relaxation techniques of proper breathing. Grant and
Hemmings (1971) give two major advantages to the use of
nonverbal communication as it applies to a disruptive child.
First, nonverbal communication appears to make less of an
issue out of a classroom disruption by not making the child
the center of attention. Second, the teacher may continue
with the class activity while attending to the disruptive
student by staying at the child's desk. As this is being

done, class discussion can continue without disruption.

Incentive System

Occasionally, limit-setting will not work, especially
when the child may be sensitive to power interactions with
adults and will go to any length to win, regardless of the
outcome (Jones, 1983). At the secondary level, it is better
not to use limit-setting as a primary means for dealing with
disruptions (Jones, 1979b). The teacher is taught to use
incentive systems as the primary means for controlling
disruptions and for getting the students back on task, and
using the limit-setting procedures as a "back-up" system,
possibly in conjunction with the incentive system.

The incentive system is a system by which the students
receive rewards for proper classroom behavior and for
diligence in performing classwork. These rewards are based
upon Premack's principle. This principle states that "a
higher probability behavior can be used to reinforce a lower
probability behavior" (Kazdin, 1977, p.4). This means that
"people are more apt to do something they should do but
dislike if they reward themselves with something they like
to do" (Research Action Brief, 1979, p.2). Premack's
principle has also been called "Grandma's Law." This states
that "you have to finish your dinner before you get your

dessert" (Jones, 1983, p.128).

The incentive system concept for rewarding children for good behaviors and academic achievement is not a new innovation (O'Leary & Drabman, 1971). According to O'Leary and Drabman (1971) in their review of token reinforcement programs, they have found through the literature that nuts, figs, and honey were used to reward academic achievement in the twelfth century teaching of the Torah. In 1529, Erasmus advocated the giving of cherries and cakes rather than using a cane for the teaching of Greek and Latin. And, in England in the early part of the nineteenth century, children were given pictures when they were promoted. However, it was not until the mid 1960's that a reinforcement program, called the token economy system emerged in the educational system (Kazdin, 1982; Milne, 1979). The token economy system used in the schools usually included (a) a set of behaviors that earn tokens, (b) a procedure to award tokens to the students for appropriate behavior, (c) a way for the students to exchange their tokens for back-up reinforcers such as candy or special activities, and (d) a possible contingency for losing tokens due to inappropriate behavior (McLaughlin, 1975). The system has been used for student disruptions, attentive behavior, academic performance, and other classroom behaviors (Kazdin, 1977; Milne, 1979; McLaughlin, 1975; O'Leary & Drabman, 1971). Studies have shown that token reinforcement programs were effective in reducing

student disruptions (Boegli & Wasik, 1978: Broden, Hall,
Dunlap, & Clark, 1970; Dietz & Repp, 1973; Hegerle,
Kesecker, & Couch, 1979; Reyes, 1979; Thompson, Brassell,
Persons, Tucker, & Rollins, 1974; Wolf, Hanley, King,
Lachowicz, & Giles, 1970) and in increasing study levels
(Broden et al., 1970; Rollins, McCandless, Thompson, &
Brassell, 1974; Thompson et al., 1974).

A major drawback to the token economy system in the
classroom is the cost of implementing the program. Some
reinforcement systems may be monetarily out of the reach of
many teachers, schools, and school district budgets. Since
the token reinforcement system has been successful in the
schools, another similar system of reinforcement could be
used to replace the token system whereby the cost would be
negligible, if any. Instead of rewarding the students with
tokens that can be exchanged for such items as candy bars,
gifts, etc., the students could be rewarded by the promise
of free time. This may be time to talk to a friend, to
perform an academic task, to review with the teacher for a
test, or any other activity that the student and teacher
feel would be of benefit to the student. How the student
uses his/her time is usually based on a joint decision
between the teacher and the student.

How does the teacher institute the incentive system?
The teacher instructs the class that on a certain day of the
week, they will all receive a predetermined amount of time

to do what they want to do within reason. This time is referred to as Preferred Activity Time (PAT) and can be in the form of a game, dividing the class into teams and having them compete against each other by using questions that pertain to the class subject matter, or even a time to talk with a friend. The only requirement for receiving the reward of PAT is to work diligently without disrupting the class. However, when someone does disturb the class or fails to work diligently, the teacher will subtract the amount of time wasted from everyone's time. To help the teacher keep accurate time, he/she employs the use of a stop watch. When the student is not on task, the teacher calls out the student's name, starts the watch, and when the student gets back to work, the watch is stopped. To prevent the class from losing all its time due to a minority of individuals, the teacher tells them that they can receive bonus time. This bonus time is usually given if the class does a good job of staying on task for a prescribed amount of time. Thus the class receives an automatic amount of time each week along with bonuses and penalties. The teacher is instructed to keep a running total of PAT time on the blackboard so everyone in the class can see how they are progressing.

Studies have shown that the use of time as a reinforcer has been successful in elementary and secondary schools in reducing disruptive behaviors (Cowen, Jones, &

Bellack, 1979; Devine & Tomlinson, 1976; Long & Williams,
1973; Osborne, 1969; Sapp, Clough, Pittman, and Toben, 1973;
Schmidt & Ulrich, 1969), increasing academic achievement
(Bording et al., 1984; Sapp et al., 1973), and increasing
time on task (Cowens et al., 1979; Packard, 1970).

The incentive system, regardless of the reinforcers,
does have its critics. One criticism of the system is that
when the rewards are withdrawn, the undesirable behavior
will return (Cotton & Savard, 1982; Research Action Brief,
1979). Another criticism is that doing something for
extrinsic reward may cause a person's intrinsic activity to
decrease (Bates, 1979; Cotton & Savard, 1982; Greene &
Leeper, 1974; O'Leary, Poulous, Devine, 1972; Ryan, 1979).

However, even with its critics, the incentive system is
important in educational settings. First, behaviors such as
talking, getting out of one's seat, turning around, etc.,
have been reduced (O'Leary & Drabman, 1971). Second, the
incentive system results in getting more students to remain
on task (Broden et al., 1970; Cowens et al., 1979; Packard,
1970; Rollins et al., 1974; Thompson et al., 1974).
Research has shown that the more time students spend on
task, the more they learn (Anderson, 1980; Fisher, Berliner,
Filby, Marliave, Cahen, & Dishaw, 1980) and that their
academic achievement increases (Bloom, 1974; Cotton &
Savard, 1982; Dyreson, 1980; Fisher et al., 1980; Goss &
Ingersoll, 1981; Rosenshine, 1979; Seifert & Beck, 1983;

Stallings, 1980).

In summary, incentive systems have been successfully employed in both elementary and secondary schools to prevent disruptive behaviors and to increase on task behaviors. The increase in on-task behaviors has been shown to produce an increase in learning and academic achievement. The incentive system of the Classroom Management Training Program uses techniques similar to those of other successful systems. There is generally no outlay of funds to institute the system, except for a stopwatch. Many teachers who have been trained in the use of the incentive system of the Classroom Management Training Program rely on it primarily to keep order and increase work output, with help from limit-setting as needed (Jones, 1979).

Back-Up Systems

Occasionally, a student will not respond properly to the incentive system. What does the teacher do? He/she needs a systematic back-up system to deal with the student. Such a back-up system may be said to have four levels (a) small, (b) medium, (c) large, and (d) extra large.

A small back-up system or response is a "quick, private interaction with the student early on to warn them that larger consequences are near if they continue" (Jones, 1983,

p. 144). Limit-setting could be characterized as a small back-up response.

A medium back-up system or response is "a more explicit and public interaction with the teacher that represents a penalty of moderate size for continued provocation" (Jones, 1983, p.144). Limit-setting could also be a medium back-up response depending on the amount of confrontation during limit-setting between the teacher and the student. Detention, a telephone call home, or loss of privileges are other examples of a medium back-up response.

A large back-up system or response is "an interaction involving school administration and usually parents" (Jones, 1983, p. 144). A parent conference with an administrator is an example of a large back-up response.

An extra large back-up system or response is "a last ditch effort to keep the student in public education" (Jones, 1983, p.144). This response can involve suspension, expulsion, or court action.

When the teacher is trained in the use of the CMTP classroom management skills, it is stressed that he/she is to start with the small back-up response. The faster the teacher progresses to the larger type of back-up response, the less options are left for the teacher the next time the student misbehaves.

The back-up system is a means by which the teacher can expand his/her repertoire in classroom management. There is

no one best way to deal with students. Research does show, though, that parents expect teachers to discipline their children and also to keep them informed of their child's progress in school (Charles, 1981). Research also shows that other discipline programs are progressive in nature as to the action taken to discipline a student (Bell & Stefanich, 1984; Jones, 1983; Wilcox, 1983). However, no one student-teacher interaction can guarantee success. Therefore, it is important that the teacher have as many options as possible to help reduce the frustrations of investing all of his/her energies into only one solution (Knoff, 1983). No one option is better than another. The amount of literature available on the topic of classroom management is staggering (Goss & Ingersoll, 1981).

In summary, the back-up system ranges over four levels, small, medium, large, and extra large. These levels help provide the teacher with options so that the teacher can expand his/her repertoire in classroom management.

Summary of Positive Discipline

Positive discipline is comprised of limit-setting, an incentive system, and a back-up system. Limit-setting lets the students know that the teacher "means business." It uses the skills of nonverbal communication and the technique

of breathing. The incentive system is a means by which the
teacher elicits proper behavior from the student and his/her
attention to task through the use of a type of behavior
modification program. This program uses the reward of
Preferred Activity Time (PAT) as the reinforcer. The back-
up system is a hierarchial way of dealing with improper
student behavior. In secondary school, it is used to "back-
up" the incentive system when it fails to change improper
behavior.

Positive Instruction

The second major area of skills taught to the teachers
was positive instruction. These skills included (a) setting
the stage for the introduction of new material; (b) teaching
to all modalities of sensory input and output (auditory,
visual, kinesthestic) (Jones, 1983); and (c) giving
corrective feedback to a student. These skills are basic to
teaching a successful structured lesson. The structured
lesson has nine specific components. These are (a) raising
the level of concern, (b) reviewing and background
information, (c) goals and objectives, (d) explanation of
the current material, (e) modeling of the current material,
(f) structured practice, (g) guided practice, (h)
generalization and discrimination, and (i) independent

practice. The following is a brief explanation of each component.

a. <u>Raising the level of concern</u>--The importance of today's lesson is explained.

b. <u>Reviewing and background information</u>--The teacher reviews the skills from the previous day and any other pertinent skills that will be used in the current lesson.

c. <u>Goals and objectives</u>--The teacher informs the students what they will be accomplishing and what they will attempt to achieve.

d. <u>Explanation of the current material</u>--The teacher explains the nature of the skill they are about to learn and any related conceptual material. The skill or task is broken down into as many components as the teacher feels necessary to accomplish his/her objectives.

e. <u>Modeling of the current material</u>--The teacher performs or demonstrates the steps so that the students can have a visual picture of the steps of the skill.

f. <u>Structured practice</u>--The entire class is lead through the steps of the skill by actually performing the task step by step as the teacher leads them. "The objective of the structure practice is to give the students the experience of correct performance" (Jones, 1983, p. 88).

g. <u>Guided practice</u>--The students now have the chance to perform the skill semi-autonomously with monitoring and corrective feedback from the teacher as needed.

h. Generalization and discrimination--The students try variations on the skill learned, so that they may be prepared for totally autonomous work.

i. Independent practice--The students practice entirely on their own. Independent practice assures mastery of the skill.

These nine components of the structured lesson have also been investigated and used by other researchers. Barak Rosenshine (1983), in his investigation of teaching functions in instructional programs, has found through the research that effective instruction is composed of six instructional functions: reviewing previous material, presenting new material in small rapidly-paced steps, using guided practice, giving feedback and corrections, using independent practice, and reviewing.

Susan Barnes (1981) in her research of the literature has found that effective teachers, teachers whose classes regularly score higher on standardized achievement tests than less effective teachers, present the lesson similarly.

Madeline Hunter (1984) another researcher and author lists the elements of an effective lesson: readying students for the lesson; presenting the objectives; presenting materials through discovery, discussion, reading, listening, or lecturing; modeling the lesson; checking for understanding; using guided practice; and using independent practice.

Delva Daines (1982) has found that similar types of elements are necessary for mastery learning to occur.

Thus the manner in which various teachers present a structured lesson is basically similar, varying in the number of steps. These similarities include (a) getting the students attention by stating objectives, (b) presenting the material through various techniques, and (c) having the students practice what they have learned. It has been found that "structuring the lesson and giving directions on task procedures has resulted in a positive correlation with high student success" (Fisher, Berliner, Filby, Marliave, Cahen, & Dishaw, 1980). What makes the structured lesson successful is the manner in which it is presented to the students. To present a successful structured lesson requires certain skills. These skills are divided into three areas (a) introduction of the material, (b) multi-modal kinetic teaching, and (c) corrective feedback. A discussion of each area follows.

Introduction of the Material

The way in which the teacher introduces the new material to the students is extremely important. Teachers are taught to build up interest in the new material by explaining to the students its importance and relevance.

That is, the teacher tries to motivate the students into
wanting to learn the new material. This motivation is
considered a "key to increasing the quality and quantity of
the learning" (Daines, 1982, p. 8). The teacher next
reviews those skills from previous lessons that the students
will need to use in the learning of the new material.
Finally, the teacher presents to the students the goals and
objectives of the current lesson. This information helps
the students to establish what they are to work toward and
motivates them to participate in the learning activities
(Daines, 1982). In addition, students learn more
effectively when they know what they are supposed to be
learning (Hunter, 1984), and they remember material better
than those students who are not given the objectives (Gagne
& Rothkopf, 1975; Rothkopf & Kaplan 1972; Royer, 1977).
Madeline Hunter (1984) has also found that teachers teach
more effectively when they know the same advance information
as the students.

In summary, the students need to have the "stage set'
to motivate them to be interested in the new material.
Then, previously learned material is introduced if it is to
be used in the understanding of the material. Finally, the
goals and objectives of the new material are presented to
the students.

Multi-Modal Kinetic Teaching

The next "phase" of the structured lesson is to present
the new material to the students. This is done through
multi-modal kinetic teaching. Multi-modal kinetic teaching
is a process by which the teacher teaches to all modalities
of sensory input and output (Jones, 1983). Its main focus
is on learning by doing. It involves the three modalities
that are of greatest importance to educators: the visual,
the auditory, and the kinesthetic (Bissell, White, & Zivin,
1971; Barbe & Swassing, 1979). The process of multi-modal
kinetic teaching involves the teacher verbally explaining
the concept or skill to the students and visually
demonstrating (modeling) the steps necessary for student
understanding of the material. The modeling or visual
demonstration is performed step by step with pictures of
each step along the way. The pictures help to make each
step of the skill permanent. After the presentation of the
material by the verbal and visual mode, the teacher then
allows the students to perform the skill. The teacher
"walks" or guides all the students through the performance
of the skill one step at a time to give them the experience
of correct performance with maximum safety and maximum
precision (Jones, 1983).

Auditory learning (through hearing), visual learning
(through reading or seeing), and kinesthetic learning

(through the direct manipulation of materials), have been used since pre-Christian Greece (Semple, 1982). Only recently did Dunn and Dunn (1979) find out that between 20% and 30% of school age children learn auditorily, 40% learn visually, and the remaining 30% to 40% by either tactual/kinesthetic means, visual/tactual means, or by some combination of visual, auditory, tactual, and kinesthetic process. Thus, only one-third of school age children learn by auditory methods alone. The remaining 70% are either visual and/or a combination of tactual/kinesthetic along with visual and auditory. However, 90% of all instruction is conducted through either lecture or lecture-demonstration (Dunn & Dunn, 1978; Dunn & Dunn, 1979). Students who learn either visually or verbally tend to do well in school, while those who learn tactually or kinesthetically do poorly (Dunn & Dunn, 1978). It has been shown by research that when all three modalities are used, the students do better than when any one sense is used (Bissell, White, & Zivin, 1971; Casale & Manzo, 1982; Sisneros & Bullock, 1983). Bissell, White, and Zivin (1971) have found that individuals differ in the modalities they prefer to use in organizing information, and, at any instant, the individual may choose which modality he/she wishes to use to interact with the environment. The more methods used, the more choices there are for the learner to interact with his/her environment.

As the teacher presents the material through multi-

modal kinetic teaching, he/she is conscious of the fact that it should be presented in small steps with a visual presentation of each step. Research has shown that students learn best when material is presented in small steps (Brophy, 1979a; Brophy, 1982; Cunningham, 1983; Gagne' & Briggs, 1974; Roshenshine, 1983). Furthermore, "learning of a new skill will be done most readily when the learner is able to recall the subordinate skills which composed it" (Gagne & Briggs, 1974, p. 118).

In summary, the teacher needs to present the material one step at a time and in such a manner that the students' modalities of the auditory, visual, and kinesthetic are stimulated.

Corrective Feedback

The third major phase of the structured lesson involves the students performing the skills of the lesson, first semi-autonomously and then autonomously. The semi-autonomous stage is when the students perform the skill or concept, just presented by their teacher, at their desks with periodic monitoring and corrective feedback from the teacher. Corrective feedback is the key to the third phase of the structured lesson. It involves praising the student, describing to him/her exactly what he/she has done right so

far; prompting the student, or describing to the students exactly what he/she is to do next in the sequence of the skill; and leaving the student, or turning and walking away before the student has time to carry out the prompt (Jones, 1983). The Classroom Management Training Program refers to corrective feedback as praise, prompt, and leave.

To praise, the teacher is directed to approach the student, look at the student's paper, and focus on exactly what the student has done correctly, ignoring what the student has done wrong. The teacher then praises the student on the correct part of the response, stating to the student exactly what is correct about the response.

To prompt, the teacher uses the student's errors to determine the starting point for prompting the student into the correct response. The teacher sometimes gives the correct answer for one of the problems to help the student feel success. Whenever the teacher prompts the student, he/she tells the student exactly what to do next and does so one step at a time. The student is never given the entire solution to the problem at one time.

After the teacher has explained to the student exactly what to do next, he/she will leave the student, explaining that he/she will be back within a few moments to help the student. This leaving enables the teacher to move on to other students desiring help rather than be confined to helping only one student.

"Educational theorists, almost universally, advocate the value of positive reinforcers in promoting pupil academic learning" (Silvernail, 1979, p. 16). Praising the student on what he/she has done correctly rather than telling him/her what has been done incorrectly, is important because knowledge of correct performances rapidly improves the learning of a performance pattern, while responses that are not reinforced are usually dropped (McDonald, 1965). Bedwell, Hunt, Touzel, and Wiseman (1984) state that

> If the students are told of their mistakes too often, they are likely to form a negative self-image which will then result in poor performance in the classroom....Feedback should be immediate and positive in order to build slow learners' self confidence in the learning (p.103).

When the teacher enables the student to experience academic or social success, that teacher enhances the student's motivation and is also helping to remediate discipline problems (Cotton & Savard, 1982).

Prompts are vital to the learning of skills (Glendenning, Adams, & Sternberg, 1983). In order for the feedback of praise to be effective, it must be followed by a corrective procedure (prompts) which corrects weaknesses of instruction and learning (Levin & Long, 1981). Prompting allows the students to know exactly what to do next. It is a better procedure for initial learning compared to feedback (having the student do a certain task without giving the student the necessary response). It has been shown to

improve the students' recall and retention of material, and
it reduces learning time (Aiken & Lau, 1967). In fact,
Becker, Engelmann, and Thomas (1971) recommend that when a
student gives an incorrect response, the teacher should give
the student the correct response and ask it again. This is
essentially the type of prompt response used in corrective
feedback (praise, prompt, and leave).

It is difficult for a teacher to leave a student,
especially if the student has questions. However, this is
an important aspect of the skill of praise, prompt, and
leave. It requires approximately 30 seconds of contact time
between the teacher and student before the teacher leaves to
go to another student. Research indicates that teacher-
student contact should only be about 30 seconds (Evertson,
Anderson, Anderson, & Brophy, 1980; Evertson, Emmer, &
Brophy, 1980). If the teacher spends more time with the
student then there is less time for other students and for
monitoring the class (Rosenshine, 1983). Fisher et al.
(1980) found that students who have contact with the teacher
during seatwork increase their amount of time on task.
Therefore, it is important to attend to as many students as
possible within a class period, and it has also been found
that a successful manager of seatwork is one who actively
circulates among the students (Rosenshine, 1983).

In summary, the third phase of the structured lesson is
corrective feedback, also referred to as praise, prompt, and

leave. The teacher praises the student and tells him/her
what he/she has done correctly. The teacher then prompts
the student on exactly what to do next, one step at a time.
And finally, as the student acts on the prompt, the teacher
leaves the student, returning after a short while. The
purpose of leaving is to allow the teacher to help as many
students as possible within the short time frame of the
class period, and to also circulate around the room to
enhance classroom management.

Summary of Positive Instruction

Positive instruction is composed of three major phases
of a structured lesson: the introduction of the material,
multi-modal kinetic teaching, and corrective feedback
(praise, prompt, and leave). Each phase is important to the
success of the structured lesson. Fredric Jones (1979b)
states that

> Certain methods of instruction can have a marked effect
> on the amount of classroom disruption, the amount of
> academic productivity, and the amount of helplessness
> and passivity displayed by certain students. The most
> important is how teachers give instruction to students
> who are stuck (p. 31).

Summary

The skills of the Classroom Management Training Program are well substantiated in the literature. These skills rely heavily upon the use of body language, an incentive system, and the structured lesson.

The literature on body language indicates that when one's personal space is invaded, that person will perform certain acts that will rid himself/herself of the "invading" person. In addition, when one uses body language, all parts of the body play an important part in communicating the inner feelings of the individual.

Incentive systems have been used for years. A major drawback in the use of this system may be the cost of its implementation. However, if a classroom teacher would reward the students with the use of time instead of tangible items like candy bars and gifts, the cost would be negligible. The research shows that the use of time is an effective means for controlling behavior and increasing time on task.

The structured lesson is an important part of the Classroom Management Training Program skills. It structures the teaching of a lesson so that the students know what is expected of them, and allows the teacher not only to teach to all modalities of sensory input and output, but also gives him/her a way to provide corrective feedback to the

students. The literature shows that the structured lesson
is not new and has been thoroughly researched.

CHAPTER III - RESEARCH DESIGN AND METHODOLOGY

Introduction

The purpose of this chapter is to describe the design of the study, population and sample, instrumentation, data collection procedures, and data analysis techniques.

Design of the Study

This study is a behavior modification study using contingency management. To implement it, three teachers (math, science, and social studies) participated in two days of the Classroom Management Training Program and allowed an outside observer to monitor their first three class periods of the day, for three days a week, for a period of three weeks both prior to and after they received their training. The data recorded during the three week period prior to teacher training established the baseline data. The data recorded in the three week period after teacher training provided data for comparison with the baseline data. However, due to illness and death in the family, the social studies teacher had to withdraw from the program before its completion. Also because of lesson scheduling problems, two of the math classes were not observed for the complete 18

days. In this study, the two teachers who had their classes observed will be referred to as the "observed" teacher group.

The observers who recorded the data had been instructed to record (a) the number of students who talked at inappropriate times or who were out of their seats, (b) the number of students who were off-task, and (c) the number of students who received individual teacher help. Each observer was trained by this researcher in the proper technique of observing classes and recording data. The training consisted of two hours of classroom instruction and a minimum of one hour of actual classroom observation. The observers were not permitted to take meaningful data until there was at least 80% interobserver reliabililty between the observers and this researcher on what was being observed during the training observations.

Following the six weeks of classroom observations, a questionnaire was distributed to the "observed" teacher group and to 22 other teachers from the same school. Though these 22 additional teachers, referred to as the "unobserved" teacher group, were not observed in this study, they previously had been taught the skills of the Classroom Management Training Program and had been applying them in their own classrooms for at least a three month period. The questionnaire determined the teachers' perceptions on how the skills from the Classroom Management Training

Program affected (a) student behavior, (b) student
productivity, (c) the amount of teacher interaction, (d)
feelings about teaching children, (e) job related stress,
(f) student grades, (g) student off-task behaviors, (h) job
satisfaction, and (i) feelings about colleagues and self.
In addition, a questionnaire was also distributed to the
students of the two teachers in the "observed" teacher group
to determine if they noticed (a) a reduction in the amount
of noise in the classroom, (b) an increased understanding of
the material, (c) an increase in the amount of time they
spent on their assigned work, and (d) an increase in the
number of helping interactions between the teacher and
themselves. This questionnaire was coupled with a personal
interview of 24 students, chosen by the two teachers from
the "observed" teacher group (four from each of the six
classes), to determine the students' opinions of how this
program affected them.

Population and Sample

This study was conducted in a high school located
within a large Northern Virginia county. This County has a
population of 639,800 people of which approximately 124,000
are students enrolled in its schools. The school system
employs over 7,000 teachers, is the largest employer in the

Commonwealth of Virginia, and consistently ranks 10-12 in size for school districts throughout the nation.

The high school chosen for this study was located in the north central section of the County. It was one of 23 high schools within the County.

A math teacher and science teacher, comprising the "observed" teacher group, and 22 additional teachers from the same school, comprising the "unobserved" teacher group, constituted the sample for this study. The math teacher from the "observed" teacher group was observed during one of the teacher's Algebra II class and two Algebra I classes. The science teacher from the "observed" teacher group was observed during one of the teacher's Earth Science class and two Earth and Space Science classes. These two teachers were chosen by this researcher to participate in this study because of their willingness to have their classes observed and studied, their willingness and enthusiasm for participating in this program, and their desire to learn and apply new classroom management skills in their classes.

The classes that were observed were all taught in self-contained classrooms. The classes and their student populations were as follows: two Algebra I classes with 22 and 25 students, one Algebra II class with 29 students, two Earth and Space Science classes with 11 and 14 students, and one Earth Science class with 26 students. The Algebra I, Earth and Space Science, and Earth Science classes each

contained a majority of 9th grade students, while the Algebra II class was composed of 11th and 12th grade students. The pupils in these classes were typical of the student population and were formed by random computer selection.

The student population of this high school was approximately 1,468 students out of a possible 42,966 students attending grades 9-12 in the County. The student body is atypical of the other County high schools in the respect that it had a large population of foreign-born students. The total student minority population for the entire school system was 19.5%, whereas the minority population of this high school was approximately 46%. However, test scores and the number of students pursuing some form of post secondary education were comparatively close to the County average. The SRA averages for 1983-84 for this high school's eleventh graders were 67% Educational Ability Series (County average 76%), and 69% Composite (Reading/Math/Language) (77% County average). The 1983-84 SAT scores for this high school were 442 verbal (459 County average), and 518 math (511 County average). The post-high school intentions for the entire senior class of 1984 at this school indicated that approximately 82% were pursuing further education. This is in comparison to 85.1% of the 9,417 County graduating seniors in 1984. In addition, this school was a comprehensive high school offering a wide

spectrum of courses ranging from the vocational to the college preparatory with Advanced Placement courses in English, history, calculus, computer science, biology, and chemistry. Programs were offered to the gifted/talented students at each level in the four major academic disciplines of English, mathematics, science, and social studies. Although the school appeared to be atypical in its minority population, it is a representative high school based on test scores, number of students pursuing a post secondary education, and its course offerings.

The 22 teachers from the "unobserved" teacher group were chosen to participate in this study because they previously had been taught the skills of the Classroom Management Training Program, they had been applying the skills in their own classrooms for at least a three month period, and their perceptions were needed on how the skills of CMTP affected them and their classes. The "unobserved" teacher group was composed of teachers from the math department, science department, social studies department, ESL (English as a Second Language) department, foreign language department, English department, and the special education department. Other teachers in the school were not chosen to participate in this study because they either had not participated in the CMTP program, or they previously had been trained but for some reason did not choose to use the skills. There were a total of 24 teachers who participated

in this study, two in the "observed" teacher group and 22 in the "unobserved" teacher group. The total number of teachers in this school was 93.

Instrumentation

The instrument that was used to determine the number of disruptions in a class period, time off-task, and the number of students who received individual help, was a "Student Observation Scoring Form." The scoring form contained spaces for the observer to record disruptions every 15 seconds for a two minute interval, off-task behaviors every 15 seconds for a two minute interval, and the number of students given corrective feedback for a two minute interval before and after off-task behavior observations. This form was developed by Dr. Fredric Jones and was modified and pre-tested by this researcher for use in this study. The modification entailed (a) lengthening by five seconds the observation time of student disruptions and off-task behaviors that were exhibited during each time interval as compared to the original form developed by Dr. Jones, and (b) incorporating provisions for recording the lesson format, no independent seat work by the students, and "make-up" time for corrective feedback. The purpose of the pre-testing was to determine the best possible length of

observing time for the observers and to discover any possible flaws in the measuring instrument.

An extensive set of directions was developed into a manual to aid the observers in the proper use of the scoring form. This manual, a copy of which is contained in the appendix, was initially developed by Dr. Jones and was modified by this observer to account for the modification in the scoring form. The manual had specific directions on what behaviors were to be scored, scoring procedures and general instructions for observation, and specific instructions on the use of the Student Observation Scoring Form and accompanying data summary sheet.

The reliability of the observation instrument was assured through a weekly check of the interobserver reliability. The observers were checked weekly to determine if they were consistently recording what they saw.

The validity of the observation instrument was assured through a thorough training of the observers. They were taught to record only specific behaviors and not record any inferences.

A questionnaire, a copy of which is contained in the appendix, was used to determine the perceptions of each teacher and student involved in this study. The "observed" and "unobserved" teacher group were asked to furnish information based upon their perceptions of how the acquired skills from the Classroom Management Training Program

affected (a) student behavior, (b) student productivity, (c) the amount of teacher interaction, (d) feelings about teaching children, (e) job related stress, (f) student grades, (g) student off-task behaviors, (h) job satisfaction, and (i) feelings about colleagues and self. The questionnaire contained 44 questions and required the teacher to respond to specific questions through the encircling of a number for his/her response. These numbered responses ranged in value from 1 through 9. The teacher's response denoted a perceived decrease if he/she circled any number from 1-4. The lower the number circled, the larger the decrease. The teacher's response denoted a perceived increase if he/she circled any number from 6-9. The higher the number circled, the larger the increase. The teacher's response denoted no perceived change if the number 5 was circled.

The students in the "observed" teachers group classes furnished information about their perceptions on how the teacher's skills affected (a) the amount of noise in the classroom, (b) their·understanding of the material, (c) the amount of time spent on their assigned work, and (d) the number of helping interactions between the teacher and themselves. The student questionnaire which contained 36 questions was similar in design to the teacher questionnaire. To acquire a more in-depth analysis of the students' perceptions, four students from each observed

class were chosen by the teacher, based upon the teachers
judgement, to be interviewed by this researcher. One
student was the most outgoing, one was the most withdrawn,
one was the best student, and one was the most disruptive.
These four types of students were chosen because they
represented the extremes of any "typical" class.

Since the teacher questionnaire was based on opinions
and had been previously used by Dr. Jones, there was no need
to check its reliability or validity. The student
questionnaire, on the other hand, was tested by giving it to
students who were not in this study. They were asked if the
questions were clear and unambiguous.

Data Collection Procedures

To determine if classroom disruptions and off-task
behaviors were reduced and if there was an increase in the
number of helping interactions between the teacher and the
students, observations of the "observed" teacher group
classes were made prior to and after the teachers attended
the Classroom Management Training Program. Strict
guidelines were established to enable the observers to take
accurate and reliable data. The observers observed and
recorded, in the following order, two minutes each of (a)
disruptive behavior, (b) corrective feedback (only if the

students were working independently at their seats), (c)
off-task behavior, and (d) corrective feedback (only if the
students were working independently).

To record disruptive behavior, each observer divided
the classroom into two approximate halves. He/she
alternately observed each half of the classroom for a 15-
second time interval until two minutes elapsed. The first
15-second time interval was devoted to sampling 'disruptive
student behavior' in the right half of the class; the next
15-second time interval was then devoted to sampling this
behavior in the left half of the class. The next time
interval returned the observer to the right side of the
room, and so on until the entire two-minute data block had
been exhausted (Jones, 1984).

Each 15 second time interval was broken down into two
parts. The first ten seconds of each interval were used for
scanning; the last five seconds were used for recording.
Scorers scanned a given half of the room, tallied the number
of students engaged in either inappropriate talk or being
out-of-seat, and then recorded that tally on the Scoring
Form in the space next to the beginning time of the
interval. No student was scored as engaging in either of
these behaviors more than once per 15-second time interval
(Jones, 1984).

During the next two minute time interval, the observer
concentrated on the teacher's behavior and recorded the

number of students who received individual help from the teacher (corrective feedback). This data was recorded only if the students were working independently at their seats. For any lesson format other than independent seat work, the observer was instructed to rest for 30 seconds and then proceed to recording off-task behaviors. However, if the teacher decided to allow the students to work independently after the observer has "skipped" one or more corrective feedback sections, the observer was able to make-up missed time at the end of the total observation cycle.

Using the same procedures and length of time as was used for scoring student disruptions, the next two minutes were devoted to scoring off-task behavior. Again, no student was scored as being off-task more than once per 15-second time interval. This sampling continued for a two minute time interval and was recorded on the Student Observation Scoring Form.

After the observer scored two minutes of off-task behavior, he/she again scored corrective feedback only if the teacher had the students working independently at their seats. If not, the observer waited 30 seconds and continued on to the next cycle.

Each Observation Form was composed of two observation cycles. Each cycle consisted of observations for disruptive behavior, corrective feedback, off-task behavior, and corrective feedback. If the observer recorded data for all

sections, a total of four minutes of disruptive behavior,
four minutes of off-task behavior, and eight minutes of
corrective feedback was recorded.

Reliability and accuracy of data collection on the
Student Observation Scoring Form was insured through a
thorough training of the observers. The training entailed
two hours of instruction and the establishment of at least
80% interobserver reliability between each observer and the
trainer (researcher) during pre-data gathering classroom
observations. The two hours of instruction included scoring
procedures, behaviors to observe and score, general
instructions for observation, and specific directions on the
use of the scoring form. The importance of scoring data
based only on what was observed, rather than what was
inferred, was stressed. For example, the observers scored
talking only when they saw some type of movement which
indicated talking and did not infer that there was talking
without visual evidence. The pre-data gathering classroom
observations focused upon practicing how to observe, record,
and take data. Each observer spent at least one class
period with the trainer (researcher), observing and
recording the targeted behaviors. When the observer and
trainer obtained at least 80% interobserver reliability on
the observation(s), then and only then were the observers
permitted to gather actual data. To assure continuous
reliability, the trainer periodically (once a week) observed

classes during the observers data gathering sessions and compared results. If the results were below 80%, additional training resulted to correct for future errors. However, there was no need for additional training since the interobserver reliability for the science observer and trainer ranged from 89% to 100% for classroom disruptions, 92% to 100% for off-task behaviors, and was 100% for corrective feedback. The interobserver reliabililty for the math observer and trainer ranged from 83% to 100% for classroom disruptions, 83% to 100% for off-task behaviors, and was 100% for corrective feedback. In addition, a Pearson product-moment correlation coefficient was determined for each observer and trainer and the results were .983, .998, and 1.000 for the science observer and trainer as it related to classroom disruptions, off-task behaviors, and corrective feedback, respectively, and .962, .958, and 1.000 for the math observer and trainer as it related to the same three areas.

Upon completion of the observations, a questionnaire was distributed to each teacher in the "observed" teacher group and the teacher's students and to the teachers in the "unobserved" teacher group. The information obtained from the teacher questionnaire focused upon the perceptions of the teacher as to the effect the skills of the Classroom Management Training Program had upon the teacher's classes. The student questionnaire provided information on the

students' perceptions of how the skills of the Program
affected them.

In addition to the questionnaires, an interview was
conducted with four students from each observed class. The
purpose of this interview was to obtain a more in-depth
study of the effect of the Classroom Management Training
Program skills upon the students.

Data Analysis

Upon completion of each classroom observation, the
observer totaled the number of classroom disruptions, off-
task behaviors, and helping interactions between the teacher
and the student. The observer also totaled the number of
minutes of observation time for each of the three variables
(disruptions, off-task, teacher help). From this
information and the knowledge of the number of students
observed, the researcher was able to determine (a) the
number of disruptions per child per minute, (b) the number
of disruptions per minute, (c) the number of off-task
behaviors per child per minute, (d) the number of off-task
behaviors per minute, (e) the feedback interaction
duration, and (f) the number of students helped per half-
hour.

The following formulas were used to determine:

1. The no. of disruptions per child per minute

$$= \frac{\text{total disruptions}}{2 \times \text{no. of stdts} \times \text{min observed}}$$

2. The no. of disruptions per minute

$$= \frac{\text{total disruptions}}{2 \times \text{min. observed}}$$

3. The no. of off-task behaviors per child per minute

$$= \frac{\text{total off-task behaviors}}{2 \times \text{no. of stdts.} \times \text{min. observed}}$$

4. The no. of off-task behaviors per minute

$$= \frac{\text{total off-task behaviors}}{2 \times \text{min. observed}}$$

5. Feedback interaction duration

$$= \frac{\text{total min. of feedback}}{\text{total no. of stdts. helped}}$$

6. No. of stdts. helped per half-hour

$$= \frac{30}{\text{feedbk. interaction duration}}$$

These calculations were performed at the end of the class period, every day, for a period of 18 days. At the end of the 18 days, an average was determined for the nine days before the implementation of the skills and for nine days after the implementation of the skills. A percent increase or decrease was then determined for student disruptions and student off-task behaviors.

The responses from the teacher and student questionnaire and student interview were analyzed to

determine the perceptions of how the skills affected the students and the teacher. The analysis of the teacher questionnaire consisted of comparing their responses in the following areas (a) student behavior, (b) student productivity, (c) the amount of teacher interaction, (d) feelings about teaching children, (e) job related stress, (f) student grades, (g) student off-task behaviors, (h) job satisfaction, and (i) feelings about colleagues and self.

The analysis of the student questionnaire consisted of comparing their responses in the areas of (a) the amount of noise in the classroom, (b) their understanding of the material, (c) the amount of time they are spending on their assigned work, and (d) the number of helping interactions between the teacher and themselves.

The responses provided the researcher through the student interview were analyzed by studying the answers provided by the students and reporting these answers as they related to the student questionnaire.

Summary

The design and sample of the study, the instruments to be used along with their implementation, and the data collecting and data analysis techniques were discussed in this chapter.

CHAPTER IV - FINDINGS

Introduction

Chapter I of this study posed the following research questions.

1. Did the application of the skills from the Classroom Management Training Program help the teacher reduce student disruptions by 60% to 95%?

2. Was there a decrease in the number of student off-task behaviors due to the application of the skills of the Classroom Management Training Program?

3. Did the precise skills of giving corrective feedback obtained from the Classroom Management Training Program reduce the duration of the helping interaction between student and teacher to an average of 10 to 20 seconds per student?

4. Was there a perceived reduction in the amount of stress felt by the teacher as a result of using the skills obtained from the Classroom Management Training Program?

This chapter presents the research data and their analyses.

Findings

Research Question No. 1: Did the application of the skills from the Classroom Management Training Program help the teacher reduce student disruptions by 60% to 95%?

The observations of classroom disruptions are summarized in Tables 1 and 2. Table 1 summarizes the average number of disruptions per child per minute before and after the teacher was trained in the classroom management skills, and table 2 summarizes the average number of disruptions per minute before and after training. Either of these observations is a good representation of classroom disruptions. The difference between the two tables is that Table 1 reflects the number of children in the classroom, whereas the results presented in Table 2 disregards class size. The results displayed in Table 1 show that the number of disruptions per child per minute were reduced anywhere from a low of 38% to a high of 57.9% for the math classes and from a low of 51% to a high of 96% for the science classes. Table 2 shows that the average number of disruptions per minute was reduced anywhere from a low of 37% to a high of 56.5% for the math classes and a low of 51.4% to a high of 96.3% for the science classes.

The responses from the "observed" teacher group questionnaire are summarized in Table 3. This table reveals that these teachers perceived a decrease, anywhere from a

TABLE 1

Average Number Of Disruptions Per Child Per
Minute In Classrooms By Teacher And Subject

Teacher/ Subject (pd.)	Pre-training Average	Post-training Average	Percent Change
Math Teacher			
Algebra II (1)	.021	.013	-38.0
Algebra I (2)	.029	.016	-44.8
Algebra I (3)	.038	.016	-57.9
Science Teacher			
Earth Science (1)	.016	.006	-62.5
Earth and Space (2)	.025	.001	-96.0
Earth and Space (3)	.027	.013	-51.0

TABLE 2

Average Number Of Disruptions Per Minute
In Classrooms By Teacher And Subject

Teacher/ Subject (pd.)	Pre-training Average	Post-training Average	Percent Change
Math Teacher			
Algebra II (1)	.54	.34	-37.0
Algebra I (2)	.57	.33	-42.1
Algebra I (3)	.85	.37	-56.5
Science Teacher			
Earth Science (1)	.36	.16	-56.0
Earth and Space (2)	.27	.01	-96.3
Earth and Space (3)	.35	.17	-51.4

minor decrease to completely eliminating the behavior, in student talking and students getting out of their seats (question no. 1), laughing, talking across the room, and class rowdiness (question no.2), negative interactions between peers (question no. 3), and talking and dawdling during lesson transitions (question no. 4).

Table 4 displays the responses, by percent, of 9 of the teachers from the "unobserved" teacher group who employed all the skills of CMTP exactly as intended. All 9 or 100% of these teachers indicated that talking and getting out of one's seat and negative peer interactions had decreased (question no. 1 and 4). Eight of the 9 teachers or 88.9% indicated that laughing, talking across the room, class rowdiness, and time wasting in lesson transitions had decreased (question no. 2 and 3). Note that the indication of 0.0% in the "no change" column in Table 4 and subsequent tables should not be construed as a negative result. The individuals responding to the various questions may have determined that there was no need for a change.

Table 5 displays the responses, by percent, of the remaining 13 teachers from the "unobserved" teacher group who used some of the skills of CMTP. Nine of the 13 teachers or 69.2% indicated that talking and getting out of one's seat and laughing, talking across the room, and class rowdiness had decreased (question no. 1 and 2). Eight of the 13 teachers or 61.5% had indicated that time wasting in

lesson transitions had decreased (question no. 4) and 6 of the 13 teachers or 46.2% indicated a decrease in negative peer interactions (question no. 3).

A summary of all 24 teachers' responses is displayed in Table 6. This summary indicates that at least 2/3 of all teachers who used the skills of CMTP perceived that disruptions in their classrooms had been reduced.

The responses to the student questionnaire by students in the classes of the "observed" teacher group are displayed in Tables 7, 8, and 9. It became necessary to separate the Algebra II responses (Table 7) from the Algebra I responses (Table 8) because the math teacher from the "observed" teacher group did not adhere to the positive discipline skills as strictly with the Algebra II class as with the Algebra I classes. These three tables indicate that 55.5% or 15 of the 27 Algebra II students, 41.9% or 18 of the 43 Algebra I students, and 48.8% or 21 of the 43 Earth Science and Earth and Space Science students believed that their teacher's training helped the teacher to produce a change in the student's classmates in the area of talking and/or getting out of one's seat (question no. 19). In addition, 48.1% or 13 of the 27 Algebra II students, 46.5% or 20 of the 43 Algebra I students, and 51.2% or 22 of the 43 Earth Science and Earth and Space Science students believed that their teacher's training helped the teacher to produce a change in the student's classmates in the area of laughing

TABLE 3

Teacher Questionnaire Responses For
The "Observed" Teacher Group

Question	Math Teacher	Science Teacher
A. Student Behaviors		
1. Talking/out of seat	Sig. Decrease	Minor Decrease
2. Laughing, rowdiness	Eliminated	Sig. Decrease
3. Negative peer interactions	Dramatic Decrease	Dramatic Decrease
4. Time wasting in lesson transitions	Dramatic Decrease	Minor Decrease
5. Arriving late to class	Minor Decrease	Minor Decrease
6. Prepared for class	Minor Decrease	Minor Decrease
7. Begin work when bell rings	Minor Decrease	Minor Decrease
8. Dawdling and time wasting	Minor Decrease	Minor Decrease
9. Asking for teacher's help	Sig. Decrease	Sig. Decrease
10. Waiting for help	Minor Decrease	Sig. Decrease
11. Working on other material	Sig. Decrease	Sig. Decrease
12. Amt. of work completed	Sig. Decrease	Minor Increase
13. Quality of work	Sig. Decrease	No Change
14. Working independently	Sig. Decrease	Minor Increase
15. Less motivation problems	Minor Decrease	No Change
16. A "get to work" attitude	Minor Decrease	No Change
17. Quality of daily grades	Minor Increase	Minor Increase
18. Quality of test grades	Minor Increase	No Change
19. Quality of homework grades	Minor Increase	Minor Increase
B. Teacher Behaviors		
20. Focusing on correct responses	Minor Increase	No Change
21. Reduced helping interaction	Sig. Increase	Minor Increase
22. Helping more students	Sig. Increase	Minor Decrease
23. Praise for slow students	Sig. Increase	Minor Increase
24. Praise for fast students	Minor Increase	Minor Increase
25. Learning/motivation-differentiate	Minor Increase	No Change
26. More time with needy students	Dramatic Increase	Minor Increase
27. Time for lesson planning	No Change	No Change
28. Frustrations with children	Sig. Decrease	No Change
29. Anger at children	Sig. Decrease	No Change
30. Exhaustion	Sig. Decrease	Minor Decrease
31. Tension and stress	Sig. Decrease	Minor Decrease
32. Feelings of failure/inadequacy	Sig. Decrease	Minor Decrease
33. Teaching is not worth it	Minor Decrease	Minor Decrease
34. Eagerness to go to work	Minor Increase	No Change
35. Enjoyment in classroom	Minor Increase	No Change
36. Positive feelings-colleagues	Minor Increase	No Change
37. Pride in being a teacher	Minor Increase	No Change
38. Feeling of professional growth	Minor Increase	Minor Increase
39. Opportunity to share ideas	Minor Increase	Minor Increase

TABLE 4

Teacher Questionnaire Responses For The "Unobserved"
Teacher Group Using All The Skills Of CMTP

(n = 9)

Question	Decrease (%)	No Change (%)	Increase (%)	NA (%)
A. Student Behaviors				
1. Talking/out of seat	100.0	0.0	0.0	0.0
2. Laughing, rowdiness	88.9	0.0	0.0	11.1
3. Negative peer interactions	100.0	0.0	0.0	0.0
4. Time wasting in lesson transitions	88.9	0.0	0.0	11.1
5. Arriving late to class	88.9	11.1	0.0	0.0
6. Prepared for class	22.2	22.2	55.6	0.0
7. Begin work when bell rings	22.2	0.0	77.8	0.0
8. Dawdling and time wasting	100.0	0.0	0.0	0.0
9. Asking for teacher's help	88.9	11.1	0.0	0.0
10. Waiting for help	77.8	22.2	0.0	0.0
11. Working on other material	66.7	33.3	0.0	0.0
12. Amt. of work completed	0.0	0.0	100.0	0.0
13. Quality of work	0.0	11.1	88.9	0.0
14. Working independently	0.0	11.1	88.9	0.0
15. Less motivation problems	0.0	11.1	88.9	0.0
16. A "get to work" attitude	0.0	0.0	100.0	0.0
17. Quality of daily grades	0.0	33.3	66.7	0.0
18. Quality of test grades	0.0	44.4	55.6	0.0
19. Quality of homework grades	11.1	22.2	55.6	11.1
B. Teacher Behaviors				
20. Focusing on correct responses	0.0	33.3	66.7	0.0
21. Reduced helping interaction	0.0	11.1	88.9	0.0
22. Helping more students	11.1	0.0	88.9	0.0
23. Praise for slow students	0.0	22.2	77.8	0.0
24. Praise for fast students	0.0	33.3	66.7	0.0
25. Learning/motivation-differentiate	0.0	33.3	55.6	11.1
26. More time with needy students	0.0	0.0	100.0	0.0
27. Time for lesson planning	0.0	33.3	55.6	11.1
28. Frustrations with children	66.7	22.2	11.1	0.0
29. Anger at children	77.8	11.1	11.1	0.0
30. Exhaustion	66.7	33.3	0.0	0.0
31. Tension and stress	88.9	11.1	0.0	0.0
32. Feelings of failure/inadequacy	66.7	33.3	0.0	0.0
33. Teaching is not worth it	77.8	11.1	11.1	0.0
34. Eagerness to go to work	0.0	22.2	77.8	0.0
35. Enjoyment in classroom	0.0	11.1	88.9	0.0
36. Positive feelings-colleagues	0.0	44.4	55.6	0.0
37. Pride in being a teacher	0.0	44.4	55.6	0.0
38. Feeling of professional growth	0.0	33.3	66.7	0.0
39. Opportunity to share ideas	0.0	33.3	66.7	0.0

TABLE 5

Teacher Questionnaire Responses For The "Unobserved"
Teacher Group Using Some Of The Skills Of CMTP

(n = 13)

Question	Decrease (%)	No Change (%)	Increase (%)	NA (%)
A. Student Behaviors				
1. Talking/out of seat	69.2	15.4	15.4	0.0
2. Laughing, rowdiness	69.2	7.7	23.1	0.0
3. Negative peer interactions	46.2	38.5	7.7	7.7
4. Time wasting in lesson transitions	61.5	7.7	15.4	15.4
5. Arriving late to class	38.5	53.8	0.0	7.7
6. Prepared for class	46.2	30.8	0.0	15.4
7. Begin work when bell rings	30.8	15.4	38.5	15.4
8. Dawdling and time wasting	53.8	30.8	15.4	0.0
9. Asking for teacher's help	53.8	30.8	15.4	0.0
10. Waiting for help	53.8	30.8	15.4	0.0
11. Working on other material	46.2	38.5	15.4	0.0
12. Amt. of work completed	15.4	23.1	61.5	0.0
13. Quality of work	15.4	38.5	38.5	7.7
14. Working independently	15.4	23.1	61.5	0.0
15. Less motivation problems	15.4	38.5	38.5	7.7
16. A "get to work" attitude	15.4	23.1	53.8	7.7
17. Quality of daily grades	7.7	38.5	30.8	23.1
18. Quality of test grades	7.7	61.5	15.4	23.1
19. Quality of homework grades	7.7	38.5	30.8	23.1
B. Teacher Behaviors				
20. Focusing on correct responses	7.7	0.0	92.3	0.0
21. Reduced helping interaction	0.0	23.1	69.2	7.7
22. Helping more students	7.7	23.1	53.8	15.4
23. Praise for slow students	0.0	38.5	61.5	0.0
24. Praise for fast students	0.0	61.5	38.5	0.0
25. Learning/motivation-differentiate	7.7	30.8	46.2	15.4
26. More time with needy students	0.0	38.5	61.5	0.0
27. Time for lesson planning	7.7	61.5	30.8	0.0
28. Frustrations with children	46.2	46.2	7.7	0.0
29. Anger at children	61.5	30.8	0.0	0.0
30. Exhaustion	46.2	53.8	0.0	0.0
31. Tension and stress	46.2	46.2	7.7	0.0
32. Feelings of failure/inadequacy	30.8	46.2	23.1	0.0
33. Teaching is not worth it	30.8	53.8	15.4	0.0
34. Eagerness to go to work	0.0	53.8	38.5	7.7
35. Enjoyment in classroom	0.0	38.5	53.8	7.7
36. Positive feelings-colleagues	0.0	61.5	38.5	0.0
37. Pride in being a teacher	0.0	61.5	38.5	0.0
38. Feeling of professional growth	7.7	23.1	69.2	0.0
39. Opportunity to share ideas	0.0	15.4	84.6	0.0

TABLE 6

Teacher Questionnaire Responses For The "Observed"
And "Unobserved" Teacher Group

(n = 24)

Question	Decrease (%)	No Change (%)	Increase (%)	NA (%)
A. Student Behaviors				
1. Talking/out of seat	83.3	8.3	8.3	0.0
2. Laughing, rowdiness	79.2	4.2	12.5	4.2
3. Negative peer interactions	70.8	20.8	4.2	4.2
4. Time wasting in lesson transitions	75.0	4.2	8.3	12.5
5. Arriving late to class	62.5	33.3	0.0	4.2
6. Prepared for class	41.7	25.0	25.0	8.3
7. Begin work when bell rings	33.3	8.3	50.0	8.3
8. Dawdling and time wasting	75.0	16.7	8.3	0.0
9. Asking for teacher's help	70.8	20.8	8.3	0.0
10. Waiting for help	66.7	25.0	8.3	0.0
11. Working on other material	58.3	33.3	8.3	0.0
12. Amt. of work completed	12.5	12.5	75.0	0.0
13. Quality of work	12.5	29.2	54.2	4.2
14. Working independently	12.5	16.7	70.8	0.0
15. Less motivation problems	12.5	29.2	54.2	4.2
16. A "get to work" attitude	12.5	16.7	66.7	4.2
17. Quality of daily grades	4.2	33.3	50.0	12.5
18. Quality of test grades	4.2	50.0	33.3	12.5
19. Quality of homework grades	8.3	29.2	45.8	16.7
B. Teacher Behaviors				
20. Focusing on correct responses	4.2	16.7	79.2	0.0
21. Reduced helping interaction	0.0	16.7	79.2	4.2
22. Helping more students	12.5	12.5	66.7	8.3
23. Praise for slow students	0.0	29.2	70.8	0.0
24. Praise for fast students	0.0	45.8	54.2	0.0
25. Learning/motivation-differentiate	4.2	33.3	50.0	12.5
26. More time with needy students	0.0	20.8	79.2	0.0
27. Time for lesson planning	4.2	54.2	37.5	4.2
28. Frustrations with children	54.2	37.5	8.3	0.0
29. Anger at children	66.7	25.0	8.3	0.0
30. Exhaustion	58.3	41.7	0.0	0.0
31. Tension and stress	66.7	29.2	4.2	0.0
32. Feelings of failure/inadequacy	50.0	37.5	12.5	0.0
33. Teaching is not worth it	54.2	33.3	12.5	0.0
34. Eagerness to go to work	0.0	41.7	54.2	4.2
35. Enjoyment in classroom	0.0	29.2	66.7	4.2
36. Positive feelings-colleagues	0.0	54.2	45.8	0.0
37. Pride in being a teacher	0.0	54.2	45.8	0.0
38. Feeling of professional growth	4.2	25.0	70.8	0.0
39. Opportunity to share ideas	0.0	20.8	79.2	0.0

and classroom rowdiness (question no. 20). It is
interesting to note that 59.3% or 16 of the 27 Algebra II
students, 48.8% or 21 of the 43 Algebra I students, and
69.8% or 30 of the 43 Earth Science and Earth and Space
Science students believed that general classroom noise was
reduced in the three week period after teacher training.
However, when the students were asked if the teacher's
training helped the teacher produce a change in the
student's own behavior in the areas of talking and/or
getting out of their seat (question no. 1) or laughing,
talking across the room, or being rowdy (question no. 2),
the responses were mixed. In the Earth Science and Earth
and Space Science classes, 53.5% or 23 of the 43 students
believed that their own laughing and class rowdiness were
reduced as a result of the teacher's training, and 37.2% or
16 of the 43 students believed that the teacher's training
caused them to reduce their talking or getting out of their
seat. In the Algebra II and Algebra I classes, 40.7% or 11
of 27 students and 46.5% or 20 of 43 students, respectively,
believed that their talking and/or getting out of their seat
was directly influenced by the teacher's training, and 33.3%
or 9 of 27 and 46.5 % or 20 of 43 students, respectively,
believe that the reduction in their laughter or rowdiness
was a result of the teacher's training.

The results of the student interview are summarized in
Appendix F. These results indicate that 15 out of the 24

students believed that there was less noise in their classroom after their teacher was trained than before their teacher was trained (question no. 9). It is interesting to note that the students wished to be quiet so they could be rewarded by participating in PAT (Preferred Activity Time).

Research Question No. 2: Was there a decrease in the number of student off-task behaviors due to the application of the skills of the Classroom Management Training Program?

The observations of classroom off-task behavior are summarized in Tables 10 and 11. Table 10 summarizes the average number of off-task behaviors per child per minute before and after the teacher was trained in the Classroom Management Training Program skills, and Table 11 summarizes the average number of off-task behaviors per minute before and after training. Either of these observations is a good representation of off-task behaviors. The difference between these two tables is that Table 10 reflects the number of children in the classroom, whereas the results displayed in Table 11 disregards class size. The results displayed in Table 10 show that the number of off-task behaviors per child per minute were reduced from a low of 12.7% to a high of 46.8% for the Algebra classes and a low of 30.2% to a high of 53.9% for the Earth and Space Science classes. However, the Earth Science class showed an increase in off-task behaviors per child per minute by 3%. Similarly, Table 11 shows that the number of off-task

TABLE 7

Student Questionnaire Responses For The Algebra II Class

(n = 27)

Question	Decrease (%)	No Change (%)	Increase (%)	NA (%)
I. Change In Student's Own Behavior				
1. Talking/out of seat	40.7	51.9	3.7	3.7
2. Laughing, rowdiness	33.3	48.1	7.4	11.1
3. Arriving late to class	51.9	29.6	11.1	7.4
4. Prepared for class	18.5	55.6	11.1	14.8
5. Begin work when bell rings	33.3	37.0	22.2	7.4
6. Dawdling and time wasting	40.7	33.3	14.8	11.1
7. Asking for teacher's help	37.0	33.3	14.8	14.8
8. Waiting for help	22.2	37.0	25.9	22.9
9. Working on other material	40.7	29.6	11.1	18.5
10. Amt. of work completed	37.0	29.6	33.3	0.0
11. Quality of work	37.0	33.3	29.6	0.0
12. Time on task	33.3	29.6	33.3	3.7
13 Amt. of time on homework	29.6	33.3	37.0	0.0
14. Amt. of time working independently	29.6	37.0	31.4	4.3
15. Quality of daily grades	33.3	29.6	33.3	3.7
16. Quality of test grades	29.6	25.9	40.7	3.7
17. Quality of quiz grades	33.3	25.9	37.0	3.7
18. Quality of homework grades	25.9	29.6	40.7	3.7
II. Change In Classmates Behavior				
19. Talking/out of seat	55.5	37.0	3.7	3.7
20. Laughing, rowdiness	48.1	33.3	7.4	11.1
21. General classroom noise	59.3	25.9	11.1	3.7
22. Arriving late to class	63.0	22.2	11.1	3.7
23. Prepared for class	22.2	63.0	7.4	7.4
24. Begin work when bell rings	25.9	33.3	29.6	11.1
25. Dawdling and time wasting	33.3	44.4	14.8	7.4
26. Let's get to work attitude	33.3	55.6	11.1	0.0
27. No. of students asking for help	22.2	22.2	55.6	0.0
III. Change In Teacher's Behavior				
28. No. of times teacher helped you	18.5	25.9	51.9	3.7
29. Time spent by teacher with you	18.5	29.6	48.1	3.7
30. Telling you what you've done right	14.8	40.7	37.0	7.4
31. Amt. of praise given to you	11.1	48.1	29.6	11.1
32. Time spent with trouble makers	37.0	37.0	18.5	7.4
33. Teacher becoming angry	25.9	18.5	18.5	37.0
34. Clarity of teacher's lecture	18.5	55.6	14.8	11.1
35. Clarity of teacher's examples	18.5	51.9	18.5	11.1
36. Your understanding of the material	22.2	37.0	37.0	3.7

TABLE 8

Student Questionnaire Responses For The Algebra I Classes

(n = 43)

Question	Decrease (%)	No Change (%)	Increase (%)	NA (%)
I. Change In Student's Own Behavior				
1. Talking/out of seat	46.5	32.6	20.9	0.0
2. Laughing, rowdiness	46.5	20.9	11.6	20.9
3. Arriving late to class	23.3	16.3	11.6	48.8
4. Prepared for class	21.0	60.5	6.9	11.6
5. Begin work when bell rings	14.0	58.1	23.3	4.7
6. Dawdling and time wasting	37.2	20.9	18.6	23.3
7. Asking for teacher's help	18.6	37.2	14.0	30.2
8. Waiting for help	32.6	25.6	14.0	27.9
9. Working on other material	27.9	23.3	9.3	39.5
10. Amt. of work completed	16.3	44.2	34.9	4.7
11. Quality of work	16.3	39.5	41.9	2.3
12. Time on task	25.6	41.9	27.9	4.7
13 Amt. of time on homework	20.9	44.2	27.9	7.0
14. Amt. of time working independently	16.3	55.8	25.6	2.3
15. Quality of daily grades	18.6	46.5	34.9	0.0
16. Quality of test grades	30.2	34.9	32.6	2.3
17. Quality of quiz grades	41.9	27.9	30.2	0.0
18. Quality of homework grades	9.3	55.8	32.6	2.3
II. Change In Classmates Behavior				
19. Talking/out of seat	41.9	27.9	20.9	9.3
20. Laughing, rowdiness	46.5	25.6	20.9	7.0
21. General classroom noise	48.8	30.2	16.3	4.7
22. Arriving late to class	37.2	39.5	14.0	9.3
23. Prepared for class	25.6	53.5	14.0	7.0
24. Begin work when bell rings	34.9	44.2	20.9	0.0
25. Dawdling and time wasting	44.2	27.9	16.3	11.6
26. Let's get to work attitude	30.2	37.2	27.9	4.7
27. No. of students asking for help	20.9	39.5	37.3	2.3
III. Change In Teacher's Behavior				
28. No. of times teacher helped you	25.6	34.9	34.9	4.7
29. Time spent by teacher with you	25.6	44.2	25.6	4.7
30. Telling you what you've done right	20.9	46.5	20.9	11.6
31. Amt. of praise given to you	18.6	39.5	34.9	7.0
32. Time spent with trouble makers	20.9	44.2	27.9	7.0
33. Teacher becoming angry	27.9	27.9	20.9	23.3
34. Clarity of teacher's lecture	20.9	34.9	37.2	7.0
35. Clarity of teacher's examples	25.6	32.6	39.5	2.3
36. Your understanding of the material	27.9	25.6	46.5	0.0

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TABLE 9

Student Questionnaire Responses For The Earth Science
And Earth and Space Science Classes

(n = 43)

Question	Decrease (%)	No Change (%)	Increase (%)	NA (%)
I. Change In Student's Own Behavior				
1. Talking/out of seat	37.2	53.5	4.7	4.7
2. Laughing, rowdiness	53.5	30.2	7.0	9.3
3. Arriving late to class	37.2	39.5	11.6	11.6
4. Prepared for class	23.3	51.2	20.9	4.7
5. Begin work when bell rings	25.6	48.8	25.6	0.0
6. Dawdling and time wasting	41.9	34.9	11.6	11.6
7. Asking for teacher's help	30.2	53.5	0.0	16.3
8. Waiting for help	41.9	37.2	9.3	11.6
9. Working on other material	44.2	25.6	11.6	18.6
10. Amt. of work completed	34.9	18.6	41.9	4.7
11. Quality of work	30.2	39.5	30.2	0.0
12. Time on task	20.9	32.6	46.5	0.0
13 Amt. of time on homework	27.9	27.9	41.9	2.3
14. Amt. of time working independently	23.3	48.8	25.6	2.3
15. Quality of daily grades	37.2	41.9	16.3	4.7
16. Quality of test grades	39.5	27.9	25.6	7.0
17. Quality of quiz grades	46.5	32.6	18.6	2.3
18. Quality of homework grades	39.5	32.6	27.9	0.0
II. Change In Classmates Behavior				
19. Talking/out of seat	48.8	39.5	9.3	2.3
20. Laughing, rowdiness	51.2	27.9	16.3	4.7
21. General classroom noise	69.8	14.0	14.0	2.3
22. Arriving late to class	46.5	39.5	9.3	4.7
23. Prepared for class	25.6	34.9	34.9	4.7
24. Begin work when bell rings	25.6	44.2	30.2	0.0
25. Dawdling and time wasting	46.5	25.6	20.9	7.0
26. Let's get to work attitude	23.3	46.5	25.6	4.7
27. No. of students asking for help	53.5	30.2	9.3	7.0
III. Change In Teacher's Behavior				
28. No. of times teacher helped you	20.9	41.9	20.9	16.3
29. Time spent by teacher with you	20.9	37.2	18.6	23.3
30. Telling you what you've done right	23.3	48.8	18.6	9.3
31. Amt. of praise given to you	30.2	37.2	18.6	14.0
32. Time spent with trouble makers	30.2	41.9	11.6	16.3
33. Teacher becoming angry	46.5	20.9	27.9	4.7
34. Clarity of teacher's lecture	30.2	25.6	44.2	0.0
35. Clarity of teacher's examples	23.3	32.6	41.9	2.3
36. Your understanding of the material	20.9	34.9	41.9	2.3

behaviors per minute were reduced for the Algebra classes and the Earth and Space Science class from a low of 7.2% to a high of 60.5%. Again, the Earth Science class showed an increase in off-task behaviors by 19.2%.

The responses to the teacher questionnaire by the "observed" teacher group in the area of off-task behavior (displayed in Table 3) reveal that both observed teachers perceived a decrease, anywhere from a minor decrease to a significant decrease, in general student dawdling, daydreaming, and time wasting (question no. 8), and in students working on material from other classes without permission (question no. 11).

The responses by the "unobserved" teacher group are displayed in Tables 4 and 5. Table 4 indicates that of the 9 teachers from the "unobserved" teacher group who completely used the skills of CMTP, all 9 teachers (100%) believed that general student dawdling, daydreaming, and time wasting had been decreased. This is in contrast to the results displayed in Table 5 which indicate that of the 13 teachers from the "unobserved" teacher group who partially used the skills, only 7 of them or 53.8% believed that student daydreaming, dawdling, and time wasting had been reduced. In addition, 66.7% or 6 of the 9 teachers from the "unobserved" teacher group who used all the skills of CMTP believed that there was a reduction in the number of

TABLE 10

Average Number Of Off-Task Behaviors Per Child Per
Minute In Classrooms By Teacher And Subject

Teacher/ Subject (pd.)	Pre-training Average	Post-training Average	Percent Change
Math Teacher			
Algebra II (1)	.052	.028	-46.2
Algebra I (2)	.063	.055	-12.7
Algebra I (3)	.062	.033	-46.8
Science Teacher			
Earth Science (1)	.033	.034	+3.0
Earth and Space (2)	.106	.074	-30.2
Earth and Space (3)	.076	.035	-53.9

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TABLE 11

Average Number Of Off-Task Behaviors Per Minute
In Classrooms By Teacher And Subject

Teacher/ Subject (pd.)	Pre-training Average	Post-training Average	Percent Change
Math Teacher			
Algebra II (1)	1.22	.74	-39.3
Algebra I (2)	1.25	1.16	-7.2
Algebra I (3)	1.39	.75	-46.0
Science Teacher			
Earth Science (1)	.73	.87	+19.2
Earth and Space (2)	1.37	.97	-29.2
Earth and Space (3)	.81	.32	-60.5

students working on materials from other classes without permission. This is in contrast to the 13 teachers from the "unobserved" teacher group who partially used the skills. Only 46.2% or 6 of them believed that there was a reduction of this type of off-task behavior. In general, 75% of the 24 teachers ("observed" and "unobserved" teacher groups) felt that general student dawdling, daydreaming, and time-wasting were reduced, and 58.3% of the 24 teachers felt that they saw a reduction in the number of students working on materials from other classes without permission (Table 6). It is interesting to note that whenever the skills of the Classroom Management Training Program were used completely as intended, a higher degree of success with the targeted behaviors resulted.

Responses to the student questionnaire in the areas of off-task behavior are displayed in Tables 7, 8, 9, questions numbers 6, 9, 12, and 25. The results are strongest for the science classes and are less definitive for the Algebra classes. In the Earth Science and Earth and Space Science classes, 41.9% or 18 of the 43 students believed that their daydreaming, dawdling, and time-wasting had been reduced (question no. 6), while 46.5% or 20 students believed that their time on task had increased (question no. 12). Close to 47% or 20 of the science students noticed a reduction in daydreaming, dawdling, and time wasting among their peers (question no. 25). In addition, 44.2% or 19 of them

indicated that they had reduced their working on material from other classes without permission (question no. 9).

With respect to the math classes, the 27 Algebra II students indicated that 40.7% or 11 of them believed that they were not daydreaming, dawdling, or wasting time as much as before the teacher was trained in the skills of the Classroom Management Training Program. A slightly lower percentage is displayed by the Algebra I students. Also, 40.7% of the Algebra II students indicated that they had reduced their working on materials from other classes without permission. However, only 27.9% or 12 of the 43 Algebra I students reduced this type of behavior. The Algebra II students and Algebra I students did not feel as strongly as the science students in increasing their time on task. Only 33.3% or 9 of the 27 Algebra II students and 27.9% or 12 of the 43 Algebra I students felt that they increased their time on task. It is interesting to note that 44.2% or 19 of the Algebra I students believed that they noticed a reduction of dawdling, daydreaming, and time-wasting among their peers, while only 33.3% or 9 of the Algebra II students felt the same way.

The student interview did not have any direct questions pertaining to time on task. However, question number 5 in the student interview revealed that of the 24 students interviewed 22 of them felt that the incentive system of PAT caused them to want to get their work completed when the

teacher allowed them time in class to do it.

Research Question Number 3: Did the precise skills of giving corrective feedback obtained from the Classroom Management Training Program reduce the duration of the helping interaction between student and teacher to an average of 10 to 20 seconds per student?

The results obtained from this study cannot be used to accurately answer this research question for three reasons. First, the science teacher from the "observed" teacher group chose not to use the skills of corrective feedback. Second, the math teacher from the "observed" teacher group only partially used the corrective feedback skills of CMTP. Third, to determine the feedback interaction duration, the researcher used the length of time the teacher was in the helping mode divided by the total number of students helped during this mode. If one or two students asked questions in this time interval, then it would appear as if the teacher spent a longer amount of time with these students than if they were each timed separately. For example, if the teacher was observed for a two minute interval and only one student asked for help, and the teacher helped the student for 20 seconds, then the data would reflect the teacher helped only one student in two minutes and not reflect the actual time that the teacher spent with the student. The same results would be recorded if the teacher helped one student the entire two-minute length. However, it was

noticed that when the math teacher from the "observed" teacher group used the skills of corrective feedback, the teacher was able to help more students than before she was trained in these skills. The results are displayed in Table 12. Notice that the number of students helped in a projected half-hour interval increased and the length of time that the math teacher spent with each student decreased sharply.

The science teacher from the "observed" teacher group did not use the skills of corrective feedback; however, the teacher perceived that there was a minor increase in her ability to have a shorter helping interaction (question no. 21, Table 3), and she also perceived herself to return less to help the same students needing help than before she was trained (question no. 22, Table 3). However, the math teacher from the "observed" teacher group perceived a significant increase in her ability to have a shorter helping interaction and her ability to frequently return to those students who were having difficulty.

The teacher questionnaire (Table 4) revealed that of the 9 teachers from the "unobserved" teacher group who used all the skills of the Classroom Management Training Program 8 of them or 88.9% not only believed that their ability to have a shorter helping duration increased, but also they were able to return more often to those students who needed help.

TABLE 12

Feedback Interaction Duration

Subject (pd.)	Feedback Interval (min.)	No. of Students Helped	Feedback Interaction Duration (min./stdt.)	Children Helped per Half-Hour (proj.)
Before CMTP				
Alg. II (1)	14	5	2.80	11
Alg. I (2)	36	22	1.64	19
Alg. I (3)	26	15	1.73	18
After CMTP				
Alg. II (1)	11	6	1.83	17
Alg. I (2)	82	90	.91	33
Alg. I (3)	42	55	.76	39

A high percentage of the 13 teachers from the "unobserved" teacher group who used only some of the skills of the Classroom Management Training Program indicated that they perceived an increase in their ability to have a shorter helping duration (9 of 13 or 69.2%) and also perceived an increase (7 of 13 or 53.8%) in their ability to return more frequently to help students having difficulty.

The 24 students who were interviewed had a different perception than the teachers. Only 2 of these students said that the teachers spent less time with them and as a result these two students felt that they were learning less.

Research Question No. 4: Was there a perceived reduction in the amount of stress felt by the teacher as a result of using the skills obtained from the Classroom Management Training Program?

The math teacher from the "observed" teacher group indicated that she noticed a significant decrease in her tension and stress (question no. 31, Table 3) and a significant decrease in exhaustion at the end of the day (question no. 30, Table 3). The science teacher from the "observed" teacher group noticed a minor decrease in both her tension and stress and exhaustion at the end of the day.

The responses of the 9 teachers from the "unobserved" teacher group who used all the skills of CMTP are indicated in table 4. Eight of these teachers or 88.9% noticed a decrease in their tension and stress, and 66.7% or 6 of them

noticed a decrease in the amount of exhaustion at the end of the day.

The responses of the 13 teachers from the "unobserved" teacher group who used only some of the skills of CMTP are indicated in Table 5. Six of these teachers or 46.2% noticed a decrease in their tension and stress, and 6 or 46.2% of them noticed a decrease in their exhaustion at the end of the day.

Summary

The results of this study were contained within this chapter. The data obtained indicates that class disruptions were reduced in all classes, anywhere from a low of 38% to a high of 96% if class size was taken into account, and from a low of 37% to a high of 96.3% if class size was disregarded. Other data obtained indicated that 5 of the 6 classes also had a reduction in off-task behaviors. No accurate results were obtained to determine if the teacher actually reduced time spent in helping students. The data obtained did indicate that the math teacher from the "observed" teacher group helped more students after the training than before the training.

Through the use of a questionnaire, the "observed" teacher group and the "unobserved" teacher group indicated

that the majority of them felt that classroom noise was
reduced, off-task student behaviors were decreased, more
students were being helped by them, and they felt less
stress, tension, and exhaustion.

Through the use of a student questionnaire and
interviews of selected students, it was also determined that
many students perceived a reduction in classroom noise, with
some students perceiving an increase in time-on-task
behaviors.

CHAPTER V - SUMMARY, CONCLUSIONS, RECOMMENDATIONS, SPECULATIONS, AND IMPLICATIONS

Introduction

A summary of this study, conclusions based upon the findings, recommendations for further research, and speculations and implications based upon the study are contained within this chapter.

Summary of the Study

Discipline in the classroom has been a concern of educators and the general public for years. Numerous programs have been developed to help the classroom teacher with his/her classroom management. These programs present skills that when properly applied could help to reduce the problems of classroom discipline. One program in particular, the Classroom Management Training Program, has stated that the skills of positive instruction and positive discipline will help the teacher to reduce student disruptions, decrease the number of student off-task behaviors, increase the number of students helped by the teacher, and reduce the amount of stress felt by the teacher. Since these claims have not been substantiated at

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the senior high school level, it was the purpose of this
study to determine if the application of the Classroom
Management Training Program skills by teachers at the senior
high school level would result in (a) a reduction or
elimination of student disruptions, (b) a decrease in the
number of student off-task behaviors; (c) an increase in the
number of students helped by the teacher, and (d) a
perceived reduction in the amount of stress felt by the
teacher.

This study was a behavior modification study using
contingency management and was conducted in a high school
located in Northern Virginia. A math teacher and a science
teacher and 22 additional teachers from the same school
comprised the sample for this study. The math teacher and
science teacher, referred to as the "observed" teacher
group, allowed their classes to be observed for a six week
period. The math teacher was observed during one Algebra II
class and two Algebra I classes. The science teacher was
observed during one Earth Science class and two Earth and
Space Science classes. There were a total of 113 students
observed from these six classes. The total enrollment of
the school was 1,468. The teachers from the "observed"
teacher group were chosen by this researcher to participate
in this study because of their willingness to have their
classes observed and studied, their willingness and
enthusiasm for participating in this program, and their

desire to learn the new classroom management skills and to apply them in their classes.

The 22 additional high school teachers in this study whose classes were not observed were referred to as the "unobserved" teacher group. The teachers from the "unobserved" teacher group were chosen to participate in this study because they previously had been taught the skills of the Classroom Management Training Program, they had been applying the skills in their own classrooms for at least a three month period, and their perceptions were needed on how the skills of CMTP affected them and their classes. The "unobserved" teacher group was composed of teachers from the math department, science department, social studies department, ESL (English as a Second Language) department, foreign language department, English department, and the special education department. Other teachers in the school were not chosen to participate in this study because they either had not participated in the CMTP program, or they previously had been trained but for some reason did not choose to use the skills. There were a total of 24 teachers who participated in this study, two in the "observed" teacher group and 22 in the "unobserved" teacher group. The total number of teachers in this school was 93.

Each teacher of the "observed" teacher group allowed an outside trained observer to monitor her first three class

periods of the day, for three days a week, for a period of three weeks prior to and after each received training in the Classroom Management Training Program (CMTP). The data recorded by the trained observers during the three week period prior to teacher training established the baseline data. This baseline data was compared to the data recorded by the trained observers in the three week period after the "observed" teacher group received training in the skills of CMTP.

The observers recorded (a) the number of students who talked at inappropriate times or who were out of their seats, (b) the number of student who were off-task, and (c) the number of students who received individual teacher help.

Following the six weeks of classroom observations, a questionnaire was distributed to the "observed" teacher group and to the "unobserved" teacher group. The questionnaire was used to determine the teachers' perceptions of how the skills from CMTP affected (a) student behavior, (b) student productivity, (c) the amount of teacher interaction, (d) feelings about teaching children, (e) job related stress, (f) student grades, (g) student off-task behaviors, (h) job satisfaction, and (i) feelings about colleagues and self. In addition, a questionnaire was also distributed to the students of the "observed" teacher group and used to determine if they noticed (a) a reduction in the amount of noise in the classroom, (b) an increased

understanding of the material, (c) an increase in the amount of time they spent on their assigned work, and (d) an increase in the number of helping interactions between the teacher and themselves. This questionnaire was coupled with a personal interview of 24 students (four from each of the six observed classes) chosen by the two teachers from the "observed" teacher group to determine their opinions of how this program affected them.

The information obtained from the classroom observations, teacher and student questionnaire and student interviews were compared as appropriate, reviewed, and analyzed from the point of view of the objectives of this study.

The findings, from the analysis of the data recorded by the trained observers, indicated that class disruptions were reduced in all classes, anywhere from a low of 38% to a high of 96% if class size was a factor, and a low of 37% to a high of 96.3% if class size was disregarded. The analysis also showed that five of the six classes had a reduction in off-task behaviors. These reductions ranged from a low of 12.7% to a high of 53.9% if class size was a factor, and ranged from a low of 7.2% to a high of 60.5% if class size was disregarded.

The findings, from the analysis of the teachers' responses to the questionnaire, showed, in the case of the "observed" teacher group, that both teachers noticed a

reduction in classroom noise and student off-task behaviors, and an increase in the number of students they helped. They also indicated that they experienced less exhaustion, tension, and stress as a result of using the CMTP skills. In the case of the "unobserved" teacher group, the findings showed that 18 of the 22 teachers reduced classroom disruptions, 16 of the 22 teachers experienced less dawdling, daydreaming, and time wasting by the students, 12 of the 22 teachers felt that the students had decreased their working on material from other classes while in their class, 15 of the 22 teachers increased the amount of help they were able to give to the students, 14 of the 22 teachers experienced less tension and stress, and 12 of the 22 teachers experienced less exhaustion as a result of using the CMTP skills.

The findings from the student questionnaire showed that 67 of the 113 students felt that general classroom noise had been reduced, and 41 of the 113 students perceived that they increased their time on task as a result of the teacher training in the skills of the Classroom Management Training Program. In addition, 15 of the 24 students interviewed believed that there was less noise in the room after the teacher was trained as compared to before their teacher was trained in the CMTP skills.

Conclusions

Research Question Number 1: Did the application of the
skills from the Classroom Management Training Program help
the teacher reduce student disruptions by 60% to 95%?

Comparing the baseline data to data taken after the
teachers were trained in the use of the CMTP skills, the
average number of student disruptions per child per minute
was reduced by 60% to 95% in one of the Earth and Space
Science classes and one of the Earth Science classes (table
1, chapter 4). The other Earth and Space Science class, the
Algebra II class, and the two Algebra I classes also showed
a reduction in classroom disruptions anywhere from a low of
38% to a high of 57.9% (table 1, chapter 4).

An examination of responses on the teacher
questionnaire by 18 teachers from the "unobserved" teacher
group indicated that the skills they obtained from the
Classroom Management Training Program helped them to reduce
student disruptions of talking and getting out of one's
seat. Not only did the teachers indicate that they
perceived a reduction in classroom disruptions as a result
of the skills obtained from CMTP, but also 54 of 113
students who were in the "observed" teachers' classrooms
indicated through a student questionnaire that they believed
that the teacher's training helped the teacher to reduce
student disruptions of talking and getting out of one's

seat. In addition, 67 of the 113 students who were in the "observed" teachers' classrooms indicated through the questionnaire that they perceived that general classroom noise had been reduced because of the teacher's training.

It is interesting to note, however, that neither teacher from the "observed" teacher group completely used all the skills of the Classroom Management Training Program because each teacher was apprehensive about her competency in performing all of the skills at once. This apprehension could be attributed to the fact that both teachers were fully conscious of the presence of the observers in their classroom, that they had only three weeks to implement the entire CMTP program, and that they had been exposed to many skills with which they had little or no experience. Since the science teacher from the "observed" teacher group did not feel that she could readily adapt the skills of the structured teaching in such a short period of time, she concentrated very heavily on using the incentive system and the teaching of rules. On the other hand, the math teacher from the "observed" teacher group relied on the use of structured teaching and on the use of the incentive system. The predominant use of the incentive system, which was common to both "observed" teachers, could be attributed to its ease of application, its need for less expertise than the others skills, the feeling of comfort in its implementation, and the teachers own experience to

incentives in their life cycle. In addition, both teachers felt that if they had a longer period of time to practice using the other skills of CMTP, they would have felt more comfortable using them.

It should be noted also that the results obtained from the data collected during classroom observations were only in the subject areas of math and science. Thus the findings and conclusions that are drawn from these results pertain soley to these two subjects and should not be construed as extending to other subjects areas.

Based upon the findings in this study, which are in response to the research question, the following conclusions can be drawn.

1. Data strongly suggests that the skills of the Classroom Management Training Program helped the "observed" teacher group to reduce their classroom disruptions.

2. The incentive system, which was common to both teachers of the "observed" teacher group, appears to be the major factor in the reduction of student disruptions.

3. Eighteen teachers from the "unobserved" teacher group believe that the skills of the Classroom Management Training Program helped them to reduce their student disruptions.

Although the use of the incentive system appeared to be the major factor in the reduction of student disruptions because of its predominant use, it does not mean that the

use of other CMTP skills would not have been just as
effective.

Using the CMTP skills to reduce student disruptions is
not confined to this study. Cowen, Jones, and Bellack
(1979) conducted a study in an elementary school using an
incentive system that was similar to the one employed in
CMTP. In their study, out of seat behavior was reduced from
between 0% and 42% of baseline and talking to neighbors was
reduced from between 3% and 65% of baseline. Jones,
Fremouw, and Carples (1977), also conducted a study in an
elementary school using the limit-setting skills of CMTP.
They found that out of seat behavior decreased from between
20% and 71% of baseline and talking to neighbors decreased
from between 29% and 95% of baseline. In yet another study,
Jones and Eimers (1975) had elementary teachers using the
skills of limit-setting and corrective feedback. They found
that out of seat behavior decreased from between 25% and 30%
of baseline and talking to neighbors decreased from between
17% and 38% of baseline. Thus previous research indicates
that the use of the skills of the Classroom Management
Training Program has resulted in a reduction of out of seat
behavior and student talking to neighbors. These results
are not inconsistent with the results obtained in this
study.

Research Question Number 2: Was there a decrease in
the number of student off-task behaviors due to the

application of the skills of the Classroom Management
Training Program?

Comparing the baseline data to data taken after teacher
training in the CMTP skills, the three math classes and two
of the three science classes from the "observed" teacher
group had fewer students off-task than before teacher
training in the skills of CMTP. In addition, the teacher
questionnaire revealed that both teachers in the "observed"
teacher group and 16 teachers from the "unobserved" teacher
group believed that time-wasting had decreased because of
the skills that they obtained from the Classroom Management
Training Program. The student questionnaire revealed that
41 of the 113 students who were in the "observed" teachers'
classrooms also perceived that they were wasting less time
as a result of their teacher's training and 22 of the 24
students interviewed revealed that Preferred Activity Time
(PAT), a technique of CMTP, caused them to want to get their
work done when the teacher allowed them time in class to do
it.

Data presented by the "observed" teacher group as it
pertained to the quality of student work was mixed. The
quality of general work either decreased or remained the
same, and the performance by the students on tests, quizzes,
and homework increased in some cases, decreased in some
cases, or remained the same. However, 8 of the 9 teachers
from the "unobserved" teacher group who completely used the

skills of CMTP noticed that the quality of the students'
work increased, 5 of the 9 noticed an increase in quality of
test and homework grades, and 6 of the 9 noticed an increase
in the quality of daily grades. The results were not as
drastic for the 13 teachers from the "unobserved" teacher
group who partially used the skills of CMTP. Only 5 of the
13 teachers indicated that they noticed an increase in the
quality of students' work, 4 of the 13 teachers noticed an
increase in quality of daily grades and homework, and 2 of
the 13 teachers indicated that the quality of test grades
increased.

Again, it is to be noted that the results obtained from
the classroom observations were only in the subject areas of
math and science and should not be construed as extending to
other subjects.

Based upon the findings in this study, which are in
response to the research question, the following conclusions
can be drawn.

1. Data strongly suggests that the skills of the
Classroom Management Training Program helped the "observed"
teacher group to reduce student off-task behaviors.

2. The incentive system, which was common to both
teachers of the "observed" teacher group, appears to be the
major factor in the reduction of off-task behaviors.

3. Sixteen teachers from the "unobserved" teacher
group believe that the skills of the Classroom Management

Training Program helped them to reduce their student off-task behaviors.

As with the reduction of student disruptions, the incentive system appeared to be the major factor in the reduction of student off-task behaviors but should not be construed as the only skill capable of reducing student off-task behaviors.

Using the CMTP skills to reduce off-task student behaviors is not confined to this study. Cowens and associates (1979) conducted a study in an elementary school using an incentive system similar to the one employed in CMTP. In their study, off-task student behaviors were reduced from between 21% and 66% of baseline levels. In addition, Jones and associates (1977) had elementary teachers using the skills of corrective feedback and limit-setting to increase the productivity of students. Thus, previous research using the skills of CMTP suggests that the results obtained in this study is not inconsistent with previous findings.

Research Question Number 3: Did the precise skills of giving corrective feedback obtained from the Classroom Management Training Program reduce the duration of the helping interaction between student and teacher to an average of 10 to 20 seconds per student?

The results obtained from the classroom observations could not accurately answer the research question because

(a) the science teacher from the "observed" teacher group chose not to use the skills of corrective feedback, thus the data obtained in this study were based only on observations from the math teacher; (b) the math teacher from the "observed" teacher group only partially used the skills of corrective feedback; (c) to determine the feedback interaction duration, the researcher used the length of time the teacher was in the helping mode divided by the total number of students helped during this mode. This did not give an accurate picture of the number of students helped.

The data did show that the math teacher from the "observed" teacher group helped more students after training than before training. This may or may not be due to the skills of the Classroom Management Training Program. Just making the teacher aware of how to help more students may have been the reason more students were helped.

The teacher questionnaire also revealed that eight teachers from the "unobserved" teacher group who completely used the skills of CMTP and nine teachers from the "unobserved" teacher group who partially used the skills perceived that they were able to have a shorter helping duration with students because of the skills of the Classroom Management Training Program. In addition, eight teachers from the "unobserved" teacher group who completely used the skills of CMTP and nine teachers from the "unobserved" teacher group who partially used the skills

also perceived that they were able to return more frequently to help students having difficulty because of the skills of CMTP.

The information obtained from the observations provided inconclusive evidence as it related to reducing the amount of time spent helping each student. However, the following conclusions can be drawn from the information provided by the "unobserved" teacher group.

1. Seventeen teachers from the "unobserved" teacher group believe that the skills of corrective feedback helped them to shorten their helping interaction with students.

2. Fifteen teachers from the "unobserved" teacher group believe that the helping interaction skills of the Classroom Management Training Program helped them to return more frequently to help students having difficulty.

Research Question Number 4: Was there a perceived reduction in the amount of stress felt by the teacher as a result of using the skills obtained from the Classroom Management Training Program?

In this study, both teachers from the "observed" teacher group, eight teachers from the "unobserved" teacher group who used all the skills of CMTP, and six teachers from the "unobserved" teacher group who used only some of the skills of CMTP indicated that they felt a decrease in tension and stress. In addition, one teacher commented that if it were not for this program, she would have left

education. Thus, the following conclusions can be drawn.

1. Teachers from the "observed" teacher group believe that the skills of the Classroom Management Training Program helped them to lessen their tension and stress.

2. Fourteen teachers from the "unobserved" teacher group believe that the skills of the Classroom Management Training Program help them to lessen their tension and stress.

In summarization, the teachers from the "observed" teacher group applied some of the skills of the Classroom Management Training Program at the secondary level which resulted in (a) a reduction in student disruptions, (b) a decrease in the number of student off-task behaviors, and (c) a perceived reduction in the amount of stress felt by the teacher. In addition, the math teacher from the "observed" teacher group was also able to increase the number of students that she helped.

Recommendations for Future Studies

The skills of the Classroom Management Training Program are based upon nonverbal communication, an incentive system using time as a reinforcer, and structured teaching. Both teachers in the "observed" teacher group were trained in all of the CMTP skills. The extent to which the teachers used

each of the skills they implemented was not available. Even if the use of each skill was able to be quantified, it would be difficult, if not impossible, to determine their separate effects on classroom management.

Based upon information provided in this chapter and the findings contained in Chapter IV, the following recommendations are being made for future research:

1. Train teachers only in the use of the incentive system skills of the Classroom Management Training Program and study its effects on student disruptions, student off-task behaviors, quality of student work, and teacher stress and tension.

2. Train teachers only in the use of limit-setting skills (nonverbal communication) of the Classroom Management Training Program, and study its effects on student disruptions, student off-task behaviors, quality of student work, and teacher stress and tension.

3. Train teachers only in the use of structured teaching skills of the Classroom Management Training Program and study its effects on student disruptions, student off-task behaviors, quality of student work, and teacher stress and tension.

4. Redefine how to take corrective feedback data and determine if the structured teaching skills help to reduce student-teacher helping interactions.

5. Measure the tension and stress a teacher

experiences both before and after using the skills of the Classroom Management Training Program to determine the actual effect of the skills upon the teacher.

6. Train humanities, vocational, and physical education teachers in the skills of CMTP and observe their respective classes to determine if the CMTP skills have an effect on student disruptions, student off-task behaviors, quality of student work, and teacher stress and tension.

Speculations and Implications Based Upon The Study

The classroom observations provided data which not only showed that classroom disruptions were reduced in all classes observed, but student off-task behaviors were reduced in five of the six observed classes. Both teachers from the "observed" teacher group felt that they would have been more successful if they had had the opportunity to use the skills at the beginning of the school year rather than beginning their use after two-thirds of the school year had passed. They felt this way because, generally, the later in the school year a change is implemented, the more difficult it often becomes to change the established behavior of students. In addition, the two teachers from the "observed" teacher group felt uncomfortable trying to use all the skills at one time. They wanted the opportunity to

experiment with each skill during the remainder of the school year and begin the new school year using all of the skills. These sentiments were also expressed by teachers in the "unobserved" teacher group who were trained earlier in the school year.

It should be noted that those teachers in the "unobserved" teacher group who used all the skills of CMTP were more successful in making a positive change in their classrooms than those teachers who partially used the skills.

Based upon (a) the teachers' feelings of inadequacy with the skills and their desire to use their learned skills at the beginning of a new school year; (b) the data obtained from the teachers in the "unobserved" teacher group who used all the skills of CMTP as compared to those teachers from the "unobserved" teacher group who partially used the skills; and (c) the data obtained from the classroom observations, responses from the student questionnaire and student interview, the following speculations could be reached:

1. If both teachers from the "observed" teacher group had used their previously learned skills at the beginning of the school year, student disruptions and off-task behaviors would have been reduced further.

2. If the teachers from the "unobserved" teacher group who partially used the skills of the Classroom Management

Training Program had used all the skills as intended, they would have been more successful in reducing classroom disruptions, reducing student off-task behaviors, reducing the length of time that they were spending helping students, increasing the number of students being helped, reducing the teacher's stress and tension, and improving the quality of student work.

3. If teachers had more time to practice the skills of CMTP, the teachers would become more proficient in the use of the skills, less reluctant to use them, and as a result, substantially increase skill effectiveness.

4. In general, if teachers were to use the skills of CMTP and apply the skills of CMTP at the beginning of the school year or whenever they are teaching a new group of students, they would more likely produce better results than if they were to use the skills after the class had already been established.

The benefits brought about by the application of the CMTP skills may of themselves generate other benefits such as (a) greater student respect for the teacher's authority, (b) enhanced student learning, (c) reduced student-teacher confrontations, (d) a more positive student attitude toward his/her class and school, (e) more time for the teacher to teach rather than to discipline students, (f) improved teacher job satisfaction, and (g) better classroom control by the teacher.

These consequential benefits make the use of the CMTP skills, especially at the senior high school level, all the more valuable as a tool in improving on the discipline and management of a class as well as the status and well being of the teacher, the chief instrument of education.

Implicated in all of this was the attempt to determine if the application of the Classroom Management Training Program skills by teachers at the senior high school level could bring about positive student behavioral patterns and a classroom environment conducive to student learning and, in turn, the attainment of a higher standard of education.

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APPENDIX A

Scoring Manual for Observation of Student Behavior

SCORING MANUAL FOR OBSERVATION OF STUDENT BEHAVIOR

Introduction: The data system outlined below is designed to obtain relatively simple measures of counterproductive student behavior in the classroom. The two types of problem behaviors that will be systematically observed are 1) disruptive student behavior, and 2) time off-task. The observer will record each of these two classes of counterproductive student behavior separately during two-minute observation periods.

Separating each of these two-minute formal observation periods is a two-minute period of general observation. This general observation period provides the observer an opportunity to rest and to tally the number of students who receive individual corrective feedback from the teacher. This tally will be made only when the children are engaged in the independent practice of an academic skill and will be omitted during other lesson formats. This "feedback tally" will provide a measure of the frequency with which children are being helped and, indirectly, the extent to which the teacher is able to remain mobile and use brief, efficient instructional feedback interactions. When there is no independent practice, the observer will "skip" the feedback tally section, rest for 30 seconds, and continue to the next observation cycle.

Time sampling procedures will be used to record the two classes of counterproductive student behavior: 1) disruptive student behavior, and 2) time off-task. Disruptive student behavior has two components that will be observed separately,. but recorded together as single tally. These tow types of disruptive behavior are: 1) inappropriate talk, and 2) out of seat.

The scoring manual will be divided into three sections. The first contains definitions of the behaviors to be scored in sufficient detail to permit reliable and accurate scoring in the field. The second contains scoring procedures and general instructions for observation. The third contains specific instructions for the use of the Student Observation Scoring Form and the accompanying Data Summary Sheet.

I. Definitions

    A. Disruptive Student Behavior: The observer will count as disruptive student behaviors both 1) inappropriate talk, and 2) out of seat.

1)   Inappropriate talk: This behavior will be
      scored whenever a student whispers or talks to
      another child nearby, talks across the room, or
      makes audible vocalization to no one in
      particular. This behavior must be directly
      observed and not inferred.

      Certain kinds of conversation will not be
      scored, since they may represent productive
      classroom behavior. They are:

      a)   Conferring with teacher.

      b)   Talking to self as long as the voice is not
            audible to you. For example, many students
            count or read aloud while working. This is
            not scored.

      c)   Conferring with another student concerning
            the assignment. Both students must be
            seated at a desk, must be whispering, and
            must have an assignment in front of them.
            However, if no materials are evident and/or
            if there is laughing, loud talking, or other
            evidence of "goofing off," score "talking to
            neighbors."

      d)   Conferring with another student while
            constructively involved with resource
            materials. Both students must have teacher
            permission for this activity, must be
            whispering, and must remain with the
            activity. Score any other walking or
            talking as a disruption unless the teacher
            gives the students permission to do so.

            Note: Audible vocalizations, such as
            audible laughter, belching, "weird" noises,
            humming, etc., are scored as instances of
            inappropriate talk.

2)   Out of seat: Score everyone whose rear end is
      not planted firmly in a chair. There are three
      exceptions.

      a)   If the student is conferring with the
            teacher or an aide. Do, however, score
            students who are "goofing off" while
            standing around the teacher's desk and
            waiting. Score students at the teacher's
            desk as "out-of-seat" if they are facing

away from the teacher, talking, laughing, or standing more than one foot from the teacher's desk.

b) If the child is kneeling on their chair or sitting on their foot while working. Do, however, score students as "out-of-seat" who are kneeling if they are looking around, talking, or otherwise "goofing off."

c) If two or more students have teacher permission to engage in activity with resource materials on the floor or in a corner of the classroom. Do, however, score students who leave this activity (and are standing) at any time during the class period.

B. Off-Task: Students are scored as off-task if at any time during the fifteen-second observation interval they are not looking directly at their study material. Thus, if a student looks up from his work, however briefly, at any time during the observational interval, he is scored as off-task. There are four exceptions:

1) If the student is conferring with the teacher or an aide.

2) If the student is looking at subject-related information on the blackboard.

3) If the student is conferring with another student concerning the assignment.

4) If the teacher is lecturing and the student looks down at his/her notes or work, rather than pay strict attention to the teacher.

C. Corrective Feedback Interaction: Tally a corrective feedback interaction between the teacher and a single student whenever a teacher stops at a student's desk, leans over to examine the student's work, and converses with the student for more than one sentence (estimated.) Do not score a look, a smile, or a brief word of encouragement.

II. Scoring Procedures

Introduction: While observing, score only what you can see. For example, score talking if you can see some

type of movement which indicates talking such as jaw movement, but do not infer talking without visual evidence-even if you know the child really is talking to his or her neighbor. Also, do not score the listener who is sharing in the disruption unless they actually talk during the observation interval. When taking sampling data, think of yourself as a machine that records visible events, not as a thinking individual who records the true state of affairs. There is no place for inference in time sampling since no two people reliably infer the same way. Even if your observations seem to rigidly run counter to the "true" state of affairs on occasion, it is better to have systematic, reliable noise in the system than random or biased noise.

A. Disruptive Student Behavior

Scorers divide the room into two approximate halves. A 15-second interval is used for sampling student disruptions. The first ten seconds of each interval are for scanning; the last five seconds are used for recording. Scorers scan a given half of the room, tally the number of students engaged in either 1) inappropriate talk, or 2) out-of-seat, and record that tally on the Scoring Form in the space next to the beginning time of the interval. No student may be scored as engaging in either of these behaviors more than once per 15-second interval.

Scorers alternate their observations back and forth between halves of the room every 15 seconds. The first 15-second interval is devoted to sampling "disruptive student behavior" in the right half of the class; the next 15-second interval is then devoted to sampling this behavior in the left half of the class. The next interval goes back to the right side, and so on until the entire two-minute data block has been gathered. Using this system, scorers begin each minute of scoring "disruptive student behavior" on the right side of the classroom.

B. Off-Task

Use the same procedure as that used for recording "disruptive student behavior." No student may be scored as off-task more than once per any given interval. Scorers will alternate back and forth between halves of the room every 15 seconds. The first 15-second interval will be devoted to sampling

off-task behavior in the right half of the class;
the next 15-second interval would then be devoted to
sampling this behavior in the left half of the
class. The next interval goes back to the right
side, and so on until the entire two-minute data
block has been gathered. Using this system,
observers begin each minute of scoring "off-task" on
the right side of the classroom.

C. Corrective Feedback Interaction

During the two minute segments of "Feedback Tally"
which separate the scoring of "Disruption" and "Off-
Task," the observer can easily obtain a tally of the
number of students receiving direct help from the
teacher. This tally can supply hard data concerning
a) the duration of the average instructional
feedback interaction and b) the number of children
helped during a typical half-hour independent work
period. The tally of the number of students
receiving direct help from the teacher is recorded
at the end of the two-minute feedback tally period
in the space labeled Feedback Tally on the right
side of the Scoring Form. Remember: This is only
to be scored during independent practice of an
academic skill. If there happens to be no
independent practice when this observation cycle is
about to occur, skip it, and wait 30 seconds before
continuing to the next cycle of either
"Disruptions," or "Off-Task."

III. Use of the Student Observation Scoring Form and Data
Summary Sheet

Before beginning formal observation, assume your
observation vantage point at the side of back of the
room and wait five minutes for the children to become
accustomed to your presence so that they are no longer
attending to you. Do not, at any time, interact with
the students or they will not learn to ignore you. If
the students try to interact, look past them and say
nothing. Even if the students know you and are used to
interacting with you in other situations, they will soon
learn that, when you enter the classroom with the
clipboard, you do not talk. Systematically
extinguishing student attention the the observer is a
prerequisite of valid data.

Before beginning formal observation, wait for the five
minutes (above) for the class to settle down and the
lesson is under way. Terminate scoring during the

observation of student behavior whenever some event
occurs which drastically alters the nature or tenor of
the period. Examples:

a) Other individuals, such as teachers, aides, or
visitors enter the classroom and interrupt the
lesson to make an announcement or presentation.
Scoring may be resumed when the individual leaves
the classroom and the level of disruptiveness
returns to its previous level.

b) If an administrator comes to the door to ask to see
a student. Scoring may be resumed when the
individual leaves the classroom and the level of
disruptiveness returns to its previous level.

c) Cease scoring when the teacher radically alters the
format of the period by introducing some activity
atypical of that period.

d) If the class goes into a transition from one type of
format to another (e.g. lecture to independent
work), wait until the level of disruptiveness return
to its previous level. This should not be longer
than 2 minutes.

1. Recording Observations

"Disruptive Student Behavior" and "Off-Task" are
scored in alternating two-minute segments of the
scoring form by a single scorer. Four minutes of
scoring of each behavior is to be considered a
minimum during any single observation period. The
"Feedback Tally" is recorded at the end of each two-
minute general observation period. Four minutes of
feedback tally are to be considered a minimum for
computing any summary data concerning instructional
feedback. If the students are not working on
independently, do not take any data during the
feedback tally cycle. You are to rest for 30
seconds, and then proceed with the next observation
of either "Disruptions," or "Off-Task." If the
teacher allows students to work independently after
you have skipped one or more feedback tally cycles,
go to the bottom of the page after all other cycles
are completed, and score 2 minutes for each cycle
that was missed. This is to be scored in the
section marked "Additional Feedback Tally." You
will record a minimum of 2 complete sets of
observations taken per class (i.e. 2 observation
sheets). Allow 2 minutes before your next complete

"set" of observations.
Following the formal teacher observation, sum the
subtotals of each two-minute observation period for
1) Disruptions, 2) Off-Task, and 3) Feedback Tallies
at the bottom of the Score Form in the space
provided. Also add the totals of a second observer
if dual observation is being carried out for the
purpose of assessing the reliability of observation.
Percent of reliability is calculated by dividing the
small total by the large total for each behavior.

Next, record the Minutes of Observation that were
carried out for 1) Disruptions, 2) Off-Task, and 3)
General Observations (feedback tally) at the bottom
of the Scoring Form in the space provided. These
numbers are particulary important when the
observation has been interrupted in any way so that
behavioral totals represent data from less than the
typical <u>four</u>-minute scoring of disruptions and off-
task and less than the typical <u>eight</u> minutes of
feedback tally.

2. Data Summary

A separate sheet is provided to facilitate a quick
summarization of the data by the observer. Such
summarization is critical since raw numbers are
easily misinterpreted and since summarization will
usually not take place unless calculating 1) percent
of children disrupting, 2) percent of children off-
task, 3) feedback interaction duration (average),
and 4) children helped per half-hour are contained
on the Data Summary Sheet along with work space for
computations. In addition, space is provided for
Interpretive Comments that might help those who were
not present to understand special features of that
particular instructional period which might help to
explain the data. All figures needed to carry out
these calculations can be obtained from the Scoring
Form.

NOTES: 1. If teacher is lecturing and student is
looking at their paper and not daydreaming, this is not
considered off-task.

APPENDIX B

Student Observation Scoring Form

STUDENT OBSERVATION SCORING FORM

Sheet # ____

Date: __/__/85   Teacher:_____   Subject/Pd. _____/___

Scorer:_____   # of students scored: _____ R_____ L _____

LESSON FORMAT: ___St. Lecture ___Lecture/Discussion ___Gp. Discussion
                ___Small Gp. Discussion ___Ind. Seatwork ___Other_____

	Min.	Seconds	Disruptive Behavior Totals	Off-Task Totals	Feedback Tally
		Side R L R L			
DISRUPTIONS	1 (1)	0____15____30____45_____	_____		
	2 (2)	0____15____30____45_____	_____		
	3	-Feedback Tally-(scored			
	4	during ind. seatwork only)			
		[ ] Check for no ind. practice			_____
		Side R L R L			
OFF-TASK	5 (3)	0____15____30____45____		_____	
	6 (4)	0____15____30____45____		_____	
	7	-Feedback Tally-(scored			
	8	during ind. seatwork only)			
		[ ] Check for no ind. practice			_____
		Side R L R L			
DISRUPTIONS	9 (5)	0____15____30____45____	_____		
	10 (6)	0____15____30____45____	_____		
	11	-Feedback Tall-(scored			
	12	during ind. seatwork only)			
		[ ] Check for no ind. practice			_____
		Side R L R L			
OFF-TASK	13 (7)	0____15____30____45____		_____	
	14 (8)	0____15____30____45____		_____	
	15	-Feedback Tally-(scored			
	16	during ind. seatwork only)			
		[ ] Check for no ind. practice			_____

Additional Feedback Tally (ind. practice only)
Score in whole minutes only

Min.	Feedback	Min.	Feedback
1	_____	5	_____
2	_____	6	_____
3	_____	7	_____
4	_____	8	_____

Minutes of Observation

	Totals	_____	_____	_____
_____ Disruption	Ind. Obs. Totals	_____	_____	_____
_____ Off-Task	% Reliability	_____	_____	_____
_____ Feeback Tally				

APPENDIX C

Student Observation Scoring Form Data Summary Sheet

STUDENT OBSERVATION SCORING FORM
DATA SUMMARY SHEET

Directions: Use the totals from the Student Observation Scoring Form
   plus other available information to compute 1) the number of
   disruptions per child per minute; 2) the number of off-task
   behaviors per child per minute; 3) the average duration of an
   individual corrective feedback interaction during indepenedent
   practice of an academic skill; and 4) a prorated estimate of the
   number of children who receive individual corrective feedback per
   half-hour.

1) Number Of Disruptions Per Child Per Minute

$$\text{# of disrupt. per child per min.} = \frac{\text{Disruption Total}}{2 \times \text{# of kids} \times \text{minutes in room observed}} = \frac{\quad}{2 \times \underline{\ } \times \underline{\ }} = \underline{\quad} =$$

2) Number Of Off-Task Behaviors Per Child Per Minute

$$\text{# of off-task per child per min.} = \frac{\text{Off-Task Total}}{2 \times \text{# of kids} \times \text{minutes in room observed}} = \frac{\quad}{2 \times \underline{\ } \times \underline{\ }} = \underline{\quad} =$$

3) Feedback Interaction Duration

$$\text{Feedback Interaction Duration} = \frac{\text{Minutes of Feedback Tally}}{\text{Total Feedback Tally}} = \underline{\quad\quad} =$$

4) Children Helped Per Half-Hour

$$\text{Children Helped Per Half-Hour} = \frac{30}{\text{Feedback Interaction Duration}} = \underline{\quad\quad} =$$

INTERPRETIVE COMMENTS: _____

_____

_____

_____

_____

__/__/85 _____/_____   _____
  Date   Teacher   Pd.   Observer

APPENDIX D

Classroom Management Training Program Teacher Questionnaire

CLASSROOM MANAGEMENT TRAINING PROGRAM
TEACHER QUESTIONNAIRE

NAME:_____ TRAINING DATE:__/__/__ TODAY'S DATE:__/__/__
    (optional)

The purpose of this questionnaire is to allow those teachers who have been trained in the skills of the Classroom Management Training Program to express their opinions regarding the effects of these skills on themselves and their students.

PART I

Directions: Place a check mark (✓) next to the statement that best indicates the degree to which the listed skills have been used.

DISCIPLINE SKILLS (Includes PAT, Limit-Setting, Back-Up System)
(check one)

_____ I have been using these skills.
_____ I have been partially using these skills.
    Why? _____

    Which ones?_____
_____ I have not been using these skills.
    Why? _____
    _____

CORRECTIVE FEEDBACK SKILLS (Praise, Prompt, Leave)
(check one)

_____ I have been using these skills.
_____ I have been partially using these skills.
    Why? _____

    Which ones?
_____ I have not been using these skills.
    Why? _____
    _____

STRUCTURED TEACHING SKILLS (Multimodal-Kinetic teaching using Illustrated Performance Sequence)
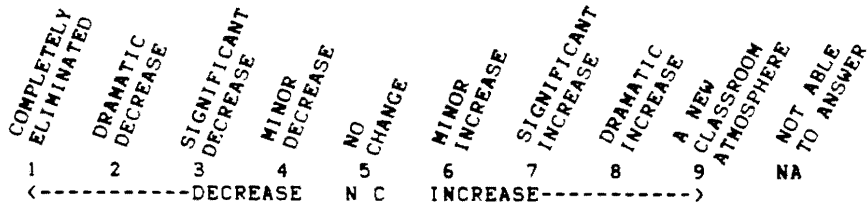(check one)

_____ I have been using these skills.
_____ I have been partially using these skills.
    Why? _____

    Which ones? _____
_____ I have not been using these skills.
    Why? _____
    _____

PART II

Directions: Read the following items and rate each on a nine-point rating
scale by placing a circle around the number which best represents your
experience with the skills obtained from the Classroom Management Training
Program (mark NA only if you are NOT ABLE to answer this question due to
the fact that you have not practiced the skill that relates to the
question). The scale represents a continuum from decreasing or
eliminating the behavior or feeling in question to increasing the same
behavior or feeling. The scale is as follows:

```
COMPLETELY  DRAMATIC   SIGNIFICANT  MINOR    NO      MINOR     SIGNIFICANT  DRAMATIC   A NEW        NOT ABLE
ELIMINATED  DECREASE   DECREASE     DECREASE CHANGE  INCREASE  INCREASE     INCREASE   CLASSROOM    TO ANSWER
                                                                                       ATMOSPHERE
    1          2           3          4       5        6          7            8         9           NA
    <-----------DECREASE          N C        INCREASE----------->
```

Ratings should represent the discrepancy between present performance and
past performance, and NOT the discrepancy between past performance and
what you would like the performance to be.

To save space, the rating scale as defined above will be represented
schematically on each page in the following form

```
      1    2    3    4    5    6    7    8    9    NA
      <----DECREASE   N C   INCREASE----->
```

Please read each question carefully. "Increase" or "decrease" may refer
to either positive or negative behavior. Circle only one number per each
numbered statement.

I. To what extent have the skills that you have obtained from the
   Classroom Management Training Program helped you to produce a change
   in the following student behaviors? (Remember: Circle only one number
   per each numbered statement)

	DECREASE	NC	INCREASE	NA
A. STUDENT DISCIPLINE	<--------		-------->	
1. Common disruptions (talking, out of seat).	1 2 3 4	5	6 7 8 9	NA
2. Blatant disruptions (laughing, talking across the room, class rowdiness).	1 2 3 4	5	6 7 8 9	NA
3. Number of negative interactions between peers (hassling each other, put-downs, criticizing each other).	1 2 3 4	5	6 7 8 9	NA

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	DECREASE	NC	INCREASE	NA
	<--------		-------->	
4. Talking and dawdling during lesson transitions so that students are slow getting to work following a change in activities.	1 2 3 4	5	6 7 8 9	NA
5. Arriving late to class.	1 2 3 4	5	6 7 8 9	NA
6. Arriving to class with paper, pencil/pen, or textbook.	1 2 3 4	5	6 7 8 9	NA
7. Number of students ready to start classwork when the bell rings.	1 2 3 4	5	6 7 8 9	NA

B. STUDENT PRODUCTIVITY

Negative Behaviors

8. Dawdling, day dreaming, time wasting.	1 2 3 4	5	6 7 8 9	NA
9. Helplessness: asking for help with work before having really tried.	1 2 3 4	5	6 7 8 9	NA
10. Waiting for help with hands raised instead of working when you are away from them.	1 2 3 4	5	6 7 8 9	NA
11. Working on material from other classes without permission.	1 2 3 4	5	6 7 8 9	NA

Positive Behaviors

12. Amount of work completed.	1 2 3 4	5	6 7 8 9	NA
13. Quality of work completed.	1 2 3 4	5	6 7 8 9	NA
14. Working independently.	1 2 3 4	5	6 7 8 9	NA
15. Having students who are less of a learning or motivation problem.	1 2 3 4	5	6 7 8 9	NA
16. The development of "let's get to work" attitude in the class.	1 2 3 4	5	6 7 8 9	NA

C. STUDENT GRADES

17. Students' daily grades (quality, i.e., number of A's - F's).	1 2 3 4	5	6 7 8 9	NA
18. Students' test grades (quality, i.e., number of A's - F's).	1 2 3 4	5	6 7 8 9	NA

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	DECREASE <--------|	NC	INCREASE |-------->		NA
19. Students' homework grades (quality, i.e., number of A's - F's).	1 2 3 4	5	6 7 8 9	NA

D. <u>COMMENTS:</u> _____

_____

_____

_____

_____

_____

II. To what extent have the skills that you have obtained from the Classroom Management Training Program helped you to produce a change in <u>your</u> behavior? (Remember: Circle only one number per each numbered statement)

	DECREASE <--------|	NC	INCREASE |-------->		NA
A. <u>TEACHER INTERACTIONS</u>				
20. Pointing out what the student has done right rather than focusing primarily upon error during instructional feedback.	1 2 3 4	5	6 7 8 9	NA
21. Shorter duration of helping inter- actions with students who are stuck.	1 2 3 4	5	6 7 8 9	NA
22. More frequent help to students who are stuck.	1 2 3 4	5	6 7 8 9	NA
23. Praise for slow students.	1 2 3 4	5	6 7 8 9	NA
24. Praise for fast students.	1 2 3 4	5	6 7 8 9	NA
25. Ability to differentiate motivation problems from genuine learning dysfunctions.	1 2 3 4	5	6 7 8 9	NA
26. Time for individual work with children who need it.	1 2 3 4	5	6 7 8 9	NA
27. Time for lesson planning.	1 2 3 4	5	6 7 8 9	NA
B. <u>FEELINGS ABOUT TEACHING CHILDREN</u>				
<u>Negative Feelings</u>				
28. Frustrations with specific children.	1 2 3 4	5	6 7 8 9	NA
29. Anger at specific children.	1 2 3 4	5	6 7 8 9	NA

		DECREASE	NC	INCREASE	NA
		<--------¦	¦	¦-------->	
30.	Exhaustion at the end of the day.	1 2 3 4	5	6 7 8 9	NA
31.	General tension and stress.	1 2 3 4	5	6 7 8 9	NA
32.	Feelings of inadequacy or failure.	1 2 3 4	5	6 7 8 9	NA
33.	Days when it seems like teaching is more trouble than its worth.	1 2 3 4	5	6 7 8 9	NA

Positive Feelings

34.	Eagerness to go to work in the morning.	1 2 3 4	5	6 7 8 9	NA
35.	Moments of enjoyment in the classroom.	1 2 3 4	5	6 7 8 9	NA

C. FEELINGS ABOUT COLLEAGUES AND SELF

36.	Positive feelings toward colleagues.	1 2 3 4	5	6 7 8 9	NA
37.	Pride in being a teacher.	1 2 3 4	5	6 7 8 9	NA
38.	Feeling of growing professionally.	1 2 3 4	5	6 7 8 9	NA
39.	Feeling less professionally isolated, i.e., having more opportunity to share teaching concerns with colleagues.	1 2 3 4	5	6 7 8 9	NA

D. COMMENTS: _____

_____

_____

_____

_____

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III. To what degree have you found the acquired skills helpful in managing
your classroom as it relates to the overall effect of the program?
(Rate 1 through 5 or Not Applicable [NA] if you have not practiced
this skill and circle only one number per each numbered statement.)

SKILLS	NO HELP	HELPED A LITTLE	MODERATELY HELPFUL	VERY HELPFUL	EXTREMELY HELPFUL	
	1	2	3	4	5	NA
40. Limit setting (physical proximity)	1	2	3	4	5	NA
41. Stopwatch & PAT's	1	2	3	4	5	NA
42. Structured teaching (IPS)	1	2	3	4	5	NA
43. Corrective Feedback	1	2	3	4	5	NA
44. Maintenance Meetings	1	2	3	4	5	NA

NOTE: This questionnaire was adapted from the CMTP questionnaire
developed by Dr. Fredric Jones.

APPENDIX E

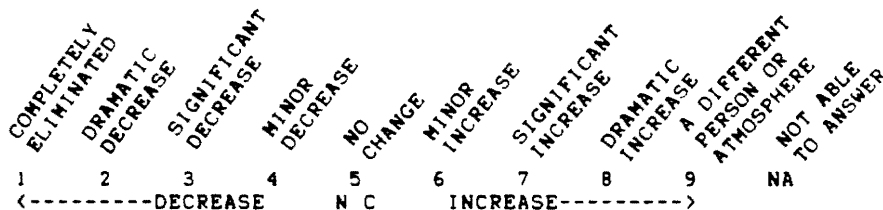Classroom Management Training Program Student Questionnaire

CLASSROOM MANAGEMENT TRAINING PROGRAM
STUDENT QUESTIONNAIRE

TEACHER'S NAME:_____ PERIOD:____ TODAY'S DATE:__/__/____

You may have noticed that for approximately 6 weeks your class was
observed by one-two observers. Each observer was recording data on your
behavior and your teacher's behavior. Approximately 3 weeks after being
observed, your teacher was absent from school for 2 days. The purpose of
this absence was to train your teacher in certain skills of classroom
management. After the training, she returned to school and used all or
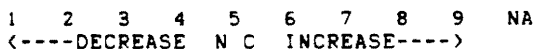part of her training.

The purpose of this questionnaire is to allow you the opportunity to
express your opinions regarding the effects of your teacher's training on
you and the rest of your classmates.

Directions: Read the following items and rate each on a nine-point rating
scale by placing a circle around the number which best represents your
perception(s) of how your teacher's training has affected you and your
classmates (mark NA only if your are NOT ABLE to answer this question due
to the fact that it does not apply to you). The scale begins at
decreasing or eliminating the behavior or feeling in question to
increasing the same behavior. The scale is as follows:


```
COMPLETELY   DRAMATIC   SIGNIFICANT   MINOR      NO       MINOR      SIGNIFICANT   DRAMATIC   A DIFFERENT   NOT ABLE
ELIMINATED   DECREASE   DECREASE      DECREASE   CHANGE   INCREASE   INCREASE      INCREASE   PERSON OR     TO ANSWER
                                                                                             ATMOSPHERE
    1           2           3            4         5         6           7            8          9            NA
    <---------DECREASE              N C           INCREASE--------->
```

Ratings should represent what it was like before the teacher's training
compared to what it is now.

To save space, the rating scale as defined above will be represented
schematically on each page in the following form:

```
    1   2   3   4   5   6   7   8   9   NA
    <----DECREASE   N C   INCREASE---->
```

Please read each question carefully. "Increase" or "decrease" may refer
to either positive or negative behavior. Circle only one number per
numbered statement.

I. Listed below are various student behaviors. From this list, please answer the following question (Remember: circle only one number per numbered statement). To what extent has the teacher's training helped her to produce a change in your behavior?

		DECREASE	NC	INCREASE	NA
		<-------		------->	
A.	**STUDENT DISCIPLINE**				
1.	Talking and/or getting out of your seat.	1 2 3 4	5	6 7 8 9	NA
2.	Laughing, talking across the room, being rowdy.	1 2 3 4	5	6 7 8 9	NA
3.	Arriving late to class.	1 2 3 4	5	6 7 8 9	NA
4.	Arriving to class with paper, pen/pencil, or text.	1 2 3 4	5	6 7 8 9	NA
5.	Ready to start work when the bell rings.	1 2 3 4	5	6 7 8 9	NA
B.	**STUDENT PRODUCTIVITY**				
6.	Dawdling, daydreaming, time wasting.	1 2 3 4	5	6 7 8 9	NA
7.	Asking for the teacher's help before you have really tried to do the work.	1 2 3 4	5	6 7 8 9	NA
8.	Waiting for help and doing nothing instead of going on and doing work that you are capable of doing.	1 2 3 4	5	6 7 8 9	NA
9.	Working on material from other classes without permission.	1 2 3 4	5	6 7 8 9	NA
10.	Amount of work completed by you.	1 2 3 4	5	6 7 8 9	NA
11.	Quality of your completed work.	1 2 3 4	5	6 7 8 9	NA
12.	Amount of time you spend in class doing your assignments rather than daydreaming, dawdling, time wasting.	1 2 3 4	5	6 7 8 9	NA
13.	Amount of time you spend on homework.	1 2 3 4	5	6 7 8 9	NA
14.	Amount of time you spend in class working independently.	1 2 3 4	5	6 7 8 9	NA
C.	**STUDENT GRADES**				
15.	Daily grades (quality, i.e., number of A's - F's).	1 2 3 4	5	6 7 8 9	NA
16.	Test grades (quality, i.e., number of A's - F's).	1 2 3 4	5	6 7 8 9	NA

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STUDENT QUESTIONNAIRE
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		DECREASE <-------	NC	INCREASE ------->	NA
17.	Quiz grades (quality, i.e., number of A's - F's).	1 2 3 4	5	6 7 8 9	NA
18.	Homework grades (quality, i.e., number of A's - F's).	1 2 3 4	5	6 7 8 9	NA

II. Listed below are various student behaviors. From this list, please answer the following question (Remember: circle only one number per numbered statement). To what extent has the teacher's training helped her to produce a change in your classmates behavior?

A. STUDENT BEHAVIOR		DECREASE <-------	NC	INCREASE ------->	NA
19.	Talking and/or getting out of one's seat.	1 2 3 4	5	6 7 8 9	NA
20.	Laughing, talking across the room, being rowdy.	1 2 3 4	5	6 7 8 9	NA
21.	General classroom noise.	1 2 3 4	5	6 7 8 9	NA
22.	Arriving late to class.	1 2 3 4	5	6 7 8 9	NA
23.	Arriving to class with paper, pencil/pen, or textbook.	1 2 3 4	5	6 7 8 9	NA
24.	Ready to start work when the bell rings.	1 2 3 4	5	6 7 8 9	NA

B. STUDENT PRODUCTIVITY

25.	Dawdling, daydreaming, time wasting.	1 2 3 4	5	6 7 8 9	NA
26.	The attitude among the students of "let's get to work."	1 2 3 4	5	6 7 8 9	NA
27.	The number of students asking for help with their work.	1 2 3 4	5	6 7 8 9	NA

III. Listed below are various student and teacher behaviors. From this list, please answer the following question (Remember: circle only one number per numbered statement). To what extent has your teacher's training changed her behavior?

TEACHER INTERACTIONS		DECREASE <-------	NC	INCREASE ------->	NA
28.	The number of times that the teacher is able to help you with your class problems or work.	1 2 3 4	5	6 7 8 9	NA

		DECREASE	NC	INCREASE	NA
		<-------		------->	
29.	The amount of time that the teacher spends with you when you need help.	1 2 3 4	5	6 7 8 9	NA
30.	Telling you what you have done right, rather than what you have done wrong.	1 2 3 4	5	6 7 8 9	NA
31.	Amount of praise that the teacher gives you.	1 2 3 4	5	6 7 8 9	NA
32.	Amount of time that the teacher spends with those students who cause problems.	1 2 3 4	5	6 7 8 9	NA
33.	Number of times that the teacher has become irritated and angry.	1 2 3 4	5	6 7 8 9	NA
34.	Clarity of your teacher's lectures.	1 2 3 4	5	6 7 8 9	NA
35.	Clarity of your teacher's examples.	1 2 3 4	5	6 7 8 9	NA
36.	Your understanding of the material.	1 2 3 4	5	6 7 8 9	NA

APPENDIX F

Classroom Management Training Program Student
Interview with Student Responses

CLASSROOM MANAGEMENT TRAINING PROGRAM
STUDENT INTERVIEW - SUMMARY

Student's First Name: _____ Teacher's Name: _____   O : W/D : B : D

Openning Statement: You may have noticed that your class was observed for
approximately 6 weeks. Approximately 3 weeks after being observed, your
teacher was trained in certain skills of classroom management. As as
result of the training, certain behaviors may have been changed. The
purpose of this interview is to obtain your perceptions of the teacher's
training on you and your classmates. This interview will take
approximately 10-15 minutes. Feel free to be open with your responses.
Your teacher will not see or get a copy of your responses by name.

PAT & DISCIPLINE

1. Do you know what PAT is?

    O: 6 yes   W/D: 6 yes   B: 6 yes   D: 6 yes   Total: 24 yes

2. Do you enjoy PAT?   y   n   Why?

    O: 6 yes   W/D: 6 yes   B: 3 yes, 3 No   D: 6 yes   Total: 21 yes,
                                                                  3 no
    "Chance to do what we want to" "I like doing puzzles" Gives me time
    to talk to my friends or do work for other classes" "We can prepare
    for tests and play games" We play or do those puzzles" Gives me time
    to catch up on homework or time to relax" "Not interesting" "Get to
    do my homework from other classes" "Time out from too much classwork"
    "Time to relax and have fun" "Takes time away from class" "Gives us
    some free time" "Time to relax, play a game" "Fun; time off from
    work" "I don't have to do my work" "Something to look foward to.
    Gives us something to do at the end of the week" "Free time" "It's
    fun" "Want to be quiet" "Waste of time" ""Useful to me because I
    can study" "It gives me a chance to do my homework" "Rather be doing
    Algebra" "Time for me to do what I want to do"

3. Does PAT cause you to work harder?   y   n

    O: 6 no   W/D: 6 no   B: 6 no   D: 3 yes, 3 no   Total: 3 yes, 21 no

4. Do you want to be quiet so you can have PAT?   y   n

    O: 6 yes   W/D: 6 yes   B: 4 yes, 2 no   D: 5 yes, 1 no
    Total: 21 yes, 3 no

5. Does PAT cause you to want to get your work done when (tchr's name)
    allows you time in class to do it?   y   n

     O: 5 yes, 1 no   W/D: 5 yes, 1 no   B: 6 yes   D: 6 yes
     Total: 22 yes, 2 no

6. Do you feel that PAT helps you to understand the material in class, or
    do you feel it's a waste of time? For example, does it help you to
    review material?   Understand   Waste of Time

    O: 5 understand, 1 no answer   W/D: 5 understand, 1 waste of time
    B: 3 understand, 3 waste of time   D: 4 understand, 2 waste of time
    Total: 17 understand, 6 waste of time, 1 no answer

7. How do you feel when (tchr's name) stops the stopwatch when you are
    talking and/or not doing your work? If this has never happened, then,
    how do you think you would feel?

    FEEL: "I need to be quiet" "I don't feel anything" "Want to be
    quiet" "I feel like I let everyone down" "Makes me feel stupid"
    "Makes me be quiet" "Doesn't bother me" "Bad; it's embarassing too"
    "Guilty"

    NEVER HAPPENED: "Makes me feel terrible" "Bad" "Guilty (2)" "I'd
    get mad" "Embarassed (5)" "Nervous" "Bad-embarassed" "Disappointed
    that we have less time for PAT" "Feel guilty" "Feel low"

8. How do you feel when (tchr's name) stops the stopwatch when someone
    else in class is talking and/or not doing their work?

    "They need to be quiet" "Get mad" "It doesn't bother me" "Oh, come
    on" No answer "I wish they would be quiet" "Man, that's stupid
    because it hurting the rest of the class" "I don't like it" "Makes
    me mad" "Makes me mad because it takes time away from everyone" "Why
    do they have to talk" "It makes me mad because it takes time away
    from me" "Mad" "Feel bad" "Don't feel it's fair" "Don't care"
    "Get real mad" "Gets me upset" "Bad" "Mad at them"

    If this has never happened, then, how do you think you would feel?

    "Irritated" "Wouldn't bother me" "Unfair" "Mad"

9. Do you find that ther is less, more, or the same amount of noise in
    the room currently as compared to before your teacher's training?
    less more, same   If less or more, what do you think it is do to?

    O: 4 less, 2 same   W/D: 3 less, 3 same   B: 3 less, 3 same
    D: 5 less, 1 same   Total: 15 less, 9 same.
    DUE TO: "PAT (5)" "Stopwatch (3)" "We are more interested": "Don't
    know why" "Getting stricter (3)" "More work for us to keep us busy"
    "Rules given to use and told us to be quiet"

10. Has the teacher ever had to stop her work, say during lecture, and
    look at you, call your name, or come over to your desk? [Qualify:
    This pertains only since your class has been observed].   y   n

    O: 1 yes, 5 no   W/D: 2 yes, 4 no   B: 6 no   D: 3 yes, 3 no
    Total: 6 yes, 18 no

If yes, how did you feel?

"Embarrassed (3)" "Embarrased- starting to sink down in my seat"

"bad" "didn't bother me"

Did you want to stop talking?

6 yes

If no, how do you think you would feel?

"Embarassed (9)" "Bad (3)" "Mad" "Nervous" "Guilty" "Ashamed"
"scared" "Not very good"

Do you think you would want to get back to work?

17 yes, 1 no

11. Has the teacher ever had to stop her work, say during lecture, and
   look at one of your classmates, call his/her name, or go over to their
   desk? [Qualify: This pertains only since your class has been
   observed.]

   19 yes, 5 no

   If yes, how did you feel or how do you think the person felt?

   "I don't care (3)" "Embarassed (9)" "Guilty" "Takes time away from
   everyone in class" "Nothing" "Bad (2)" "Stupid" "Sorry"

   Do you think the person wanted to stop talking?

   16 yes, 3 no

CORRECTIVE FEEDBACK

If the teacher is going around the room helping the students with their
work.

12. When you need help on a problem, do you find that the teacher is
   spending more, less, or about the same amount of time with you?   more
   less, same

   O: 1 less, 4 same, 1 more   W/D: 6 same   B: 5 same, 1 more
   D: 1 less, 4 same, 1 more   Total: 2 less, 19 same, 3 more

   If the answer is less, then, do you feel you are learning just as much
   as before her training?

   2 no

13. How do you feel when the teacher leaves you when you still have
    questions?

    The math teacher was the only teacher to do this and it occurred only
    three times. The responses were: "Little angry" "I feel mad because
    I still don't know how to do it" "Doesn't bother me"

    Does she come back enough times to answer all your questions?

    2 yes, 1 no

14. Does the teacher now give you more (quantity) and better examples or
    problems than she did before she was trained?   y   n

    O: 5 yes, 1 no   W/D: 6 yes   B: 5 yes, 1 no   D: 6 yes
    Total: 22 yes, 2 no

    In what way?

    "Explains them better-adds more" "Works the examples all the way out-
    there are more steps" "She shows more and clearer steps now" "Does
    step by step-easy to hard" "Writes down alot more-gives more steps"
    "Does more of them-more steps" "More steps and clearer" "Better
    explanations-clearer examples" "Better explained and more examples"
    "Can't say" "More details" No answer "Better explanation" "Better
    detail-more steps" "Gives more examples" "General examples" "Not
    boring. Easier to understand" "Draws more pictures. Examples are
    good" "Don't know. They are just better" "Explains them in more
    detail-adding more steps" "You can understand them more-adding more
    steps"

15. Are the examples that the teacher gives you to help with your homework
    enabling you to do more homework problems without her help?

    O: 4 yes, 2 no   W/D: 5 yes, 1 no   B: 5 yes, 1 no   D: 4 yes, 2 no
    Total: 18 yes, 6 no

    Do you feel more confident?

    O: 5 yes, 1 no   W/D: 5 yes, 1 no answer   B: 5 yes, 1 no answer
    D: 4 yes, 1 no, 1 no answer   Total: 19 yes, 2 no, 3 no answer

16. Do you think you are a good student?   y   n

    O: 6 yes   W/D: 6 yes   B: 6 yes   D: 4 yes, 2 no
    Total: 25 yes, 1 no

Why?

"I do my work and behave" "I do my homework and make good grades"
"Got an A" "I try" "I understand quicker" "Get my work done" "Get
straight A's-never in any trouble" "Make good grades-don't cause
problems" "I work in class" "Sometimes I don't do my homework" "I
listen" "I do my work and don't talk much" "Making good grades" "I
get high grades" "I get mostly A's" "I never get in trouble" "Don't
cause trouble in class" "I get all my work done and when I miss days
I make it up" "I have all my notes and I hardly talk- I'm prepared"
"I do my homework and try not to create problems" "I do my homework
and do good on quizzes and tests" "Don't put that much into it"
"Never go to class late and complete homework-never talk in class" "I
don't talk and I do my homework"

17. Do you plan to go to college? y n

O: 5 yes, 1 no   W/D: 4 yes, 2 no   B: 6 yes   D: 5 yes, 1 no
Total: 20 yes, 4 no

What college would you like to attend?

M.I.T.; G.M.U.; William and Mary (2); V.P.I. (3); Elon (2); No choice
(8); W. VA. Univ; Military Academy; Hampton

VITA

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