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Roy R. Taylor

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DESIGNING, IMPLEMENTING, AND EVALUATING A STAFF DEVELOPMENT  
PROGRAM ON LEARNING STYLES AND TEACHING STYLES  
IN AN URBAN JUNIOR HIGH SCHOOL

A Dissertation Presented

by

ROY R. TAYLOR

Submitted to the Graduate School of the  
University of Massachusetts in partial fulfillment  
of the requirements for the degree of

DOCTOR OF EDUCATION

MAY 1990

Education

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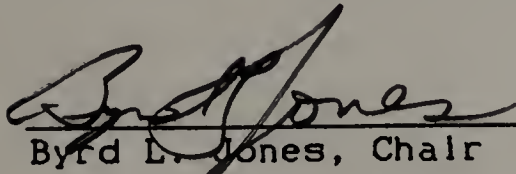
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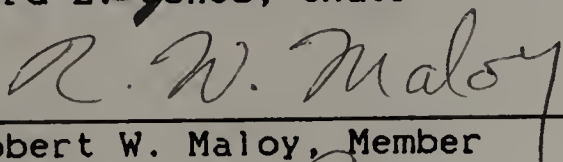
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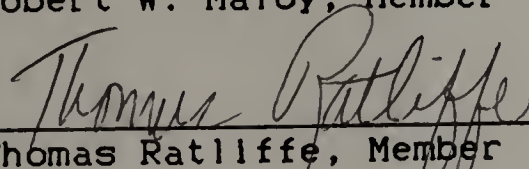
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## DEDICATION

This dissertation is dedicated to:

My loving wife, Juanita, who was the "wind beneath my wings,"

and

My adorable daughter, Melanie, whose understanding and patience encouraged me to prevail.

## ACKNOWLEDGEMENTS

My deepest gratitude and appreciation go to the following individuals and organizations for supporting and assisting me in the completion of this study:

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Roosevelt Board of Education, for supporting the Roosevelt U/Mass Staff Development Program.

My parents, for encouraging me "to get as much education as you can."

My sister Mary, who encouraged and supported me in my educational endeavors since early childhood.

ABSTRACT

DESIGNING, IMPLEMENTING, AND EVALUATING A STAFF DEVELOPMENT  
PROGRAM ON LEARNING STYLES AND TEACHING STYLES  
IN AN URBAN JUNIOR HIGH SCHOOL

MAY 1990

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This study documented the process of designing, implementing, and evaluating a low-cost, school-based, researcher-conducted staff development program for four voluntary Black seventh and eighth grade science and social studies teachers at Roosevelt Junior Senior High School, New York, during 1987-88. The underlying purpose was to learn more about effective school improvement in low-income school districts. Staff development efforts aimed to expand teachers' teaching styles to accord more closely with urban Black students' diverse learning styles in four homogeneously grouped classes with the intent of (a) improving students' academic achievement, (b) increasing attendance to class, and (c) improving attitudes about school.

Five collaboratively planned workshops on teaching styles and learning styles provided opportunities for

teachers (a) to expand their repertoire of teaching styles, (b) to recognize students' learning styles, (c) to develop problem-solving techniques for their classes, (d) to work cooperatively with other teachers, and (e) to enhance their professional growth.

Based on observations, discussions, interviews, and self-reports, the researcher concluded that teachers (a) utilized different teaching strategies in their classes to address more students' learning styles, (b) provided more opportunities for students to work cooperatively in class, (c) shared ideas with other teachers, (d) planned their lessons with other teachers, (e) incorporated students' suggestions into lessons, (f) utilized a larger variety of teaching aids and materials, and (g) praised their students more often. Their students (a) displayed less inappropriate behavior in class, (b) worked cooperatively with their classmates, (c) offered teachers suggestions to make classes more interesting, and (d) complained less often of boredom.

Evidence of positive gains suggests that staff development is feasible in low-income school districts when staff are encouraged to seek support and ideas from students, parents, teachers, and administrators about issues considered important in their setting. Collaborative planning fosters a climate that encourages a variety of school improvement efforts to flourish over time.



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## CHAPTER 1

### INTRODUCTION

Teachers have various styles of teaching and students have various styles of learning. Combs, Avila, and Purkey (1971) stated that interchanges between teachers and their students differ from moment to moment. Teachers react to each student in terms of the unique questions, ideas, problems, and concerns that he/she is expressing at a particular instant. Teachers should increase their awareness of the variety of learning styles in their classes and implement various teaching strategies to help meet students' needs and to develop a school environment where students want to be on a regular basis.

According to Barr and Dreeben (1977), as long as classrooms retain their traditional character, students will not attend school on a regular basis. Monk and Ibrahim (1984) stated that absenteeism may also be a consequence of the negative activities taking place in school. For instance, students may absent themselves from an unruly class or a teacher whose approach does not match a student's needs.

Sarason (1982) posed thought-provoking questions relative to learning, schooling and education as he referred to processes that take place in school. What do children in a classroom think about the learning climate? Do students

have their own theories about how and why one learns? Are there discrepancies between the theories children think about and the theories they are required to adopt? Would children like to talk about these matters? Are they able to talk about them? How do teachers explain and discuss their theories of learning and thinking with their students? According to Dunn (1982), if teachers sought answers to these questions from their students, and implemented the responses into their teaching, students' academic achievement as well as their attitudes toward school would improve. Dunn (1982) stressed the need for teachers to listen to students.

Prior to the 1986-87 school term, seventh and eighth grade students at Roosevelt Junior Senior High School were academically grouped homogeneously and heterogeneously for placement into their major subjects--English, social studies, mathematics, and science--and foreign languages. Homogeneously, students were placed in their English class based on their language and reading skills on the Iowa Test of Basic Skills. For example, students who scored within a year's range were placed in the same group or track.

Heterogeneously, students were placed into their science, mathematics, social studies, foreign languages--except advanced placement--and their ancillary classes, which included physical education, typing, home and careers, music, and technology. Students were "labeled" according to



the English class in which they were enrolled, and, thus, teachers tended to set their expectations according to the homogeneous designation of the English class. To that extent, teachers did not allow for individual differences among students, for example, their interests, abilities, or learning styles. Teachers often taught their heterogeneously grouped classes homogeneously because they felt more comfortable and using the traditional teaching methods. The philosophy of the scheduling process for junior high students at Roosevelt Junior Senior High School was not clearly defined to encourage teachers to address the students' individual learning needs.

During the 1986-87 school term, however, a plan was devised to address the individual learning needs of the seventh grade students. Students were scheduled into their major subjects and foreign languages based on their interests, abilities, past academic performance in their major subjects, teachers' recommendations, and past performance in language, reading, and mathematics on the Iowa Test of Basic Skills.

A scheduling committee, composed of administrators and counselors, reviewed the academic data and teachers' recommendations for each student and scheduled them into their major subjects and foreign language based on the analysis of the data. A student, for example, could have been scheduled for AP English, B science,

C mathematics, AP Spanish, and B social studies, which reinforced the previously undefined tracking system at Roosevelt Junior Senior High School. Thus, classes had become homogeneous or tracked again.

Olexa and Schafer (1971) reported that students who were assigned to lower tracks exhibited lower self-esteem, displayed more school misconduct, dropped out of school more often, and displayed a higher rate of delinquency than students in middle or high tracks (cited in Goodlad, 1984, p. 152).

Oakes (1985) also concluded that low-track students participate less in extracurricular activities at school, exhibit more school and classroom misconduct, are involved more often in delinquent behavior outside of school, are more alienated from school, and have higher drop-out rates.

### Problem

A two item questionnaire (see appendix A) was administered to approximately 50 seventh graders, who had patterns of poor school attendance, during the spring of 1986 to ascertain why they had not attended school or their classes regularly. Although most of the students surveyed indicated they would prefer being in school and being in their classes, there was, however, a significant percentage (17%) of the 233 seventh graders who were not attending school or their classes on a regular basis, which

possibly contributed to the 16.30% retention rate of seventh graders during the 1984-85 school term.

Table 1 reveals the number and percent of students who repeated the seventh grade from 1984-1989. During the 1983-84 school term, 16.19% of the seventh grade students were retained. Whereas, during the 1988-89 school term, 10.00% of the seventh grade students were retained. The largest retention rate of 18.80% occurred during the 1985-86 school term. The mean number of seventh graders who were retained from 1984 to 1989 was 36, with a mean percentage of 16.39.

TABLE 1

---

Seventh Grade Retentions at Roosevelt Junior Senior High  
School from 1984 to 1989

---

Year	# Students	# Retained	% Retained
1983-84	247	40	16.19
1984-85	233	38	16.30
1985-86	218	41	18.80
1986-87	212	39	18.39
1987-88	209	39	18.66
1988-89	170	17	10.00
Mean	215	36	16.39

---

Why are seventh graders at Roosevelt Junior Senior High School cutting their classes and being retained at alarming rates? Are they turned off by school? Do they think school is not worthwhile? There seemed to be a "self-destruct" mechanism built into the grading procedures for those students who did not attend their classes regularly. If students have four unexcused absences from class during a quarter (forty school days), they fail the course with a grade of 40C. If these students fail another quarter during the same academic year because of excessive unexcused absences, then they are denied the opportunity to attend summer school, which might enable them to be promoted to the next grade. (Note: Roosevelt School District's Promotion Policy (1987-88) states that seventh grade students must pass 3 of the 4 majors, English, mathematics, science, and social studies, with a grade of 65% to be promoted to the eighth grade.)

The following is the intervention procedure for excessive absences:

1. Progress reports are sent home to parent(s)/guardian(s) and guidance counselors at the mid-quarter.
2. Counselors arrange conferences with students' parent(s)/guardian(s) to discuss attendance problems.



3. Teachers and parent(s)/guardian(s) usually give their reasons for poor attendance, i.e., "lazy", "doesn't like school", "comes to school only to eat", etc.
4. Teachers and counselors offer suggestions for improving attendance.
5. Students are expected to improve their attendance to classes without input into the possible problems or suggestions for improvement.

The cycle of poor attendance tended to decline only temporarily after "intervention" by counselors, teachers, and parents. Part of the problem of poor attendance had not been addressed because the students had not, in most cases, had an opportunity to explain their absences. Their responses were seldom treated as significant, if someone took time to ask. When students were absent from school, absent from classes, late for classes, or cut classes, they were sending "educators" strong signals that needed to be addressed in the form of program evaluation and staff development for teachers and students.

Junior high school students needed more opportunities to be taught according to their learning styles and junior high teachers needed to acquire a repertoire of teaching styles. The researcher observed that many junior high students often failed classes, cut classes, exhibited negative behavior inside and outside classes, and portrayed signs of apathy toward teachers' prescribed lessons. The

researcher had also observed varying levels of frustration among Junior high teachers when their "well-planned" lessons were not accepted with enthusiasm by all students. Through numerous observations, in most instances, teachers presented their lessons in large groups, employing the same teaching style for all students. Very little, if any, attention was given to students who did not grasp information as quickly as others. Usually, if students asked questions in class, teachers answered with previously used examples or explanations. If students did not understand the first time, usually they did not understand the second time when teachers repeated their examples or explanations without regard for students' learning styles. For example, using picturesque descriptions, rephrasing statements, or using graphics on the chalkboard might increase students' understanding.

When Junior high teachers searched for ways to maintain students' interest in classwork, there seemed to be a need for teachers themselves to acquire a repertoire of teaching styles. Presumably, experienced teachers have acquired a variety of teaching techniques which would enhance learning in their classes. Their inability or unwillingness to vary their teaching styles affected students' motivation, behavior, and learning.

These and similar observations motivated the researcher to share concerns with Junior high teachers, administrators,

and students about teaching styles/learning styles and their effects on students' experiences in school. To assist junior high teachers in acquiring a repertoire of teaching styles, a plan was needed to (1) assess teachers' teaching styles, (2) offer staff development workshops at convenient times for teachers, and (3) to assist students in understanding their learning styles.

The need for teaching styles/learning styles staff development further manifested itself through the researcher's interactions with students, parents, teachers, and administrators. Students often exhibited signs of frustration in classes, but many could not intelligently analyze problems which confronted them.

### Purpose

The purpose of this study was to design, implement, and evaluate the effects of teachers acquiring a repertoire of instructional approaches appropriate to the diverse learning styles of seventh and eighth grade students to improve students' achievement, students' attendance, and to assess the impact on students' attitudes.

### Significance of the Problem

Recently, great emphasis has been placed on individualization of learning and teaching students in the least restrictive environment. Many educators have interpreted individualization and least restrictive

environment to mean placing students in special education classes.

Little attention has been given to individualization of teaching for "normal" students in the "regular" classrooms. Many programs and techniques, however, have expanded individualization for students who have been classified as physically or mentally handicapped to accommodate their rates and styles of learning. An Individualized Educational Plan (IEP) ordinarily helps meet the varied educational needs of handicapped students.

Doyle and Ponder (1975) suggested that teachers accepted advice for improving their teaching when it met three criteria. The advice was operational and described actual teacher behaviors; it was consistent with a teacher's role definition; and it was cost effective in terms of time and energy.

Teachers should become familiar with various teaching styles in order to have a repertoire of styles from which to choose. A variety of instructional modes might accommodate the learning styles of their students. Teachers who increase their awareness of a variety of learning styles may increase their range of teaching approaches and their flexibility in using varied approaches.

Instructionally, this study provided teachers with a repertoire of teaching techniques, through workshops and cooperative planning. As a possible outgrowth of this



study, the school district has begun to provide, as a part of its orientation for new teachers, an ongoing staff development program to provide teachers with instructional approaches, which would possibly reduce the number of students being referred to special education, outside educational facilities, and increase school attendance.

Academically, this study offered students the opportunity to be taught in the manner that they receive and process information best. Therefore, if students' learning styles are incorporated into classroom activities, their interest in school and their academic retention will likely increase, thus resulting in higher academic success in school and improved attendance, which may transcend academic disciplines and grade levels.

### Setting

#### Community

Roosevelt is a one square mile village located in the southwestern section of Nassau County, Long Island, New York, which is an unincorporated community of approximately 14,000 inhabitants. It is a part of the Town of Hempstead and does not have its own local government, health agencies, sanitation services, or police department.

According to the 1980 Federal Census there are 630 families of two or more, whose head of household is a single parent. This comprises 31 percent of the families in the

community. There are 581 families with children under 18 whose head of household is female and no husband is present. There are 49 households where there is a male head of household and no wife is present.

Roosevelt is a racially isolated community. The ethnic composition of the community has changed from predominately White in 1960 to predominately Black in 1980 as indicated by Table 2.

TABLE 2

Village and Student Population			
Village Population			
U.S. Census			
<u>Category</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>
Black	2,241	10,135	12,516
White	8,000	4,730	1,259
Others	108	235	334
Student Population			
School District Census			
<u>Category</u>	<u>1966</u>	<u>1975</u>	<u>1983</u>
Black	1,595	4,180	3,134
White	1,872	87	25
Other Ethnic	0	118	67
<u>(Federal Project Proposal--Roosevelt School District, 1983)</u>			

## School

Roosevelt Junior Senior High School has a comprehensive curriculum with leveling (tracking) according to students' academic abilities (AP, advanced placement; A above average; B, average; and C, below average) in each major academic discipline, English, social studies, science, and mathematics. There are 125 teachers. The administrative staff includes a principal, two assistant principals, a dean of students, and five administrative supervisors.

The junior high school is comprised of the seventh and eighth grades, which is not physically separated from the senior high school. There are approximately 450 students in grades seven and eight. There are ten seventh grade homerooms and ten eighth grade homerooms.

## Scope and Limitations

### Generalization Limitations

The results of this study were limited in scope, because they were not used to generalize about increased students' achievement, students' attendance or students' attitudes in any other setting. The participant population included seventy-five Black students, three Hispanic students, and one White student, ages 12-17 years, who were from low to middle socioeconomic backgrounds. The results were limited to specific instructional materials and procedures used in this study.

### Design Problems

The possible problems which may have influenced the results of the study were (a) time of classes; (b) scheduled school activities during the school day; (c) absentee rate of participating teachers; (d) students losing interest; (e) inadequate teaching materials; (f) extra attention given to the participating students; (g) teachers' unwillingness to implement different teaching strategies; (h) small group of teachers participating in study; and (i) time of year.

### Experimenter Bias

All necessary precautions were taken to reduce the possibility of experimenter bias employing the following procedures:

1. Clarifying the purposes and procedures
2. Making participation voluntary
3. Adjusting to the group's needs and goals to the extent possible

The researcher's position, administrative supervisor in the Roosevelt Junior Senior High School's Junior high department, had possible advantages and disadvantages which could have affected the outcomes of the study.



1. Some advantages were the following:
  - a. Researcher had easy access to teachers, students, and students' academic and attendance records.
  - b. Researcher could adjust teachers' schedules which would have provided them time to participate in workshops during the workday.
  - c. Researcher adjusted his schedule to coincide with teachers' schedules.
  - d. Students did not feel compelled to attend classes.
2. Some disadvantages were the following:
  - a. Teachers initially provided the researcher with information they thought he needed for a successful study.
  - b. Teachers thought they would be held accountable if the study was not successful.

### Outline of Chapters

Chapter 1 includes a statement of the problem, the purpose of the study, a description of the community and the school, and the need for staff development for learning styles/teaching styles. Chapter 2 reviews current literature relating to learning styles, teaching styles, student achievement, student attendance, attitudes, and staff development. Chapter 3 reports the procedures for

conducting the study. Chapter 4 reports and analyzes the data resulting from the study. And, chapter 5 offers recommendations for staff development, implications for future studies, and conclusions.

## CHAPTER 11

### REVIEW OF LITERATURE

#### Introduction

This study proposed to design, implement, and evaluate an appropriate staff development program to expand the repertoire of teaching styles of junior high teachers at Roosevelt Junior Senior High School with the intent of improving students' academic achievement, attitudes, and attendance to class. The study was based on four propositions. First, students in early adolescence are at a stage of high variability and changing identity so that seventh and eighth grade students--whether tracked or not--include a wide range of learning styles. Second, if students find appropriate instruction and concern for themselves as individuals, they will attend class and that attendance should eventually yield academic achievement. Third, a planned staff development project to expand the repertoire of teaching styles to accord more closely, though not necessarily on a one to one basis, with students currently enrolled should increase opportunities for success in school. And fourth, a staff development program is more likely to be ongoing if participants are provided opportunities to "buy into" the process through collaborative planning. These four propositions guided the development and evaluation of this study and structured the

review of literature, which focused on adolescence, learning styles, teaching styles, and staff development.

### Adolescence

There are many definitions of adolescence, each of which reflects a somewhat different facet of the interaction between two societies and the adolescent as described by Haviland and Scarbough (1981, p. 6):

Medically, adolescence begins with the growth hormonal changes associated with the sexual maturity and ends when there is no further growth. Legally, adolescence ends with the assumption of adult responsibility for voting, for the draft, and for debts and contracts, including marriage. Ages for the assumption of these duties range from 14 to 21 in various countries and states. There are also variations in the age at which a child becomes responsible for criminal acts; these range from 14 to 18 in most countries and states. Educationally, adolescence is the time spent in junior high and high school, and sometimes college. When an adolescent leaves school, he or she may be considered an adult. Psychologically, adolescence is a period of transition during which cognitive, physical, personality, and social changes occur. Adult roles are practiced and a personal identity is formed.

Coleman (1978) noted that adolescence is a very stressful developmental stage. Youth often experience an identity crisis as they define roles for themselves.

Safer (1986, p. 406) emphasized that the Junior High/Middle School is relatively hectic for adolescents, particularly when compared to elementary school:

Junior High/Middle School allows its students far more independence and mobility. In Junior High/Middle School, students move through the halls for over 30 min/day, which is at least three to four times more than which occurs in tightly supervised Elementary School corridors. The seven different classrooms/seven

between period hall transfer schedule creates both an open and a "fluid" educational setting. As such, it provides more possibilities for behavioral deviations, e.g., class cutting and substance abuse.

For example, at Roosevelt Junior Senior High School, seventh and eighth grade students attend eight different classes with eight different teachers daily, which requires their moving through the building unescorted nine times each day. Whereas at the elementary schools in the Roosevelt School District, students remain with the same teacher for their major subjects--English, reading, science, social studies, and mathematics--and they only changes classes with teacher supervision for remedial classes, enrichment classes, and physical education. Additionally, seventh and eighth grade students at Roosevelt Junior Senior High School lack opportunities to go outside to "run and play" with their peers after they eat lunch.

Nisbet and Entwistle (1969) stated that the transition from Elementary School to Junior High/Middle School is stressful, but transitions to new schools and to secondary schools usually take a short period of time for most students to make the adjustments. Elias et al. (1985) added that vulnerable students entering secondary school face problems that rarely diminish with time. For example, stress that is experienced by adolescents is usually compounded for the poor, racial or ethnic minorities, or recent immigrants ("American Adolescent," 1989). Elias et al. further added that adolescents' higher levels of



stress may be manifested in different ways; high absenteeism from school/class; poor academic achievement, and disruptive behavior, which may be attributed to adolescent alienation and poor self-concept.

According to Mackey and Alghren (1977), adolescent alienation is a major problem of contemporary society. Bronfenbrenner (1974; 1986) stressed that adolescent alienation begins in the family. Some contemporary families have become disorganized as a result of external forces such as economic and social pressures.

Calabrese (1987) stated that the sense of alienation is carried by the adolescent to the school, and the school's response often reinforces the decision to withdraw or rebel. Usually these adolescents are easily identified because they eat lunch together, smoke together, and congregate together. Calabrese further stated that since the school makes little effort to integrate these students, they view this interaction as justification for rejecting the world of adults (p. 930).

Hotinen and Korpinen (cited in Korpinen, 1987) reported that the school self-image of weak students remains extremely low, since the majority of these students believe that teachers make them feel inadequate and that they often are put down in school. Similarly, Ford (1986) emphasized that students who have a negative perception of school are also likely to have a poor self-image, inattentive parents,

low achievement, and a high absentee rate. These students are often placed in the back of the classroom, ignored by the teacher, and are treated with malice rather than concern and patience.

Adler (1982) stated that schools seem more concerned with graduation requirements, discipline, course offerings, and the records of the athletic teams, which are reflected in the school's curriculum that neglects programs to encourage integration. Additionally, students are often segregated by intellectual ability through grouping (Gullotta, 1983).

Korpinen (1987) maintained that the self-concept is a significant educational idea and its development is an essential aim of education. The self-concept "is shaped by environmental influences, especially in social interaction with those closest and most important to the individual" (p. 50). Further, Korpinen maintained that individuals respect themselves, consider themselves valuable, and accept themselves. They do not consider themselves better than others; neither do they consider themselves worse. They are aware of their limitations and they trust their own developmental possibilities (p. 52). DeAude (1975) stated that children who have healthy self-concepts get along well with other children, know their strengths and weaknesses, are curious, and try out new things.

According to Burns (1982), if the pupil's individual characteristics have been considered sufficiently in teaching: in aims, in content, in methods, and in evaluative reporting, then the evaluation will have a positive effect on the pupil's self-concept. Hale-Benson (1988) suggested that "children's self-confidence will be fostered through frequent compliments, praise, display of work, performance, open houses, and frequent success experiences" (p. 163).

Manning (1988) stated that middle school educators can design learning environments based on an understanding of Erik Erikson's psychosocial theories by designing lessons and activities that incorporate children's developmental stages. Erikson (1963, p. 95) divided human life into eight psychosocial stages. The eight psychosocial stages include: (a) trust vs. mistrust 0-18 months; (b) autonomy vs. shame 1.5-3 years; (c) initiative vs. guilt 3-6 years; (d) industry vs. inferiority 6/7-11/12 years; (e) identity vs. role confusion 11/12-18 years; (f) intimacy vs. isolation young adulthood; (g) generativity vs. stagnation middle age; and (h) ego integrity vs. despair older adulthood.

Table 3 (cited in Manning, 1988, p. 97) describes the characteristics of Erikson's Identity vs. Role Confusion Stage (11/12-18) and early adolescence and their implications for educators.



TABLE 3

Erikson's Identity vs. Role Confusion Stage (11/12-18)  
and Early Adolescence (1963, p. 95)

Characteristics	Implications for Educators
1. Childhood ends/puberty begins	1. Recognize early adolescent's mental, physical, and social change require appropriate learning experiences
2. Primarily concerned with others perceptions of them	2. Recognize that others' perceptions of early adolescents affect self-perception and achievement.
3. Confused about roles and evolving identity	3. Accept that learners' evolving identity requires appropriate and planned educational activities
4. Can be cliquish/clannish and cruel to peers	4. Accept cliques as part of early adolescent's life; however, remind learners that their behavior affects others
5. Has increased independence and responsibility	5. Planned appropriate educational experiences and responsibility of learners
6. Beginning search for ideal life and situations	6. Support search for ideal yet encourage learners to maintain sense of reality

According to Maier (1969), the Identity vs. Role Confusion period is the beginning of the search for an identity and a mastery of the problems of childhood and a readiness to confront the challenges of the adult world.

During these years, adolescents begin to question many previously resolved issues (Erikson, 1963). Consequently, adolescents are at a stage of high variability and changing identity, which includes a wide range of learning styles.

### Learning Styles

What is learning style? Canfield and Lafferty (1970) discussed conditions, content modes and expectations; Dunn and Dunn (1978) itemized stimuli and elements; Gregorc (1979) emphasized distinctive behaviors and dualities--abstract and concrete levels; Hunt (1979) referred to conceptual level; Kolb (1981) specified heredity equipment, past experience, and the environment; and Schmeck et al. (1977) contrasted deep and shallow information processing (cited in Dunn et al., 1981, p. 372). Fischer and Fischer (1979) referred to learning style as a pervasive quality in the behavior of an individual (p. 245). Guild and Garger (1985) categorized learning styles into four basic groups: (a) cognition, (b) conceptualizations, (c) affect, and (d) behavior (p. 6).

Fisher and Fisher (1979, pp. 246-250) categorized learning styles into ten groups:

1. The Incremental Learner--These students proceed step-by-step fashion, systematically adding bits and pieces together to gain larger understanding. . . .
2. The Intuitive Learner--The learning style of these students does not follow traditional logic, chronology, or step-by-step sequence. . . .

3. The Sensory Specialist--These students rely primarily on one sense for meaningful formation of ideas. . . .
4. The Sensory Generalist--These students use all or many of the senses in gathering information and gaining insight. . . .
5. The Emotionally Involved--These students function best in a classroom in which the atmosphere carries a high emotional charge. . . .
6. The Emotionally Neutral--These students function best in a classroom where the emotional tone is low-keyed and relatively neutral. . . .
7. Explicitly Structured--These students learn best when the teacher makes explicit a clear unambiguous structure for learning. . . .
8. Open-Ended Structure--These students feel at home and learn best in a fairly open-ended environment. . . .
9. The Damaged Learner--These students are physically normal yet damaged in self-concept, social competency, aesthetic sensitivity, or intellect in such a way that they develop negative learning styles. . . .
10. The Eclectic Learner--These students can shift learning styles and function profitably may find one or another styles more beneficial, but can adapt to and benefit from others. . . .

Among the most widely used learning styles model in United States' schools, according to Wedlund (1987), is the Dunn model. The Dunn model described learning styles in terms of how the individual's ability to learn new or difficult material is affected by the following variables: (a) the immediate environment (noise level, temperature, amount of light, and furniture design); (b) emotionality (degree of motivation, persistence, responsibility, and need for structure); (c) sociological needs (learning alone or with peers, learning with adults present, learning in groups); (d) physical characteristics (auditory, visual, tactile, and kinesthetic strengths, best time of day for

learning, need for food and drink while learning, and mobility requirements); and (e) psychological inclinations (global and analytic strengths) (cited in Carbo & Hodges, 1988, p. 55).

Carlisle (1985, p. 78) introduced four basic strategies used to learn: "stating memorized information; performing a sequence of activities; distinguishing and categorizing a thing or idea; and identifying relationships and their importance." According to Carlisle, the learning that results from these strategies varies from stage to stage. For example, stating memorized information and performing a sequence of activities require an inordinate amount of practice and hard work. And memorizing can be boring for students and can be easily forgotten. However, performing is usually motivating for students and is not forgotten as easily, because relationships are formed.

Hunkins (1987) stated that students at any age can benefit greatly from being aware of the processes they use in their learning. Hunkins also stated that teachers can be instrumental in helping students process their learning strategies by sharing their teaching methods with the students and when students are having difficulty comprehending an idea, teachers can act as a "consultant" and use the "teachable moment" to help the students understand (pp. 65-66).



Keefe (1979) stated:

Learning style diagnosis opens the door to placing individualized instruction on a more rational basis. It gives the most powerful leverage yet available to educators to analyze, motivate, and assist students in school. As such, it is the foundation of a truly modern approach to education. (quoted in Dunn et al., 1981, p. 372)

For example, when teachers are aware of their students' learning styles, teachers can design more diverse learning environments to incorporate a broader range of students' learning styles to increase students' grades, attendance, and attitudes.

### Teaching Styles

Teachers' teaching styles are influenced by their learning styles (Gephart et al., 1980; MacNeil, 1980; McDaniel, 1982). Teachers, for example, tend to utilize their preferred teaching style more often when teaching their classes, as opposed to utilizing a variety of teaching styles to address students' diverse learning styles. According to Heikkinen, Pettigrew, and Zakrajsek (1985), "A broad understanding of individual learning styles and preferred learning conditions ought to underscore the need for an eclectic approach to teaching, one that provides for a variety of learning styles" (p. 80).

Various researchers categorized and discussed teaching styles and their impact on teaching and learning. Fischer



and Fischer (1979, p. 251) categorized teaching styles into six groups:

1. The Task-Oriented--These teachers prescribe materials to be learned and demand specific performance on the part of the students.
2. The Cooperative Planner--These teachers plan the means and ends of instruction with student cooperation.
3. The Child Centered--These teachers provide a structure to pursue whatever the students want to do or whatever interests them.
4. The Subject Centered--These teachers focus on organized content to the near exclusion of the learner.
5. The Learning Centered--These teachers have equal concern for the student and for the curricular objectives, the materials to be learned.
6. The Emotionally Exciting and Its Counterpart--These teachers show their own intensive emotional involvement in teaching.

Smith (1975) stated that the goal of teaching should support students' learning and respond to students' interests. Carlisle (1985) reported that teachers and students can promote or impede learning in classrooms. In a study, student trainees were asked to list things which they believed lead to unsatisfactory learning and to list things which they believed lead to satisfactory learning. The students indicated several variables that they believed promoted or impeded learning. According to the students, the following variables lead to satisfactory learning: The teacher provides a positive atmosphere; allows group involvement; and treats the students with respect. The student applies what is learned; is motivated; sets goals; sets priorities concerning study time; relates concepts to understanding ideas; and respects the teacher.

Conversely, students reported, according to Carlisle, that the following variables lead to unsatisfactory learning: The teacher is self-centered; lacks the ability to communicate information to students; speaks in a monotone; does not help students learn; allows personal problems to interfere; teaches incorrect information; and tests on information not taught. The teachers stated that students are usually unprepared; are not alert; do not want to learn because the subject is boring; lack motivation to learn; cannot relate concepts to familiar things; and do not set learning goals.

Crenshaw (1986) stated that teachers should assist students in developing good traits and changing or eliminating bad ones. Crenshaw also stated that students can maintain their individuality but still have a feeling of belonging.

Dunn and Dunn (1975) described three classroom conditions which teachers may use to meet the individual learning needs of their students: individualized classroom; open classroom; and alternative programs:

#### Individualized Classroom

The teacher is responsible for diagnosing, prescribing for, and guiding each student through the learning process. Recognizing the different elements of learning style, he permits students to work anywhere in the environment, in any sociological pattern that they choose. When a student demonstrates ability to follow objectives that have been assigned to him, he is permitted to continue working as he prefers and is gradually permitted more and more options in objectives, resources, activities, and evaluation.

When a student does not appear to be able to work independently, structure is added to his prescription so that he works, to varying degrees, under the direct supervision of the teacher. Multimedia, multisensory resources are available to students who may select from among them. Objectives are written on an individual basis and may be contributed to or developed by the students. When progress is not satisfactory, the teacher becomes increasingly directive. Grades are determined as a result of testing related to each youngster's specific objectives. (p. 41)

### Open Classroom

Children are permitted to select their own curriculum, resources, schedule, and pace of learning. Students may remain with a topic as long as it interests them and may study alone, with a friend or two, or in a small group. Since youngsters learn in very individual ways, the teacher is responsible for providing an environment rich in multimedia resources and for encouraging student involvement with the materials. Objectives, if used, are determined by the child and may vary from student to student and on a continuously changing basis. Grades are not given, but evaluations are made in terms of each child's demonstrated growth. A positive and "happy" attitude is considered very important for student progress. (p. 42)

### Alternative Programs

Students are given curriculum choices, freedom, and objectives and are expected to gather and retain information independently. Students are usually permitted a voice in their program development. Since alternative programs differ widely, the degree to which options are provided concerning objectives, resources, activities, and evaluation is dependent on the individual program, not the student. (p. 43)

An alternative program, which was known as The School Within a School, was instituted at Roosevelt Junior Senior High School during the 1985-86 and 1986-87 school terms. The program was designed to address the needs of 60 students in grades 9-12 who had been identified as "at-risk" students. The students, in most instances, had repeated



several grades; they posed an inordinate amount of disciplinary problems; and some had even dropped out of school.

The School Within a School incorporated characteristics of the individualized classroom as well as the open classroom. Students progressed at their own rate on individually prescribed lessons. Reports indicated that many students progressed two or more years in their major subjects during one academic year. In addition to the required instructional materials, which the students learned at their individual rates, students could select related learning materials to enhance their class activities or for personal gratification.

During the two years the School Within a School was in operation, reports indicated that it had a positive impact on its students. Students' disruptive behavior declined significantly. Students' attendance to school/class increased significantly. And, the majority of the students received regular high school diplomas with their respective classes.

Similarly, an Alternative School was begun at Roosevelt Junior Senior High School in September, 1989. The newly developed Alternative School is based on the concepts of the School Within a School, except the 80 students attend classes from 3:30 P.M. to 7:30 P.M. at Roosevelt Junior Senior High School.

On the contrary, Goodlad (1984) described the typical, predominant approach to instruction as follows:

The teacher sat at a desk watching the class, lecturing, or reading. Most students were writing, a few were stretching, and the remainder were looking contemplatively or blankly into space. The classrooms we observed were more like than unlike those in the old images so many of us share. Usually we saw desks or tables arranged in rows, oriented toward the teacher at the front of the room. (pp. 93-94)

Four elements of classroom life in the schools of sample came through loud and clear from our data. First, the vehicle for teaching and learning is the total group. Second, the teacher is the strategic, pivotal figure in the group. Third, the norms governing the group derive primarily from what is required to maintain the teacher's strategic role. Fourth, the emotional tone is neither harsh and punitive nor warm and joyful; it might be described most accurately as flat. (p. 108)

The classes described by Goodlad differ markedly from the learning styles-based classes that Dunn and Griggs (cited in Dunn, 1989) observed during their visits to secondary schools throughout the United States in 1987. During Dunn and Griggs' visit to several secondary schools throughout the United States in 1987, they reported (a) patterns within the classrooms consisted of pairs, small groups, or individuals working alone, or with a teacher or an aide, (b) all learning was compatible with the students' assessed learning style preferences, (c) students assumed a major responsibility for learning, (d) students were extensively involved in the learning process, and (e) students acquired the required knowledge, skills, and competencies through a wide variety of strategies (p. 3).



Dunn and Griggs reported that teachers at Corsicana High School, Corsicana, Texas, analyzed students' perceptual strengths and developed tactual/kinesthetic material for students, who previously achieved poorly (p. 3). Midwest High School, Midwest, Wyoming, reported an increase in teachers' positive attitudes, a significant decrease in students' absences over a five year period, and a significant number of students scoring on grade level on standardized testing (p. 3). Sacred Heart Academy, Hempstead, New York, reported a significant increase in the responsibility levels of the students, which translated into less direct supervision and a significant increase in students' academic achievement gains (p. 4). Roberson High School, Chicago, Illinois, reported that students have conducted themselves with dignity that reflects how they feel about themselves, their schooling and their teachers (p. 4). And Cedar Crest High School, Lebanon, Pennsylvania, reported that the students behaved with decorum and earned better grades than previously when they were permitted to use radios in class (p. 4).

The identification of children's modality strengths and appropriate planning of activities to incorporate children's modality strengths are thought to prevent learning difficulties in the classroom (Barbe and Milone, 1980; Barbe and Milone, 1981; Barbe and Swassing, 1979; Dunn and Carbo, 1981; Pizzo, 1982; Relff, 1985). For example, "auditory

learners want to express themselves orally and to hear the assignment. Visual learners must see new materials, have pictures, study guides, and charts available. Kinesthetic learners need to touch and act out what they are learning" (Reiff, 1987, p. 107). For example, when teachers say to students: "Let me tell you," "Let me show you," "Let's do it," are comments one may hear in a classroom where different modalities are considered. When a student says, "I don't understand," the teacher then attempts to explain the material in a different way than it was originally presented (Guild & Garger, 1985, p. 66).

Glasser (cited in Brandt, 1988, p. 39) argued that teachers need to find ways in class to give students chances to associate with others in friendly ways and do this as a planned part of learning.

Further, Glasser stated:

Good researchers like David Johnson, Robert Slavin, and Spencer Kagan have proven the effectiveness of cooperative learning or as I call it, learning-teams. Here the teacher, instead of trying to force all the students down a single learning pathway, becomes a facilitator who goes from team to team encouraging helping, inquiring, and prodding. In this method of instruction, the teacher gets nose to nose with learning, and students are encouraged to branch out creatively and stray from the "common" pathway. (p. 41)

Oakes (1985, p. 211) concluded that "cooperative learning strategies are an appropriate place to begin to develop the substance of an instructional mode designed to counter the limited, uninspired classroom instructional practices and homogeneous grouping." Further, Oakes

emphasized that cooperative learning has three advantages over competitive and individualistic methods: (1) a built-in incentive for students to interact with one another as learning resources; (2) a means of accommodating learning differences in the learning process; and (3) a way of greatly minimizing or eliminating the effects of initial differences in students' skill levels or learning rates in the assigning of rewards for learning (p. 210).

Slavin (1984) argued that for team learning to be effective, instructional methods must adequately provide for the four alterable elements of Carroll's (1963) model: appropriate levels of instruction (ability to understand instruction), incentives (perseverance), time (opportunity), and quality of instruction.

When cooperative learning methods provide group goals based on the learning of all members, the effects on student achievement are remarkably consistent. Of thirty-eight studies of at least four weeks duration comparing cooperative methods to traditional control methods, thirty-three found significantly greater achievement for the cooperatively taught classes, and five found no significant differences (Slavin, 1987).

In a synthesis of research on cooperative learning, Slavin (1981) indicated that the positive effects of cooperative learning methods on student achievement appear equally frequently in elementary and secondary schools, in

urban, suburban, and rural schools, and in subjects as diverse as mathematics, language arts, social studies, and reading. However, studies indicated that there is a tendency for Blacks to gain outstandingly in achievement as a result of working cooperatively (Lucker et al., 1976; Slavin, 1977; Slavin & Dickle, 1980), although Whites also achieve more as an outcome of cooperative learning (p. 657). Hale-Benson (1989) maintained that Black children's learning is "very highly characterized by learning from people rather than objects. Therefore, a high adult-child ratio, small group learning and peer-group tutoring are useful" (p. 81). Cureton (1978) and Slaughter (1969) suggested that schools incorporate culturally induced teaching styles used with Afro-American children into their repertoire of instructional methods (cited in Shades, 1982, p. 236).

In addition to academic gains, research overwhelmingly support the usefulness of cooperative learning for improving the social outcomes of schooling, such as intergroup relations, attitudes towards mainstreamed students, and general positive relations between students of different ethnic backgrounds. Otterbourg (1986) reported that students in cooperative learning settings "are more likely...to name students of other races as best or close friends and to have more cross-race interactions outside as well as inside the classroom" (cited in Ianni, 1989, p. 138). Cooperative learning also seems to make students feel



better about themselves (Slavin, 1981, p. 658). Another teaching strategy is peer tutoring. Hurtford and Hart (1979) concluded from their study that peer tutoring challenges many of our assumptions about who is best able to teach children. Teachers' negative views of peer interaction may reflect a lack of training in how to use this valuable resource according to Hiebert (1980). She also states that we can hardly expect harmonious and effective interaction to magically follow the command "interact" if children have not had prior peer learning experiences within the classroom and if teachers have provided little structure for these experiences (pp. 877-878). Teachers must tap this valuable resource because studies on peer tutoring and group learning indicate that peer learning can enhance instructional outcomes (Allan et al., 1976; Webb, 1977).

Mastery learning, (Bloom, 1976; Block and Burns, 1976), one of the most widely used alternatives to traditional teaching methods, focuses primarily on students' abilities to understand instruction by attempting to insure that all students have mastered the previous skill before attempting the next. Mastery learning can be individually-paced or group-paced (Block and Anderson, 1975).

Slavin and Karweit (1984) reported that a study was conducted which incorporated team learning components and mastery learning components. They reported that no



significant interactions between mastery and team were found, indicating that the addition of the mastery component neither enhanced nor detracted from the effectiveness of the team component (p. 732).

However, in order to promote educational growth within the classroom, teachers must be effective managers. Evertson and Emmer (1982) proposed thirty-six strategies by which teachers' effectiveness can be enhanced for improved academic success for their students. They stated that teachers can (a) provide assignments for different students, (b) use a variety of materials, (c) make presentations adapted to different ability levels, (d) be receptive to students' input, and (e) encourage group cohesiveness.

Evertson and Emmer concluded that the results of their survey had several implications for teacher training programs and for research on teaching. They stressed that the beginning of the year is a critical time for establishing behavioral patterns, expectations, and procedures that can persist throughout the year for improved academic success. Evertson and Emmer further emphasized that the established behavioral and academic expectations at the beginning of the year should be planned collaboratively with the students so as to be more realistic and more meaningful.

Squires, Hultt, and Segars (1981, p. 174) reported that "student classroom behaviors that indicate involvement,

success, and coverage of appropriate content are most closely linked to student achievement, which is supported by teacher behaviors such as planning, management, and instruction."

Adelman and Taylor (1983) concluded that many students with learning problems are not highly motivated to improve their academic skill deficiencies. They also stated if a greater number of these students are to be helped, it will be necessary to understand better the role motivation plays in the maintenance and correction of behavioral problems.

Trickett and Moos (1973) linked student satisfaction and mood to the social environment of school classes. The study showed that students expressed greater satisfaction in classes where there was a high student involvement and innovative teaching methods. The study also showed that classrooms in which students reported a great deal of content learning reflected a high degree of teachers' concern for the students. Trickett and Moos further stated that classrooms must be intellectually challenging to encourage growth in achievement and understanding as well as cohesive and satisfying to encourage students' interest and motivation.

Fogelman (1978) concluded from a study that there is a straightforward relationship between school attendance, attainment, and behavior in that children with high attendance levels obtain an average higher scores on reading

comprehension and mathematics tests. Bloom's (1976) studies of the relationship between school attendance and achievement have produced mixed results.

Nielsen (1984) stated that rather than teaching adolescents methods for motivating themselves, teachers often use psychology only to make them comply with adult wishes. He further stated that because most youths are accustomed to following the orders of adults, their self-management skills are probably unrefined (p. 32). Nielson emphasized that school districts have the responsibility of ensuring that teachers are effective managers and they are kept abreast of changing techniques in an evolving society. One way to enhance the abilities of teachers is through collaboratively planned and ongoing staff development activities.

### Staff Development

Changing schools requires changing the culture of schools (Purkey and Smith, 1983). School culture, according to Sergiovanni, (1984) includes "values, symbols, beliefs, and shared meanings of parents, students, teachers, and others conceived as a group or community" (p. 9). Louis (1985) emphasized that members of school culture share common values and beliefs. Similarly, according to Lambert (1988), school culture is composed of beliefs, assumptions, and attitudes held by group members for a given period of

time. Sarason (1982) and Felman-Nemser and Floden (1986) referred to school culture as the overall character of a school. Pfeffer (1982) argued that a school's culture can affect the motivation and commitment of its members.

Elmore (1987) reported that the culture of schools affects teachers and students by defining and legitimating inequality which is often referred to as authority. Grant (1985) stated:

Authority in schools is formulated by (a) teacher's predisposition to influence students' learning, (b) students' predisposition toward learning and adult influence, (c) teachers' knowledge and skill in subject matter and pedagogy, (d) the structure of adult work in schools, (e) formal rules governing the structure and operation of schools, and (f) expert knowledge about what should be taught and how. (cited in Elmore, 1987, p. 67)

Lambert (1988) emphasized that the effectiveness of schools is contingent upon a healthy school culture.

Sergiovanni (1984) reported that excellent schools incorporate sacred values and beliefs supporting a vision of excellence. Studies (cited in Papalewis, 1988, pp. 158-159) have shown that effective schools have (a) a clear and vital mission (Boyer, 1983), (b) clearly articulated goals and identities (Lightfoot, 1983), and (c) positive values (Squires, Huitt, and Segars, 1983).

Sergiovanni (1984) further emphasized that effective schools reward and motivate their teachers which will promote the feeling of success. Lieberman and Miller (1984, p. 89) summarized several findings and reported that schools



which have been characterized as "effective schools" share a core of characteristics: (a) a sense of order in the school, (b) high expectations for student achievement, (c) strong leadership from the principal or other staff members, (d) schoolwide control of instructional and training decisions, and (e) clear goals collectively agreed upon (Rutter et al., 1979; Edmonds, 1978; Austin, 1979; Squires, 1980; Brookover and Lezotte, 1979). Similarly, Stefanich (1983) summarized the characteristics of school which are considered effective from his research findings: (a) a consensus exists on curricular goals, (b) the principal exhibits strong leadership; (c) the staff and administration reflect positive expectations, and (d) student assessment is consistent.

Conversely, Morgan (1986) found that less effective schools are composed of school leaders who are problem solvers and operate from a fixed stand point rather than remaining open and flexible to new ideas--status quo. Parish et al. (1989) hold the belief that these schools present and maintain the economic and social order of the larger culture by passing norms values, practices and traditions to the next generation by sorting students along economic and class lines. Giroux and Purpel (1983) referred to the sorting of students by economic and class lines as the hidden curriculum of the organizational structure of schools. Oakes (1985, p. 175) stated:

Minority children and those from the lowest socioeconomic groups have been consistently found in disproportionate numbers in classes at the lowest track levels and children from the upper socioeconomic levels have been found to be consistently over represented in higher tracks.

Further, Bates (1987) stated that ruling-class schools make adjustments and refinements to accommodate the educational needs of the ruling class. Whereas on the other hand, work-class schools rely on the bureaucratic structures for changes to occur. The Roosevelt School District, New York, for example, is a predominately Black working-class school district with a minimal amount of local financial support. Consequently, the District relies heavily on financial support from state and national funding agencies. Therefore, the outside bureaucratic structures have an inordinate amount of influence on school change as opposed to school districts which rely less heavily on outside agencies for financial support.

Lambert (1988) argued that movement in a culture is contingent upon (a) creating tension, (b) building from conflict, and (c) equipping teachers to deal with ambiguity. Furthermore, Ornstein and Hunkins (1988) stated that school leaders must present ideas and values which are acceptable by the group members. Teachers, however, according to Corbert et al. (1987), are inherently and universally resistant to change.

Sarason (1982, p. 96) stated:

Any attempt to introduce change into the school setting requires, among other things, changing the existing regularities in some way. The intended outcomes involve changing the existing regularity, eliminating one or more of them, or prodding new ones.

Corbett et al. (1987, p. 39) reported that several researchers offered reasons for unsuccessful innovative efforts: poor administrative planning and a heavy logistical burden on teachers (Gross et al., 1971), insufficient time to learn new practices and inattention to later stage of the change cycle (Huberman and Miles, 1984), and the need for principals to be more dynamic leaders (Hall et al., 1984).

Garten and Valentine (1989) argued that effective instructional leadership is contingent upon the school leader's ability to involve teachers in focusing on the school's mission and an agreement on the means to achieving established goals. Squires (1980) proposed three leadership variables which usually build and maintain school norms: modeling, feedback and consensus building.

Principals, according to Rutter et al. (1979), are expected to be the tone setter for teachers by supporting inservice activities, monitoring classes, and supervising instruction. Brookover et al. (1979) stated that students' learning is linked to the beliefs of the principal, for example, if the principal does not believe that students

will learn, then the principal probably will not encourage the staff to devote sufficient time to instruction.

Principals can provide teachers with feedback by observing their classes on a regular basis and by conferring with teachers about instructional and inservice concerns (Wynne, 1980). Brookover et al. (1979) reported that effective schools are also characterized by feedback that acknowledges students' academic success and appropriate behavior.

Duckett et al. (1980) and Wynne (1980) contended that appropriate modeling and feedback produced consensus among teachers for desired school change. Smith (1987) emphasized that there is no one way to model. However, Smith further emphasized that a collaborative school is constructed on a set of beliefs and practices designed to achieve defined goals. Smith stated:

The belief that the quality of education is largely determined by what happens at the school site.... instruction is most effective in a school environment characterized by norms of collegiality and continuous improvement....teachers are responsible for the instructional process and accountable for its outcomes....a wide range of practices and structures that enable administrators and teachers to work together on school improvement, and the involvement of teachers in decisions about school goals and the means of implementing them. (p. 5)

Combs (1988) suggested that changing teachers' beliefs require creating an environment conducive for change as opposed to imposing reforms upon teachers. Smith (1987) revealed that "principals of collaborative schools have



often reported that power shared is power gained: the teachers' respect for them grows" (p. 6). Teachers, according to Smith, would assume new responsibilities through the collaborative process, such as setting goals and overseeing their own professional development. Smith, however, emphasized that collaborative schools require leadership styles that are different from those usually found in bureaucratic schools.

Combs stressed that "a major drawback of innovations is the lack of determining what is important" (p. 39). Garten and Valentine (1989) suggested that school leaders establish a committee, for example, an Instructional Improvement Council to assess instructional needs and make recommendations for ongoing staff development, which solicits teachers' input. Garten and Valentine offered the following as responsibilities of an Instructional Improvement Council: (a) determine the inservice needs of faculty members, (b) assess curricular needs, (c) review current instructional objectives, (d) analyze student achievement, and (e) make recommendations for program improvement. Smith (1987) reported that when school leaders provide teachers opportunities to participate in school change, teachers cooperate more with each other and with the administrators. For instance, Palincsar et al. (1988/1989) reported that the Springfield, Illinois, schools began a collaborative reciprocal teaching program among teachers and

administrators which, in addition to instructional chaining, produced peer support groups among teachers and greater understanding and appreciation of teaching and learning by the principals from the teachers' vantage point.

Additionally, Jones and Maloy (1988, pp. 55-56) emphasized that staff development involved four key processes:

1. Creates synergy from professional and organizational developments.
  - mutual benefits for those involved.
  - both institutional direction and personal growth.
2. Fosters adoption and adaptation.
  - emphasis on communications, group processes, connecting diverse groups in new alliances.
3. Values characteristics of successfully changing organizations.
  - leadership, goal clarity, high standards and expectations.
4. Commits priority resources to equity needs.
  - not to leave anyone out but to recognize a special place for traditionally disenfranchised groups.

Further, Joyce et al. (1987) suggested that school leaders select staff development programs which promise to substantially increase students' learning and to increase students' interest in learning. Recent research on staff development and curriculum implementation, according to Huberman and Miles (1984), emphasized establishing programs to enable teachers to acquire a repertoire of effective teaching strategies. Fenstermacher and Berliner (1983) further suggested that school leaders planning staff development activities to improve or expand teaching skills consider the teachers' learning styles. For example, Ogle

(1988/1989) reported that the East Meadow, Long Island, teachers at Meadowbrook School designed a staff development project to help their students become strategic learners. Ogle further reported that the teachers designed activities "taking into account student interest and teacher preferences" (p. 47).

Recent innovations in staff development have come about through university and school partnerships. The Roosevelt School District, Roosevelt, New York, entered into a staff development partnership in August, 1982, with the University of Massachusetts at Amherst whereby teachers and administrators would design, implement, and evaluate staff development projects, while earning an advanced degree--master of education or doctor of education (Jones and Maloy, 1988).

Jones and Maloy reported that the University of Massachusetts and the Roosevelt Union Free School District's Staff development partnership:

will provide systematic and coordinated means of involving the professional employees in activities and study to identify inhibitors to wholesome learning, increase expectations, improve supervision/teaching/evaluations, define objectives, and locate resources both within and without the district.  
(p. 55)

Isher and Leslie (1987) reported that University-based personnel and school leaders have recognized the need to collaborate to strengthen educational programs in both university and school settings. Huling-Austin and

O'Bryan-Garland (1987) reported that Southwest Texas State University implemented a collaborative program with the local school district which has resulted in better communications between the school and university and improved the teaching/learning process in the local schools. Mackenzie and Ulrich (1984) reported that a collaborative program was established at Florida Atlantic University and a central Florida school district (unnamed) to improve the efficiency of the district's support personnel which also enhanced the district's and the University's public support through the attention which was focused on the programs. Maeroff (1983) concluded from his research that effective collaborative programs between universities and schools must (a) agree that they have common concerns, (b) overcome the traditional pecking order, (c) sharply focus projects, (d) recognize and reward participants, and (e) focus on action, not machinery (cited in Huling-Austin & O'Bryan-Garland, 1987, p. 42).

### Summary

This chapter presented four bodies of literature--adolescents' developmental characteristics, learning styles, teaching styles, and staff development--which supported the four propositions: (a) adolescents are at a stage of high variability and changing identity so that seventh and eighth grade students--whether tracked or not--include a



wide range of learning styles, (b) if students find appropriate instruction and concerns for themselves as individuals, they will attend class and that attendance should eventually yield academic achievement, (c) a planned staff development project to expand the repertoire of teaching styles to accord more closely, though not necessarily on a one to one basis, with students currently enrolled should increase opportunities for success in school, and (d) a staff development program is more likely to be ongoing if participants are provided opportunities to "buy into" the process through collaborative planning.

Adolescence is characterized by rapid physical growth and hormonal development which is usually compounded by stress, alienation, and identity confusion, which may be manifested by high absenteeism from school/class, poor academic performance, and disruptive behavior. Adolescence is the stage of development which has many implications for educators to diversify their educational programs to accommodate their students' varied social and educational needs. Adolescents have a variety of learning styles which are shaped by their environment, emotions, sociological needs, physical characteristics, and psychological inclinations.

Teachers usually teach according to their preferred learning style. Researchers have shown that when teachers acquired and utilized a repertoire of teaching styles in the

classes, student achievement usually increased. However, cooperative learning or team learning often produced more interaction among ethnic groups as well as increased academic achievement.

Implementing effective school change requires changing the culture of schools. Changing school culture necessitates school leaders involving teachers in the change process with clearly defined goals and objectives which have been collaboratively planned by school leaders and teachers. The goal of staff development should ultimately be to increase student achievement.

Recently, university-based partnerships have been implemented to strengthen the communications among universities and schools and to keep school districts abreast of current trends in education.

## CHAPTER 111

### METHODOLOGY

The project was implemented during the 1987-88 school year at Roosevelt Junior Senior High School in two seventh grade social studies classes, one seventh grade science class, and one eighth grade social studies class, with four volunteer teachers. Other staff members were informed of the nature and purpose of the study on a regular basis. The researcher conducted a series of five staff development workshops during the spring of 1988 based on Fischer and Fischer's (1979) ten identified learning styles and six identified teaching styles and Dunn and Dunn's (1975) one hundred question Learning Styles Inventory (see appendix B).

The workshops addressed the following:

1. Designing goals and objectives to address the need for study based on a student questionnaire administered in 1986 and discussions with students, parents, teachers, and administrators
2. Introducing teaching styles by Fisher and Fisher (1979)
3. Introducing learning styles by Fisher and Fisher (1979)
4. Introducing varied teaching strategies

5. Reviewing Learning Styles Inventory by Dunn and Dunn (1975)
6. Designing various learning activities/projects based on students' learning styles

The researcher used Fischer and Fischer's ten identified learning styles and six identified teaching styles and Dunn and Dunn's one hundred question Learning Styles Inventory as models for this study after reviewing and discussing several other researchers' teaching and learning styles models. Fischer and Fischer's learning styles and teaching styles provided clearly defined characteristics, whereby teachers could categorize their students' learning styles and their teaching styles with more objectivity and less difficulty than with some of the other models which had been reviewed and discussed with teachers. Additionally, Dunn and Dunn's one hundred question Learning Styles Inventory provided teachers more objectivity and less difficulty in identifying their students' learning styles, individually or as a group, based on the tallied results (see appendix C).

The following sample of statements were collected from junior high students in an informal survey, conducted prior to the study:

1. All she/he does is sit at her desk.
2. She/He gives too many projects.
3. I get tired of reading from the book.



4. I get tired of watching movies.
5. We never go on field trips like the other students.
6. Her/His class is so boring.
7. All we do is read all the time.
8. I wish we would do something different. We just copy from the book.
9. She/He talks too much.
10. The students are too noisy.

Parents expressed their unsolicited concerns about teaching styles/learning styles as evidenced by the following statements which were made in the presence of the researcher prior to the study:

1. I do not want my child in his/her class because too many students fail.
2. She/He doesn't care about the students. All she/he wants to do is finish the book.
3. My child never does homework in her/his class.
4. Do they ever go on field trips?
5. Do they ever do projects?
6. I don't like the way she/he teaches.
7. It's crazy in that class.

Teachers expressed the following concerns:

1. I can't teach slow students. I am not a special education teacher.
2. Some of these students can't learn.
3. They need to be in special education.

4. They keep me busy all the time.
5. My students become bored so easily.
6. I become so frustrated when they don't understand after I have explained something several times.
7. It's really difficult to plan for my classes. They don't seem interested.

Administrators were often heard by the researcher expressing the following concerns:

1. Too many students are cutting classes.
2. Too many students are failing.
3. Too many students are repeating the 7th and 8th grades.
4. Too many students are repeating for the third time.
5. Some of the teachers don't seem to be meeting the needs of the students.
6. Some of the students seem to be turned off by the teachers.
7. What are possible options that we can offer our students?
8. Maybe we need to restructure the junior high.

Students, parents, teachers, and administrators expressed a need for teachers to vary their teaching methods on the junior high level to increase student achievement, increase attendance, and improve students' attitudes about school. In order to design a staff development program which would be relevant for students and teachers, the

researcher administrated a needs assessment survey to seventh grade students and a teaching styles survey to junior high and special education teachers. The results from both instruments were categorized and prioritized in order of frequency distribution. Workshops were designed based on items which occurred most frequently. An extensive review of literature on learning styles/teaching styles was used to provide participants with current and relevant information relative to expressed concerns.

#### Involving Others in Planning

The idea of teaching styles/learning styles for improved academic achievement, improved attendance, and improved attitudes did not take place in a vacuum. Students, parents, teachers, and administrators collaborated among themselves and with the researcher to help construct an effective staff development program on teaching styles/learning styles to address their concerns. Teachers, especially, had direct impact on the planning and implementation of workshops and class activities because of their expressed desire to effect change in students. Workshops were designed to provide participants data from experts, to share experiences regarding teaching styles/learning styles from a professional and a personal

perspective, and to help teachers acquire a repertoire of teaching styles.

The researcher sought students' ideas by asking them to complete a five question survey form designed by the researcher titled, "How Can Your Teacher Make Learning More Interesting?" Students provided an array of suggestions ranging from "I don't know" to "She could give us more experiments and projects or maybe even go on a field trip to a science fair or a museum. I feel we should expand our horizon on science." Seventy-nine seventh and eighth graders were surveyed. To compare the effects of employing varied styles with students of varied learning abilities, the participating teachers chose the following classes to provide a range of academic abilities: one seventh grade advanced placement science class, one seventh grade above average social studies class, one average seventh grade social studies class, and one eighth grade below average social studies class.

In providing for shared experiences, the researcher sought ideas from others by asking members of the junior high and special education faculty to complete a teaching styles survey, which was composed of fifteen questions with six major categories, and to suggest areas about which they wanted more information. Teachers also shared their teaching strategies with the researcher and with the participants. Teachers who were not active participants



in the workshops collaborated frequently with the participants to acquire teaching strategies. The researcher believed a secondary outcome of this project was the reduction of the fear among teachers to consult fellow teachers for suggestions when their teaching strategies did not seem to work.

The researcher surveyed twelve junior high teachers and ten special education teachers to determine if they would 1) complete a teaching styles survey, 2) participate in staff development workshops, 3) share opinions with the researcher, and 4) complete evaluation forms. Seven junior high teachers and six special education teachers consented to participate in staff development workshops on teaching styles/learning styles. Due to the following constraints, only four junior high teachers participated in the workshops and in the implementation of the study:

1. According to the teachers' contract, teachers must be paid at an hourly rate of \$8.00 (eight) to attend afterschool workshops, which are in addition to the two regularly scheduled meetings per month.
2. Several junior high teachers chose not to participate in staff development activities.
3. Of the thirteen consenting teachers, the largest number of junior high teachers who had common planning periods was six.

4. Junior high special education teachers did not have planning periods when the workshops were offered.
5. One teacher refused to relinquish his planning period to attend workshops.
6. An administrative supervisor would not provide relief time for one teacher to participate in workshops.

The researcher involved four junior high teachers in five workshop training sessions as a need to acquire a repertoire of teaching styles based on an extensive review of current and relevant literature, students', parents', teachers', and administrators' concerns regarding students' success in school, and observations of teachers imparting knowledge to students in their classrooms.

Permission to conduct the study was obtained from the principal and the administrative supervisors of social studies and science. The teachers signed consent forms (see appendix D) giving the researcher permission to use their information in his dissertation.

A teaching styles survey (see appendix E) was administered to twelve seventh and eighth grade teachers and ten special education teachers at Roosevelt Junior Senior High School during the fall of 1987. Of the twelve junior high teachers who completed the teaching styles survey, four teachers, whose names were not used, participated in five

staff development workshops on learning styles and teaching styles from February 1, 1988 to April 4, 1988.

The participating teachers, four Black females, ages thirty-three to fifty-three years, taught seventh and eighth grade social studies and science. Participant #1 is a fifty year old Black female seventh grade social studies teacher. Her undergraduate major is social studies and her graduate major is reading. She has been teaching fourteen years. Participant #2 is a thirty-three year old Black female seventh grade social studies teacher, with a Bachelor of Science degree in history and a Master of Science degree in historical writing. She has been teaching eight years. Participant #3 is a fifty-three year old Black female eighth grade science teacher, with an undergraduate major in biology and a graduate major in education. She has twenty-two years of teaching experience. Participant #4 is a thirty-eight year old Black female eighth grade social studies teacher. She has an undergraduate and a graduate major in sociology. She has been teaching ten years.

The teachers selected four classes to participate in the study, one "AP" class (Advanced placement), one "A" class (above average), one "B" class (average), and one "C" class (below average), to include a wide range of learning styles, academic abilities, interests, and performance levels.

There were sixty-four seventh grade and fifteen eighth grade boys and girls, ages twelve to seventeen years. Ethnically, there were seventy-five Black students, three Hispanic students, and one White student who were from low to middle socioeconomic backgrounds in a suburban/urban community.

Teachers administered a five question researcher-designed questionnaire to the students in April, 1988 which posed the following questions:

1. Is the classwork usually interesting?
2. Do you expect to pass this class this quarter?
3. Are you usually given interesting assignments or activities by your teacher?
4. Do you like coming to this class?
5. What could your teacher do differently that would help you improve your learning in this class?

The students were administered a Learning Styles Inventory by Dunn and Dunn (1975) by the teachers during the first week of the study. The teachers reviewed the surveys and designed varied lessons to accord more closely with students' learning styles.

The teachers provided the researcher with the following data:

1. Attendance of each student in the participating classes, for the first, second, third, and fourth quarters of 1987-88



2. A breakdown of academic grades for the first, second, third, and fourth quarters for 1987-88, for example, number of students earning grades between 90-100 or 80-89
3. Written or oral assessments from participating teachers regarding the study, for example, problems and/or rewards of implementing the study into classes, increased student enthusiasm, additional planning required, etc.
4. A copy of the grade reports, which included students' grades for attitude (see appendix F).

This study was implemented for five weeks during the fourth quarter of the 1987-88 school term. The classes met five times per week for thirty-eight minute sessions.

At the end of the five week implementation period, the teachers administered a post-student questionnaire to assess students' attitudes about learning. Teachers also reported students' attendance, attitudes, and grades to the researcher from their grade books. The researcher analyzed the attendance, attitudes, and grades of the first three quarters of 1987-88 and compared students' grades, attitudes, and attendance during the study.

The four participating teachers were administered a teaching styles survey by the researcher at the beginning of the study. The data from the teaching styles survey was

used to help formulate objectives and activities of the workshops.

The participating teachers provided the researcher with oral or written assessments of the study at the end of the five week implementation period. The teachers reported any problems, rewards, or suggestions for implementing varied teaching strategies into the classroom in the seventh and eighth grades.

The following procedures were used to gather data:

1. Researcher selected teachers from a pool of volunteers.
2. Teachers administered learning styles survey to students.
3. Researcher conducted five workshops for teachers.
4. Teachers designed and implemented individual learning activities/projects to accord more closely with students' learning styles.
5. Teachers observed each other two or three times to modify, design, and implement teaching strategies in their classes.
6. Researcher met with students individually and in small groups to get oral and written feedback.
7. Researcher monitored students' attendance to classes.
8. Researcher compiled and analyzed data (students' attendance, students' grades, students' attitudes, and oral and written feedback from teachers).

The researcher chose to use action research, as opposed to other research models, because of its characteristics, which were easily adapted to this study. Cohen and Manion (1985, p. 208) defined action research as

situational--it is concerned with diagnosing a problem in a specific context and attempting to solve it in that context; it is usually collaborative--teams of researchers and practitioners work together on a project; it is participatory--team members themselves take part directly or indirectly in implementing the research; and it is self-evaluative--modifications are continuously evaluated within the ongoing situation, the ultimate objective being to improve practice in some way or other.

Formative and summative evaluative approaches were used to assess this study. Formatively, the procedures were modified to accommodate feedback from the participants when it was in accord with the goals and objectives of the study. And, summatively, students' grades, attitudes, and attendance to class were collected by the teachers and reported to the researcher for analysis during the 1987-88 school term.

All junior high teachers, including special education, were asked to complete a teaching styles survey and list areas about which they wanted more information, which helped direct the focus of the workshops.

After each workshop, the participating teachers completed assessment forms. They also gave oral feedback which was recorded by the researcher. Upon completion of the workshops, the teachers implemented various teaching strategies in their classes, which they had agreed to

assess by comparing students' grades, attendance to class and attitudes. They also administered a survey to assess students' attitudes about learning and their learning styles.

Five staff development workshops were conducted by the researcher from February 1, 1988, to April 4, 1988, in room #205 at Roosevelt Junior High School from 1:47 p.m. to 2:25 p.m. (see table 4). The workshops were designed to help junior high teachers acquire a repertoire of teaching styles and to assist teachers in designing lessons and activities to accord more closely with students' learning styles.

After the final workshop, the teachers summarized their experiences in narrative form. The teachers reflected on (a) students' attitudes about learning, (b) their attitudes about different teaching approaches, (c) fellow teachers' attitudes about different approaches to teaching, (d) amount of additional time needed for planning lessons, (e) increased enthusiasm among students about class assignments and lessons, (f) their reluctance to try new teaching strategies, and (g) suggestions for future workshops.



TABLE 4

Staff Development Workshops  
on Teaching Styles/Learning Styles  
February 1, 1988 - April 4, 1988  
Roosevelt Junior Senior High School  
Roy R. Taylor, Researcher

Workshops	Dates	Activities
#1	2/1/88	<ol style="list-style-type: none"> <li>1. Outlining Participants' Roles</li> <li>2. Goal Consensus</li> <li>3. Need for Study</li> <li>4. Analyzing and Prioritizing Needs</li> <li>5. Discussion on Teaching Styles/ Learning Styles</li> </ol>
#2	2/9/88	<ol style="list-style-type: none"> <li>1. Reviewing Results of Teaching Styles Survey</li> <li>2. Acquisition of Teaching Styles</li> <li>3. Discussion on Teaching Styles</li> </ol>
#3	3/7/88	<ol style="list-style-type: none"> <li>1. Identification of Participants' Learning Styles</li> <li>2. Discussion on Participants' Learning Styles</li> </ol>
#4	3/23/88	<ol style="list-style-type: none"> <li>1. Designing Projects/Activities</li> <li>2. Discussion on Projects/Activities</li> </ol>
#5	4/4/88	<ol style="list-style-type: none"> <li>1. Role-Playing Teaching Styles</li> <li>2. Role-Playing Learning Styles</li> <li>3. Learning Styles Inventory</li> <li>4. Implementation Timeline</li> <li>5. Collecting Data</li> </ol>

#### Workshop #1

February 1, 1988

This workshop began with the researcher thanking the junior high teachers for agreeing to participate in staff

development workshops on teaching styles/learning styles. The researcher shared with participants how he became interested in the project. He stated that he observed during the fall of 1984, which was his first year in Roosevelt, a large number of junior high students failing classes or repeating grades and generally displaying low self-esteem and negative feelings about school.

Participants browsed through the teaching styles/learning styles literature, which had been displayed by the researcher. Participants also chatted about various situations they had encountered in their classrooms during the day. One eighth grade participant asked another, "How did you get Johnnnny (not his real name) to do any work for you last year?" The other participant responded, "You have come to the right place to get that question answered, honey."

The workshop was designed to outline participants' roles in the staff development project, to discuss and analyze need for study, and to generate discussions on teaching styles/learning styles. The workshop was composed of five specific objectives and five corresponding activities.

#### Objectives

Specific objectives for workshop #1 were the following:

1. To outline participants' role in the project

2. To begin building goal consensus and goal clarification
3. To discuss need for study
4. To analyze and prioritize needs
5. To generate dialogue on teaching styles/learning styles

### Procedures

The following activities corresponded to the objectives by number:

#### Activity #1--Outlining Roles

Discussion among the researcher and the participants generated seven responsibilities.

1. To serve as a planning group and as workshop participants
2. To provide input in analyzing and prioritizing the results of students' assessment forms
3. To categorize and analyze students' learning styles
4. To acquire a repertoire of teaching styles
5. To investigate and evaluate curricular materials
6. To modify curricular materials to accord more closely with students' learning styles
7. To share information and ideas with other teachers

#### Activity #2--Goal Consensus

The researcher and the participants agreed that the following were realistic goals:

1. To promote positive attitudes and positive work habits among junior high students
2. To create a harmonious working relationship among junior high teachers
3. To bridge the gap from elementary to high school for junior high teachers
4. To increase communication among students, parents, teachers and administrators

#### Activity #3--Need for Study

This activity generated much discussion among participants and the researcher. The participants discussed a range of needs based on teacher and student surveys and discussions with students, parents, teachers, and administrators. The following is a compilation of needs which were generated by the dialogue among the participants and the researcher:

1. To provide teachers with a repertoire of teaching styles
2. To increase teachers' awareness of students' learning styles
3. To improve students' attitudes about learning
4. To improve teachers' attitudes about teaching
5. To increase students' awareness of their learning styles
6. To increase teachers' awareness of their learning styles



7. To improve parents' attitudes about schools
8. To improve administrators' attitudes about teachers
9. To improve students' academic achievement
10. To improve students' attendance
11. To reduce teacher burnout
12. To improve school climate
13. To reduce competition among students
14. To reduce competition among teachers
15. To increase collaboration among students
16. To increase collaboration among teachers

#### Activity #4--Analyze and Prioritize Needs

The participants experienced much disagreement regarding the order of importance of the needs based on their ideas about the role of schools. After sharing opinions, the participants suggested the following order to address the needs:

1. To design activities to increase teachers' awareness of students' learning styles
2. To design activities to provide teachers with a repertoire of teaching styles
3. To design activities to increase teachers' awareness of their learning styles
4. To design activities to increase students' awareness of their learning styles

The researcher and the participants believed that other needs, which were listed in Activity #1, would emerge if the aforementioned activities were implemented and monitored closely.

#### Activity #5--Teaching Styles/Learning Styles

This activity was included to give participants the opportunity to express personal attitudes towards teaching styles/learning styles. Discussion centered around resistance which may be encountered by participants who did not want to change their teaching style(s). One participant also discussed her reluctance to incorporate "something new" into her classes because it may impede her ability to complete state curricular mandates.

Implementation of varied teaching styles to accord more closely to the learning styles of students generated concerns among the participants. The participants believed they would be expected to perform the following tasks: to design individual learning styles assignments for students, to design individual examinations for students, to design individual examinations for students, and to teach directly to the learning styles of students. The researcher re-emphasized that the participants would be expected to develop a repertoire of teaching styles which would provide them with more opportunities to address the varied learning styles of their students, not Individualized Educational Plans (IEP's).

### Feedback for Workshop #1

In the absence of a formal objective assessment form, the researcher asked the participants to assess workshop #1 in a narrative form. The researcher gave the participants the option of providing their names and the grades and/or subjects they taught, which would not be used in reporting the results of the assessments.

Because of time restraints, the participants did not complete their assessments at the end of the workshop. The researcher asked participants to return assessments to him the next day. Three assessments were turned in the next day and one was turned in two days later.

The following are the narrative assessments of workshop #1:

The workshop was interesting. I had not given much thought to teaching styles and learning styles before. I am not sure if time will allow me to individualize my lessons because of the State's mandates. I also don't think I can individualize in my classes because they are too large.

I just love the idea of learning styles because my students really enjoy doing projects, making speeches, etc. This will provide me with different ways to construct my lessons. I think we should always look for new ways to help our students improve.

I think the workshop was very informative. I am willing to try new techniques which will help my students learn. I have tried every technique that I know, and my students still seem bored. If this will help me meet the needs of my students, you have my support. I will let you know if it works in my classes.

I think this is a great idea. I have always used different approaches in my classes. This will be an added dimension. I think we should explore all the capabilities and interests of our students.

The participants expressed their enthusiasm about attending the workshops, their eagerness to learn different teaching strategies, and their desire to motivate their students to learn. The agenda seemed appropriate because participants did not discuss displeasure with any of the agenda items.

The assessments did not reveal logistical concerns. Thus, the researcher did not make plans to change the length of the workshops (thirty-eight minutes), the place (room #205 in the Junior high wing), nor the time (1:47 p.m. to 2:25 p.m.).

### Workshop #2

February 9, 1988

This workshop opened with the researcher reviewing objectives and activities from workshop #1 and summarizing feedback from participants. Participants shared various disruptive situations which had transpired in their classes during the past week and various strategies they had used to restore order for approximately five minutes before the researcher directed them toward their focus for today--to discuss their teaching styles. The workshop was designed to review participants' teaching styles, to discuss how participants acquired their teaching styles, and to present



Fisher and Fisher's (1979) identified teaching styles. The workshop was composed of three objectives and three corresponding activities.

### Objectives

Specific objectives of workshop #2 were the following:

1. To review results of researcher designed Teaching Styles Survey with participants
2. To provide opportunities for participants to discuss how they acquired their teaching styles
3. To present Fisher and Fisher's (1979) six identified teaching styles

### Procedures

The following activities corresponded to the objectives by number:

#### Activity #1--Reviewing Results of Teaching Styles Survey

This session began with the researcher sharing the results of the Teaching Styles Survey which was administered to twelve junior high and ten special education teachers during the fall of 1987. The emphasis of the survey was on teacher methodology. The following is a tally of the results of the survey:

	Always	Frequently	Sometimes	Never
1. I plan my lessons with equal concern for students and curricular objectives.	11	10	1	0

- |   | Always | Frequently | Sometimes | Never |
|---|--------|------------|-----------|-------|
| 2. I provide an atmosphere that allows my students to pursue activities that interest them. | 5      | 9          | 7         | 1     |
| 3. I plan my class activities with student input.   | 5      | 5          | 9         | 1     |
| 4. I demand that my students perform academically at a specific level.                      | 9      | 5          | 2         | 4     |
| 5. I must finish teaching the textbook in order to meet curricular requirements.            | 2      | 2          | 4         | 14    |
| 6. I prescribe materials for a student to learn based on his/her learning style.            | 5      | 10         | 6         | 0     |
| 7. I become emotionally involved in my teaching.  | 10     | 9          | 5         | 0     |
| 8. I use different techniques to involve all students in class activities.                  | 7      | 11         | 5         | 0     |
| 9. My students ask questions for clarification.   | 3      | 9          | 10        | 0     |
| 10. My students complain of boredom.  | 0      | 0          | 16        | 2     |
| 11. My students complete their homework assignments.  | 0      | 7          | 10        | 0     |

- |     |   |              |                  |                 |            |
|-----|---|--------------|------------------|-----------------|------------|
| 12. | I rephrase questions or statements when my students do not understand.                | Always<br>14 | Frequently<br>3  | Sometimes<br>2  | Never<br>0 |
| 13. | I use the same materials with all students.   | Always<br>2  | Frequently<br>5  | Sometimes<br>10 | Never<br>3 |
| 14. | Individualization enables me to involve more students in class.                       | Always<br>4  | Frequently<br>12 | Sometimes<br>6  | Never<br>0 |
| 15. | I would attend workshops that would provide me with a variety of teaching techniques. | Yes<br>13    | No<br>9          |                 |            |

The following is a list of topics about which teachers wanted additional information if they attended workshops:

1. All styles of modern music dating from about 1930 to present, i.e., swing, fifties, peace movement, flower power, 70s hard rock, punk, disco, new wave, rap, reggae, etc.
2. I would attend, but because of other academic and athletic commitments, I do not have the time at this point.
3. Teaching reading, speaking the English language, and writing improvements.
4. I am always open to new learning styles and techniques.
5. Almost any professional secondary topic provided there is a follow-through on all resolutions.
6. Motivating students.
7. Math and technology.
8. Information concerning the student who has not been categorized as special education, but who needs something special in terms of learning with the "normal" group setting. Different learning patterns. Giving test for results or giving information for good test results.

9. About subject area. About new state requirements for Social Studies test.
10. Ways students learn. Behavioral modification. Special Education.
11. I would like to find some ways to keep my students interested in the materials that I must cover to get them ready for the State Examinations.
12. Program instructions. How to deal with the pathology that is now rampant in public education for which teachers were not trained.
13. How to teach the child who is unwilling to learn. How to improve the percentage of students doing their homework assignments.
14. How does one motivate the non-academic student? Creative teaching for the potentially motivated. Classroom control. In an effort to get through the material, I feel I sacrifice both ends of the spectrum--those who would enjoy a new learning experience and those who need to be gently and slowly brought up to their potential.
15. Team approach to managing students. How to enable all of us to work together in a cohesive multifaceted plan to help as many students as possible to learn.
16. Developing school and individual pride and self-discipline.
17. Individualized instruction.
18. Students with language barriers because of a second language. Teaching students waiting to be placed in Special Education. Best utilization of time for the teacher, student, and the class.
19. I would like to discuss some of these topics with my fellow teachers at a public forum. That would really be helpful.

The results of the survey were not consistent with concerns which junior high and special education teachers had informally expressed with the researcher in the initial planning of staff development workshops on teaching



styles/learning styles. According to the survey results, most teachers seemed to employ ideal teaching styles/learning styles strategies in their classes, but their oral and written comments were not as idealistic.

#### Activity #2--Acquisition of Teaching Styles

Participant #1 stated that she patterned her teaching styles after a "handsome" junior high teacher. She stated that he was the only teacher who really motivated her to learn. She stated that she was not really aware of the teaching styles he used to motivate her to learn, but she believed it was because of his "good looks." She stated that she completed all assignments, attended all classes, and performed well on tests because she wanted to satisfy him. She also stated that when she became a teacher she wanted to teach the way he taught. She did state that there were not any clearly defined teaching styles that he exhibited. He did involve students in the planning of lessons and designing lessons and activities according to students' needs and desires. Participant #1 stated that she also involves students in the planning process.

Participant #2 stated that she acquired her teaching styles from a college professor, whom she admired for his ability to make lessons come "alive", regardless of the topic. She also stated that prior to having taken a class from him during the second semester of her freshman year, she completed assignments only because they were required,

not because they were interesting or relevant. She stated that the professor was a great influence also in her decision to become a teacher. She had previously viewed teachers as those who "feed" students information and students would "regurgitate" it on examinations.

Participant #2 adds drama into her lessons to make them come alive as her college professor did.

Participant #3 stated that a high school science teacher and a college science professor influenced her teaching styles. She stated that both individuals were task oriented and good disciplinarians. They had little tolerance for things that deviated from the norm. They believed if they had a task to complete, all other things became secondary until the task had been completed. They also did not tolerate students who did not conform to the "standards of behavior." Participant #3 believed that these two individuals were role models for their students and other teachers because they produced outstanding academic and behavioral changes among their students. Participant #3 stated that she exhibits many of the traits of her two mentor teachers in her day-to-day interaction with students. She also stated that she does not believe that her styles are necessarily the best for other teachers, but they have worked for her for many years. She stated that she would like to become more student oriented, but she is afraid that the students will view her as becoming "easy."

Participant #4 stated that she cannot focus on any particular individual who may have influenced her teaching styles. She stated that she patterned her teaching styles after many teachers, especially those who were emotionally exciting. She stated that she likes to get her students "emotionally worked up" for a lesson. She also stated that she likes to pattern her lectures after southern Black preachers so she can really get the students mentally involved. She stated that she likes to move around the room a lot. She feels like this is coming down from the pulpit and mingling with the congregation to let them know she is a part of them.

#### Activity #3--Teaching Styles

What influences teaching styles? It has been suggested that one's learning preference influences one's teaching style (Gepheart, Strother and Duchett, 1980).

If teachers, like other people, have experienced ways of perceiving and processing information, then it is reasonable to believe that teachers will communicate their subject matter in ways that are most compatible with their learning styles. A broader understanding of individual's learning styles and preferred learning conditions ought to underscore the need for and approach to teaching, one that provides for a variety of learning styles (Heikkinen, Pettigrew and Zakrajsek, 1985).



The following list of six identified teaching styles by Fisher and Fisher (1979, p. 251) was provided to give participants the opportunity to generate discussion about their teaching styles:

1. The Task-Oriented--These teachers prescribe materials to be learned and demand specific performance on the part of the students.
2. The Cooperative Planner--These teachers plan the means and ends of instruction with student cooperation.
3. The Child Centered--These teachers provide a structure to pursue whatever they want to do or whatever interests them.
4. The Subject Centered--These teachers focus on organized content to the near exclusion of the learner.
5. The Learning Centered--These teachers have equal concern for the student and for the curricular objectives, the materials to be learned.
6. The Emotionally Exciting and Its Counterpart--These teachers show their own intensive emotional involvement in teaching.

### Feedback for Workshop #2

The four participants felt that the activities for this session were appropriate. They particularly enjoyed discussing the results of the researcher designed Teaching Styles Survey and the opportunity to discuss how they acquired their teaching styles.

Participant comments were the following:

1. I really never thought about how I acquired my teaching style. This workshop helped me learn about myself.
2. I think I need to become more accommodating of my students' needs.



3. The interaction among us was great.
4. We need more sessions like this.

### Workshop #3

March 7, 1988

This workshop began approximately ten minutes late because one participant had an unscheduled parent conference that her supervisor arranged without consulting her. During this time, the remaining three participants shared opinions regarding students' success in school and teachers' roles in helping students achieve. Participants stated that it was a difficult transition for them to employ different teaching techniques in their classes because they feel uncomfortable trying new ideas. They stated that they feel "in charge" when they are using their "traditional" strategies.

The researcher formally began the workshop when the fourth participant returned. The researcher distributed a list of learning styles for discussion. The workshop was composed of two objectives and two corresponding activities.

#### Objectives

Specific objectives of workshop 3 were the following:

1. To identify participants' learning styles based on Fisher and Fisher (1979)
2. To generate discussions regarding participants' learning styles

## Procedures

The following activities corresponded to the objectives by number:

### Activity #1--Participants' Learning Styles

This activity began with the participants reviewing the ten learning styles by Fisher and Fisher (1979, pp. 246-250).

1. The Incremental Learner--These students proceed step-by-step fashion, systematically adding bits and pieces together to gain larger understanding. . . .
2. The Intuitive Learner--The learning style of these students does not follow traditional logic, chronology, or step-by-step sequence. . . .
3. The Sensory Specialist--These students rely primarily on one sense for meaningful formation of ideas. . . .
4. The Sensory Generalist--These students use all or many of the senses in gathering information and gaining insight. . . .
5. The Emotionally Involved--These students function best in a classroom in which the atmosphere carries a high emotional charge. . . .
6. The Emotionally Neutral--These students function best in a classroom where the emotional tone is low-keyed and relatively neutral... .
7. Explicitly Structured--These students learn best when the teacher makes explicit a clear, unambiguous structure for learning. . . .
8. Open-Ended Structure--These students feel at home and learn best in a fairly open-ended environment. . . .
9. The Damaged Learner--These students are physically normal yet damaged in self-concept, social competency, aesthetic sensitivity, or intellect in such a way that they develop negative learning styles. . . .
10. The Eclectic Learner--These students can shift learning styles and function profitably and may find one or another styles more beneficial, but can adapt to and benefit from others. . . .

After participants had reviewed and discussed the learning styles, the researcher asked them to choose the styles which most closely identified their learning

style(s). Participants chose at least two learning styles to identify their preferred ways of learning. They stated that at times they learned in other ways, but they believed the following learning styles best represented the ways they learn in most situations.

1. Participant #1--Seventh grade social studies teacher
  - A. Open-ended structure
  - B. Emotionally involved
2. Participant #2--Seventh grade social studies teacher
  - A. Intuitive learner
  - B. Open-ended structure
3. Participant #3--Seventh grade science teacher
  - A. Explicitly structure
  - B. The incremental learner
  - C. Emotionally neutral
4. Participant #4--Eighth grade social studies teacher
  - A. Emotionally involved
  - B. Eclectic learner

#### Activity #2--Discussions on Participants' Learning Styles

This activity was designed to give the participants opportunities to generate discussions about their learning styles--how they acquired their learning styles, how their learning styles affected their success in school, and how their learning styles influenced their career choices.

The participants generally agreed that they did not choose a learning style. They believed they acquired their



learning styles according to circumstances. If a classroom were well-structured, they worked in a well-structured setting. If a classroom were emotionally charged, they worked in an emotionally charged atmosphere. The participants stated that the ways they learned as adolescents did not necessarily represent their preferred learning styles, but they were expected to adapt to teachers' teaching styles.

The participants revealed varied responses regarding their learning styles on their success in school. Three participants generally agreed that they excelled academically in school because their learning styles allowed them the flexibility to adjust to most school and classroom situations.

Participant #3, on the contrary, stated that she did not experience outstanding success in most of her classes because they were not explicitly structured. She stated that she usually did not participate in class discussions because she was a little shy. She usually did not receive extra credit for class participation. She did excel in her science class where all experiments followed a step-by-step sequence and the class was well-disciplined.

Three participants stated that they chose social studies as majors in college because the subject is open-ended. Students can read excerpts from history or sociological documents and express their varied opinions.



The three participants stated that other professions would have offered them open-ended opportunities, but they chose teaching because they enjoyed interacting with adolescents.

Participant #3 chose to become a science teacher because the step-by-step scientific method accorded more closely with her learning styles--explicitly structured, the incremental learner, and the emotionally neutral. She also stated that there were other careers which could have afforded her similar opportunities, but she enjoyed working with junior high students.

### Feedback for Workshop #3

The participants stated that the learning styles' identification activity and discussions that followed were very useful. Three of the four participants stated that if they fully understood their learning styles themselves, they could better determine the effects on their students' learning.

Participant comments were the following:

1. Hands-on activities might help us get the feel of what we have been discussing in the previous sessions.
2. I am getting so much information that I don't know how to use it. I need time to "digest" it. Maybe we could reschedule next week's workshop.

### Workshop #4

March 23, 1988

The researcher began the workshop by reviewing the activities of workshop #3. He also discussed feedback provided by the participants. The participants expressed a need to "take a break" from the workshops temporarily. They stated that they had been provided more information than they could "digest" in a short period of time. The researcher changed the focus of workshop to incorporate hands-on activities, utilizing the concepts to which participants had been exposed in previous sessions.

The focus of the workshop was to design learning styles projects/activities and to generate discussion among participants relative to participant-designed projects/activities. The workshop was composed of two objectives and two corresponding activities.

#### Objectives

Specific objectives for workshop #4 were the following:

1. To design projects/activities for each of the ten identified learning styles according to participants' respective academic disciplines
2. To generate discussions regarding the participant-designed projects/activities

#### Procedures

The following activities corresponded to the objectives by number:

### Activity #1--Designing Projects/Activities

The researcher asked the four participants to design projects/activities for each of the ten learning styles. This activity generated forty projects/activities, ranging from drawing a map of New York with red, white, and blue chalk on a 3'X 5' white poster--explicitly structured--to constructing a model of a futuristic city--open-ended.

### Activity #2--Discussion on Projects

The participants expressed some frustration while they were completing this activity because they stated that designing projects for the ten learning styles was time consuming and required a thorough understanding of the learning styles. The researcher impressed upon the participants that they probably would not need to design activities for ten learning styles in their classes because, based on previous surveys, usually four or five learning styles were more prevalent than others.

### Feedback for Workshop #4

Participants felt that designing hands-on activities/projects were extremely useful because it provided them opportunities to view learning styles' activities in "real life." They stated that the discussions which were generated about the projects/activities were useful because participants shared ideas which other

participants could use with their students to create cross-disciplinary activities/projects.

### Workshop #5

April 4, 1988

The researcher began the session with a review of the assessment forms for workshop #4 which helped structure this workshop. Participants had expressed an interest in role-playing teaching styles/learning styles to help them with their comfort level in the classroom. Participants asked the researcher for more clarification regarding collecting data and the implementation timeline.

The focus of the workshop was role-playing, introducing a Learning Styles Survey, designing an implementation timeline, and providing a format for collecting data. The workshop was composed of five objectives and five corresponding activities.

### Objectives

Specific objectives for workshop #5 were the following:

1. To role-play varied teaching styles
2. To role-play varied learning styles
3. To introduce Learning Styles Inventory by Dunn and Dunn (1975)
4. To plan implementation timeline for introducing teaching styles/learning styles into the classes



5. To provide participants with a format for collecting data: attendance, grades, and attitudes

### Procedures

The following activities corresponded to the objectives by number:

#### Activity #1--Role-Playing Teaching Styles

This activity involved the four participants in presenting short lessons to other participants and the researcher. Each participant conducted a five minute lesson based on the participant's teaching preference(s). This session also involved each participant conducting a short lesson incorporating a repertoire of teaching styles.

#### Activity #2--Role-Playing Learning Styles

Activity #1 and activity #2 were conducted concurrently. The two activities had been planned as separate activities, but as activity #1 began to unfold, participants began to assume certain learning styles--some of their own and others they acquired for the activity.

#### Activity #3--Learning Styles Inventory by Dunn and Dunn

The researcher introduced the one hundred item Learning Styles Inventory to the participants for discussion regarding administering the survey to their students. Participants expressed concerns relative to the large number of items on the survey and the repetition of items.

The researcher impressed upon the participants that students should be monitored closely for boredom or fatigue

when taking the survey, and the time should be adjusted accordingly. The researcher stated that many items were repeated on the survey to check for consistency among responses.

#### Activity #4--Implementation Timeline

The following timeline for implementing teaching styles/learning styles into class lessons and activities were collaboratively planned by the researcher and the participants:

Tuesday, April 12, 1988.....	Choose class to participate in study
Wednesday, April 13, 1988.....	Administer student questionnaire
Monday, April 18, 1988.....	Administer Learning Styles Survey to students
Monday, April 25, 1988 - Friday, May 27, 1988.....	Implement Learning Styles/Teaching strategies into class activities
Friday, May 27, 1988.....	Administer post-student questionnaire

#### Activity #5--Collecting Data

The researcher asked the participants to collect or provide the following data to substantiate the study:

1. Attendance of each student in the participating classes for the first, second, third, and fourth quarters of 1987-88 school term

2. A breakdown of the grades for the first, second, third, and fourth quarters, for example, number of students earning grades between 90-100, 80-89, and so on for the 1987-88 school term
3. Written or oral assessments from participating teachers regarding the study, for example, problems and/or rewards of implementing study into classes, increased student enthusiasm, or additional planning required.
4. A copy of the grade reports, which included the students' grades for attitude

#### Feedback for Workshop #5

Participants stated that the objectives and activities this session were very helpful. They felt that the role-playing activities on teaching styles and learning styles provided them a more "realistic" feel of what they were expected to do in their classrooms with their students. They also stated that the implementation timeline and the format for collecting data clarified dates and provided them with a sense of direction. They stated that they knew when they were expected to perform certain tasks and what information they were expected to collect. Participant comments were the following:

1. I found these workshops to be very enlightening.
2. I can use everything I learned with my students.

3. I have a better understanding of how I learn as well as how my students learn.
4. Other teachers should be exposed to teaching styles/learning styles.

### Summary

Five staff development workshops on teaching styles/learning styles were conducted at Roosevelt Junior Senior High School for four voluntary junior high teachers from February 1, 1988, to April 4, 1988. Opportunities were provided for participants to acquire a repertoire of teaching styles to accord more closely with students' learning styles through reviewing literature, discussions, exchanging ideas, and role-playing. The researcher and participants collaboratively planned objectives and designed corresponding supporting activities for the workshops.

The enthusiasm of the participants indicated that they had bought into the program. They agreed to serve as ambassadors and to share their techniques and materials with other teachers, who wanted to try different teaching strategies with their students.

The results of the students' pre- and post-attitudinal surveys and a comparison of students' academic grades, attendance to class, and attitudinal ratings for the four



classes for four quarters during the 1987-88 school term are presented in Chapter 4.

## CHAPTER 1V

### RESULTS

The results of this study will be presented in this chapter. The purpose of this study is to document the process of designing, implementing and evaluating a staff development program to address seventh and eighth grade students' diverse learning styles and junior high teachers' varied teaching styles with the intent of improving students' academic achievement, attitudes, and attendance to class in four selected classes at Roosevelt Junior Senior High School during the 1987-88 school term.

Four propositions were developed to address adolescents' diverse learning styles and junior high teachers' varied teaching styles. First, students in early adolescence are at a stage of high variability and changing identity so that seventh and eighth grade classes--whether tracked or not--include a wide range of individual needs and learning styles. Second, if students find appropriate instruction and concern for themselves as individuals, they will attend class and that attendance should eventually yield increased academic achievement. Third, a planned staff development project to expand the repertoire of teaching styles to accord more closely, though not necessarily on a one to one basis, with students currently enrolled should increase opportunities for success in

school. And fourth, a staff development program is more likely to be ongoing if participants are provided opportunities to "buy into" the process through collaborative planning.

This chapter begins with the demographic characteristics of the students in the four selected classes. Next, the results of a five-question pre- and post-Student Attitudinal Survey (see appendices G and H) will be presented, followed by the comparison of students' grades, attitudes, and attendance to class for four quarters (1987-88 school term) in each of the four classes.

### Demographic Characteristics

Demographic characteristics of each class are profiled in Tables 5-8. Table 5 profiles the demographic characteristics of the students in the seventh grade level AP science class. The mean age of the males was 13.2500 years and the mean age of the females was 13.0000 years. There were 23 students enrolled in the class--7 Black males, 15 Black females, and 1 Hispanic female.

Academically, the females maintained a higher yearly average than males--females, 80.4% and males, 74.5%. This class was composed of students who scored 3-5 years above grade level in reading and mathematics on the Iowa Test of Basic Skills in May, 1986. No students failed this class for the year.

TABLE 5

Demographic Characteristics of the Seventh Grade Level AP Science Class--Teacher #3			
	Males	Females	Total
Age (mean)	13.2500	13.0000	13.0760
Sex (n)	7	16	23
Race (n)			
Black	7	15	22
White	0	0	0
Others	0	1	1
Academic Average (1987-88)	74.5%	80.4%	78.6%
Yearly Failures (n) (64-0)	0	0	0

The demographic characteristics of the students in the seventh grade level A social studies class are profiled in Table 6. The mean average of the males was 12.5833 years and the mean age of the females was 13.5000 years. There were 27 students enrolled in the class--5 Black males, 22 Black females, 2 Hispanic females, and 1 White female.

Academically, the females maintained a higher yearly average than the males--females, 88.5% and males, 82.8%. The students in this class scored 1-2 years above grade level in reading and mathematics on the Iowa Test of Basic



Skills in May, 1986. There were no failures in this class for the year.

TABLE 6

Demographic Characteristics of the Seventh Grade Level A Social Studies Class--Teacher #1			
	Males	Females	Total
Age (mean)	12.5833	13.5000	13.3302
Sex (n)	5	22	27
Race (n)			
Black	5	19	24
White	0	1	1
Others	0	2	2
Academic Average (1987-88)	82.8%	88.5%	87.4%
Yearly Failures (n) (64-0)	0	0	0

Table 7 profiles the demographic characteristics of the students in the seventh grade level B social studies class. The mean age of the males was 13.1666 years and the mean age for the females was 13.3333 years. There were 14 students enrolled in the class--5 Black males and 9 Black females. No other ethnic groups were represented in this class.

The males maintained a higher yearly academic average than the females--males, 71.0% and females, 64.3%. This

class was composed of students whose scores in reading and mathematics ranged from 1 year below grade level to on grade level on the Iowa Test of Basic Skills in May, 1986. Two females failed this class for the year.

TABLE 7

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Demographic Characteristics of the Seventh Grade Level B  
Social Studies Class--Teacher #2

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	Males	Females	Total
Age (mean)	13.1666	13.3333	13.2738
Sex (n)	5	9	14
Race (n)			
Black	5	9	14
White	0	0	0
Others	0	0	0
Academic Average (1987-88)	71.0%	64.3%	66.6%
Yearly Failures (n) (64-0)	0	2	2

---

The demographic characteristics of the students in the eighth grade level C social studies class are profiled in Table 8. The mean age of the males was 14.5000 years and the mean age of the females was 15.2500 years. There were 15 students enrolled in the class--6 Black males and 9 Black

females. No other ethnic groups were represented in this class.

Academically, the males maintained a higher yearly average than the females--males, 70.0% and females, 58.0%. This class was composed of students who repeated the 8th grade or 8th grade social studies one or more times and those who scored 2 or more years below grade level on the Iowa Test of Basic Skills in May, 1986. Three females failed this class for the year.

TABLE 8

Demographic Characteristics of the Eighth Grade Level C Social Studies Class--Teacher #4			
	Males	Females	Total
Age (mean)	14.5000	15.2500	14.9500
Sex (n)	6	9	15
Race (n)			
Black	6	9	15
White	0	0	0
Others	0	0	0
Academic Average (1987-88)	70.0%	58.0%	62.8%
Yearly Failures (n) (64-0)	0	3	3

### Student Attitudinal Survey

A five-question pre- and post-Student Attitudinal Survey was administered to the students in the four classes in April and June, 1988, to assess students' attitudes about their classwork and about their learning. The results of the survey are presented in Tables 9-13.

Table 9 presents the results of students' responses to question #1, "Is the classwork usually interesting?" The April and June, 1988, results indicated that the majority of the students in three classes stated that their classwork was usually interesting. However, ten (43%) students in the seventh grade level AP science class stated "yes" and ten (43%) stated "no" in the June, 1988, survey.

TABLE 9

Question #1. Is the classwork usually interesting?		
Responses	Respondents	Percentages
7th Grade Science AP Teacher #3		
April 13, 1988		
Yes	5	22%
No	10	43%
Sometimes	8	35%

Continued, next page.



Table 9, cont.

June 9, 1988

Yes	10	43%
No	10	43%
Sometimes	3	13%

---

7th Grade Social Studies A  
Teacher #1

April 13, 1988

Yes	11	58%
No	5	26%
Sometimes	3	16%

June 10, 1988

Yes	12	71%
No	1	5%
Sometimes	4	24%

---

7th Grade Social Studies B  
Teacher #2

April 18, 1988

Yes	14	66%
No	5	24%
Sometimes	1	5%
A Little	1	5%

June 10, 1988

Yes	15	68%
No	1	5%
Sometimes	6	27%

---

8th Grade Social Studies C  
Teacher #4

April 14, 1988

Yes	9	75%
No	0	0%
Sometimes	3	25%

Table 9, cont.

Table 9, cont.

June 15, 1988

Yes	8	73%
No	1	9%
Sometimes	2	18%

Table 10 presents the results of students' responses to question #2, "Do you expect to pass the class this quarter?" The April and June, 1988, results indicated that the overwhelming majority of the students in the four classes expected to pass the class during the fourth quarter.

TABLE 10

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Question #2. Do you expect to pass this class this quarter?

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Responses	Respondents	Percentages
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7th Grade Science AP  
Teacher #3

April 13, 1988

Yes	20	91%
No	2	9%

June 9, 1988

Yes	22	96%
No	0	0%
Maybe	1	4%

---

Continued, next page.

Table 10, cont.

7th Grade Social Studies A  
Teacher #1

April 13, 1988

Yes	14	78%
No	2	11%
Maybe	2	11%

June 10, 1988

Yes	14	82%
No	1	6%
Don't know	1	6%
No response	1	6%

7th Grade Social Studies B  
Teacher #2

April 18, 1988

Yes	20	95%
Maybe	1	5%

June 10, 1988

Yes	17	77%
Maybe	4	18%
Not really	1	5%

8th Grade Social Studies C  
Teacher #4

April 14, 1988

Yes	11	84%
No	1	8%
Maybe	1	8%

June 15, 1988

Yes	8	73%
No	1	9%
Maybe	1	9%
Hopefully	1	9%

Table 11 presents the results of students' responses to question #3, "Are you usually given assignments that are of interest only to you"? The results of the April and June, 1988, survey indicated that the majority of the students (64% and 76%, respectively) in the seventh grade level AP science class stated "no." Seventy-four percent (74%) of the students in the seventh grade level A social studies class stated "yes" in April, 1988, and 41% of the students stated "yes" in June, 1988. The largest percentage (82%) of the students in the eighth grade level C social studies class stated "yes" in April, 1988, and 55% of the students stated "sometimes" in June, 1988.

TABLE 11

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Question #3. Are you usually given assignments that are of interest only to you?

---

Responses	Respondents	Percentages
7th Grade Science AP Teacher #3		
April 13, 1988		
Yes	4	16%
No	16	64%
Sometimes	5	20%

Continued, next page.



Table 11, cont.

June 9, 1988

Yes	2	8%
No	19	76%
Sometimes	4	16%

---

7th Grade Social Studies A  
Teacher #1

April 13, 1988

Yes	14	74%
No	3	16%
Sometimes	2	10%

June 10, 1988

Yes	7	41%
No	5	29%
Sometimes	3	18%
Don't know	1	6%
No response	1	6%

---

7th Grade Social Studies B  
Teacher #2

April 18, 1988

Yes	10	48%
No	9	43%
Sometimes	2	9%

June 10, 1988

Yes	8	35%
No	11	48%
Sometimes	4	17%

---

8th Grade Social Studies C  
Teacher #4

April 14, 1988

Yes	9	82%
No	1	9%
Sometimes	1	9%

Table 11, cont.

Table 11, cont.

June 15, 1988

Yes	2	18%
No	3	27%
Sometimes	6	55%

---

Table 12 presents the results of students' responses to question #4, "Do you like coming to this class? If no, why not?" Forty-four percent (44%) of the students in the seventh grade level AP science class stated "sometimes" in the April, 1988, survey. Students' comments ranged from "Because I'm not very good in science and I'm always failing science" to "At times this class can be fun and at other times it can be boring." The June, 1988, survey results indicated that 57% of the students responded "sometimes." Students' comments ranged from "Because it's hard to understand and remember all the work" to "We never see movies--only on the subject."

Seventy-four percent (74%) of the students in the seventh grade level A social studies class stated "yes" in the April, 1988, survey. Students' comments ranged from "Because we always get a lot of homework" to "Because I don't like going to any classes." The June, 1988, results indicated that 88% of the students stated "yes." Students did not make comments.

Eighty-six percent (86%) of the students in the seventh grade level B social studies class stated "yes" in the April, 1988, survey, with no comments. The June, 1988,

survey results indicated that 87% of the students stated "yes," with two comments--"Because it's too hard" and "It can be a little boring."

Eighty-four percent (84%) of the students in the eighth grade level C social studies class stated "yes" in the April, 1988, survey, with one comment--"Because the teacher gets on my nerves." In June, 1988, eighty-two percent (82%) of the students stated "yes," with one comment--"I don't like school."

TABLE 12

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Question #4. Do you like coming to this class?

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Responses	Respondents	Percentages
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---

7th Grade Science AP  
Teacher #3

April 13, 1988

Yes	8	35%
No	4	17%
Sometimes	10	44%
Not really	1	4%

If no, why not?

1. Because I'm not very good in science and I'm always failing science.
2. Because it has no feeling or meaning so I would call it boring.
3. Sometimes it's fun and sometimes it's boring.

Continued, next page.

Table 12, cont.

4. Because it's so tiring that time of the day when it's almost time to go home.
5. It is sometimes a little boring.
6. Because it's a boring class, and I don't really care for science.
7. Because it's very boring, and I don't like her.
8. Sometimes I don't like coming because I know we are getting a lot of work. I don't like science, but sometimes it's interesting.
9. At times this class is boring, but at other times it's interesting.
10. I don't have a great interest in science.
11. Sometimes it's interesting and sometimes it's not.
12. At times the class can be fun and at other times it can be boring.

June 9, 1988

Yes	13	57%
No	4	17%
Sometimes	6	26%

If no, why not?

1. Because it's hard to understand and remember all the work.
2. Because I don't understand it.
3. Sometimes I do and sometimes I don't.
4. Because all we do is read.
5. I don't like science.
6. It's boring. All you do is read, write and take notes.
7. Sometimes I am tired.
8. We never see movies--only on the subject.

Table 12, cont.



Table 12, cont.

7th Grade Social Studies A  
Teacher #1

April 13, 1988

Yes	14	74%
No	3	16%
Sometimes	2	10%
If no, why not?		

1. Because we always get a lot of homework.
2. Because some things are not interesting to me.
3. Because I don't like going to any class.

June 10, 1988

Yes	15	88%
Sometimes	1	6%
No response	1	6%
If no, why not?		
No responses.		

7th Grade Social Studies B  
Teacher #2

April 18, 1988

Yes	19	86%
No	1	5%
Sometimes	2	9%
If no, why not?		
No responses.		

June 10, 1988

Yes	20	87%
No	1	4%
Sometimes	2	9%

Table 12, cont.

Table 12, cont.

If no, why not?

1. Because it's too hard.
2. It can be a little boring.

8th Grade Social Studies  
Teacher #4

April 14, 1988

Yes	10	84%
No	1	8%
Sometimes	1	8%

If no, why not?

1. Because the teacher gets on my nerves.

June 15, 1988

Yes	9	82%
No	1	9%
Sometimes	1	9%

If no, why not?

1. I don't like school.

Table 13 presents the results of students' responses to the April and June, 1988, survey question #5, "What could your teacher do differently to help you improve your learning in this class?" and "What did your teacher do differently to help you improve your learning in this class?" Students' responses are reported in categories based on the similarity of the contents of the statements.

The April, 1988, survey produced eight response categories in the seventh grade level AP science class. Forty-two percent (42%) of the students stated, "She could

give us more projects and experiments." Seven response categories were produced in the June, 1988, survey.

Thirty-six percent (36%) of the students stated, "She did everything basically the same."

Nine response categories were produced by the students in the seventh grade level A social studies class in the April, 1988, survey. Thirty-five percent (35%) of the students stated, "She should let us discuss our work more openly among ourselves." The June, 1988, survey produced eight response categories. Eighteen percent (18%) of the students stated, "She gave us the work more than one time."

Students' responses in the seventh grade level B social studies class produced nine response categories in the April, 1988, survey. Thirty-two (32%) of the students stated, "Nothing." The June, 1988, survey produced seven response categories. Twenty-nine percent (29%) of the students stated, "She lets us do our work alone."

Students in the eighth grade level C social studies class produced six response categories in the April, 1988, survey. Fifty percent (50%) of the students stated, "Nothing." The June, 1988, results produced seven response categories. Forty-two percent (42%) of the students stated, "She explained the work more."

TABLE 13

Question #5. What could (did) your teacher do differently to help you improve your learning in this class?

Responses	Respondents	Percentages
-----------	-------------	-------------

7th Grade Science AP  
Teacher #3

April 13, 1988

1. She could give us more projects and experiments.	12	42%
2. She could explain the work more vividly.	5	18%
3. Everything is okay.	4	14%
4. She could take us on a field trip to a science fair or to a museum.	2	7%
5. I don't know.	2	7%
6. She needs a sense of humor.	1	4%
7. Let us sit next to whom we want to.	1	4%
8. She can't do anything. I don't study.	1	4%

June 8, 1988

1. She did everything basically the same.	8	36%
2. She explained everything thoroughly.	5	23%
3. She gave us more homework.	2	9%

Continued, next page.



Table 13, cont.

4. I don't really know.	2	9%
5. She gave us more experiments and projects.	2	9%
6. She gave us more duplicated materials to review for our exams.	2	9%
7. She showed more movies.	1	5%

---

7th Grade Social Studies A  
Teacher #1

April 13, 1988

1. She should let us discuss our work more openly among ourselves.	7	35%
2. She could give us more interesting work.	3	15%
3. There's nothing she can really do to improve the class.	3	15%
4. She could have a sense of humor.	1	5%
5. She can ask us what we want to learn.	1	5%
6. There should be an extra class for slow people.	1	5%
7. We shouldn't have to come to school everyday.	1	5%
8. She could be meaner.	1	5%
9. I don't know.	1	5%

June 10, 1988

1. She gave us the work more than one time.	3	18%
---	---	-----

Table 13, cont.

Table 13, cont.

2. She explained the lessons to me so I could understand better.	3	18%
3. No response.	3	18%
4. She was nicer and concerned about our education.	2	12%
5. She gave us more work.	2	12%
6. Yes.	2	12%
7. Everything.	1	6%
8. Nothing.	1	6%

7th Grade Social Studies B  
Teacher #2

April 18, 1988

1. Nothing.	7	32%
2. Give more work.	3	14%
3. No response.	3	14%
4. Give us hard assignments and teach us more.	3	14%
5. Make the assignments more interesting by showing films on the subjects.	2	9%
6. Have more discussions.	1	5%
7. Less movies.	1	5%
8. More fun projects.	1	5%
9. She could give us more time to study for tests.	1	5%

June 10, 1988

1. She let us do our work alone.	7	29%
----------------------------------	---	-----

Table 13, cont.

Table 13, cont.

2. Nothing.	6	25%
3. She taught us more.	6	25%
4. She talked more.	2	8%
5. She let us do more projects and other materials that were interesting.	1	4%
6. She didn't let us go to the bathroom as often as before.	1	4%

---

8th Grade Social Studies C  
Teacher #4

April 14, 1988

1. Nothing	6	50%
2. Explain the work more.	2	17%
3. My teacher does everything interesting in her class.	1	8%
4. I don't know.	1	8%
5. She could give us more current events.	1	8%
6. She helps me all the time.	1	8%

June 15, 1988

1. She explained the work more.	5	42%
2. No response.	2	17%
3. She was nice to us.	1	8%
4. She made the discussions interesting.	1	8%
5. She laughed with us.	1	8%
6. I don't know.	1	8%
7. No response.	1	8%

---

### Students' Grades, Attendance, and Attitudes

Tables 14-17 present a comparison of students' grades, attendance, and attitudes for four quarters during the 1987-88 school term in the seventh grade level AP science class, the seventh grade level A social studies class, the seventh grade level B social studies class, and the eighth grade level C social studies class.

As indicated by Table 14, the mean grade for the students in the seventh grade level AP science class for the first quarter was 80.27%. The second quarter showed a 3.46% decrease to 76.81%. The third quarter, however, indicated a gain of 3.9% to 80.77%. The fourth quarter reflected a significant decrease of 4.47% to 76.30%.

Attitudinally, the students displayed a mean score of 85.68% for the first quarter, whereas there was an attitudinal mean of 83.57% during the second quarter, reflecting a decrease of 2.11%. The third quarter represented an increase of 2.34% to 85.91%. The fourth quarter showed a slight decrease of 0.04% to 85.87%.

The mean attendance for the class was 93.32% during the first quarter. The attendance rate showed a significant reduction of 6.89% during the second quarter to 86.43%. There was a significant increase of 8.48% during the third quarter to 94.91%. A slight decrease of 0.65% occurred during the fourth quarter, reducing the mean attendance rate to 94.26%.



TABLE 14

Comparison of Students' Grades, Attitudes, and Attendance for the First, Second, Third, and Fourth Quarters during the 1987-88 School Term in the Seventh Grade Level AP Science Class--Teacher #3

STUDENT	QTR. 1			QTR. 2			QTR. 3			QTR. 4		
	GR	ATT	ATTN	GR	ATT	ATTN	GR	ATT	ATTN	GR	ATT	ATTN
GA	80	85	89	75	75	100	75	75	100	70	75	100
GB	96	95	100	96	95	100	97	95	93	90	95	98
GC							70	75	98	60	75	58
GD	65	75	91	60	75	89	70	75	91	70	75	89
GE	80	85	89	70	75	76	70	75	78	65	75	67
GF	85	95	100	85	95	100	92	95	100	90	95	100
GG	90	95	96	91	95	96	96	95	100	90	95	93
GH	80	85	93	75	85	91	75	75	80	70	75	96
GI							85	85	100	80	85	98
GJ	80	95	96	80	95	98	85	95	100	80	95	93
GK	85	95	91	85	95	87	85	85	87	70	85	91
GL	50	40	33	50	40	2						
GM	90	95	96	90	95	100	90	95	100	80	95	100
GN										65	85	98
GO	80	85	96	75	85	100	75	85	93	80	85	100
GP	80	85	98	75	85	91	75	85	96	70	85	100
GQ	85	95	98	85	95	100	80	85	98	80	85	100
GR	80	85	98	80	85	96	80	85	76	75	85	91
GS	90	95	100	91	95	100	91	95	100	85	95	100
GT	90	95	100	85	95	98	91	95	100	85	95	98
GU	90	95	100	85	95	100	85	95	100	80	95	100
GV	65	75	93	40	40	2	80	85	100	75	85	100
GW	85	85	100	75	85	89	70	75	100	65	75	100
GX	70	75	98	65	75	100	70	85	98	80	85	98
GY												
GZ	70	75	98									
N	22	22	22	21	21	21	22	22	22	23	23	23
MEAN	80.27	85.68	93.32	76.81	83.57	86.43	80.77	85.91	94.91	76.3	85.87	94.26
STD	10.45	12.46	13.64	13.56	16.05	28.06	8.84	7.93	7.59	8.5	7.75	10.45

Table 15 indicates that students in the seventh grade level A social studies class displayed an academic mean of 84.96% during the first quarter. There was a slight increase of 1.26% during the second quarter, raising the mean to 86.22%. Likewise, there was an increase of 2.39% during the third quarter, increasing the mean to 88.61%. The fourth quarter showed a slight increase of 0.13%.

The class earned a mean attitudinal score of 91.67% during the first quarter. The second quarter reflected a slight increase of 0.29%, raising the mean to 91.96%. The third also represented a slight increase in the students' attitude of 0.43%, increasing the mean to 92.39%. There was a slight decrease of 0.35% during the fourth quarter, reducing the mean to 92.04%.

The mean attendance rate for the students during the first quarter was 95.42%, whereas the second quarter represented a mean attendance rate of 93.87%, reflecting a decrease of 1.55%. The third quarter indicated a mean attendance rate of 93.26%, representing a decrease of 0.61%. An increase of 2.59% occurred during the fourth quarter, raising the mean attendance rate to 95.85%.

TABLE 15

Comparison of Students' Grades, Attitudes, and Attendance for the First, Second, Third, and Fourth Quarters during the 1987-88 School Term in the Seventh Grade Level A Social Studies Class--Teacher #1

STUDENT	QTR. 1			QTR. 2			QTR. 3			QTR. 4		
	GR	ATT	ATTN	GR	ATT	ATTN	GR	ATT	ATTN	GR	ATT	ATTN
SA	93	95	98	95	95	100	96	95	96	98	95	98
SB	85	85	96	90	95	100	91	95	96	94	95	100
SC	90	85	91	92	95	96	92	95	98	93	95	100
SD	70	85	98	75	85	89	75	85	93	80	95	96
SE	92	95	93	94	95	100	95	95	98	95	95	96
SF	70	75	87	60	65	67	60	65	62	60	65	67
SG	92	95	100	93	95	98	95	95	100	97	95	100
SH	90	95	100	91	95	100	92	95	91	94	95	100
SI	85	95	96	85	95	96	90	95	98	92	95	98
SJ	70	85	93	70	85	84	75	85	89	80	95	98
SK	90	95	91	90	85	84	92	95	93	92	95	91
SL	85	95	91	85	95	100	91	95	93	93	95	100
SM	85	95	100	85	95	100	90	95	98	91	95	98
SN	85	95	98	85	95	96	85	95	93	90	95	98
SO	80	95	91	85	95	93	90	95	91	90	95	93
SP	90	95	98	90	95	100	92	95	98	93	95	100
SQ	91	95	98	91	95	100	93	95	96	94	95	98
SR	85	95	98	85	95	91	90	95	82	92	95	98
SS	92	95	100	93	95	98	95	95	96	96	95	98
ST	92	95	100	92	95	100	95	95	100	97	95	100
SU	92	95	96	92	95	98	94	95	98	95	95	98
SU	85	95	93	80	85	82	80	85	93	80	85	96
SW	85	95	93	85	95	87	90	95	93	90	95	93
SX										80	85	91
SY										80	85	96
SZ										80	85	91
SAA	65	75	91									
SAB												
N	24	24	24	23	23	23	23	23	23	27	27	27
MEAN	84.96	91.67	95.42	86.22	91.96	93.87	88.61	92.39	93.26	88.74	92.04	95.85
STD	8.02	6.24	3.75	8.19	6.87	8.18	8.37	6.74	7.77	8.37	6.56	6.33

Table 16 reveals that students in the seventh grade level B social studies class maintained a mean academic grade of 72.14% for the first quarter. The second quarter revealed a decrease of 3.21%, lowering the mean to 68.93%. However, during the third quarter, a significant increase of 5.50% occurred, raising the mean to 74.43%. On the contrary, the fourth quarter reported a decrease of 4.07%, lowering the mean grade to 70.36%.

The students' attitudes indicated a mean score of 81.07% during the first quarter. There was an overwhelming decrease in students' attitudes during the second quarter, 8.57%. Contrarily, there was a significant increase of 7.41% increase in students' attitudes during the third quarter, raising the mean attitudinal rate to 79.64%. The fourth quarter represented a decrease of 3.93% in students' attitudes, lowering the mean to 75.71%.

The students displayed a mean attendance rate of 87.57% during the first quarter. The attendance rate during the second quarter dropped to 84.29%, representing a decrease of 3.28%. However, during the third quarter, there was a slight increase of 1.21%. There was a further increase during the fourth quarter, representing an increase of 0.86%.



TABLE 16

Comparison of Students' Grades, Attitudes, and Attendance for the First, Second, Third, and Fourth Quarters during the 1987-88 School Term in the Seventh Grade Level B Social Studies Class--Teacher #2

STUDENT	QTR. 1			QTR. 2			QTR. 3			QTR. 4		
	GR	ATT	ATTN	GR	ATT	ATTN	GR	ATT	ATTN	GR	ATT	ATTN
RA	65	75	93	80	75	93	85	75	98	65	75	82
RB	65	75	89	75	85	96	70	85	87	80	85	87
RC	40	40	0	40	40	13	75	85	88	60	40	73
RD	70	85	100	80	85	100	80	85	100	80	75	89
RE	75	85	96	80	85	69	75	85	87	75	85	84
RF	65	75	98	65	75	100	70	75	98	70	75	96
RG	95	95	96	50	40	96	75	75	89	75	75	80
RH	85	95	96	80	85	84	85	85	89	80	85	93
RI	75	85	89	75	85	87	70	85	80	80	85	91
RJ	80	85	93	70	75	96	75	85	87	80	85	96
RK	65	75	93	65	75	93	65	65	60	70	75	89
RL	85	95	98	75	85	91	92	95	96	90	95	96
RM	70	85	87	50	40	64	40	40	40	0	40	53
RN	75	85	98	80	85	98	85	95	98	90	95	100
N	14	14	14	14	14	14	14	14	14	14	14	14
MEAN	72.14	81.07	87.57	68.93	72.50	84.29	74.43	79.64	85.50	70.36	75.71	86.36
STD	12.49	13.39	24.58	12.84	17.50	22.40	11.98	13.42	15.99	21.17	16.16	11.65

Table 17 indicates that the students in the eighth grade level C social studies class earned an academic average of 66.00% during the first quarter. The second quarter revealed a decrease of 4.46%, lowering the mean to 61.54%. However, during the third quarter, the mean increased by 3.46%, increasing the mean to 65.00%. Likewise, the fourth quarter revealed a slight increase of 0.11%, raising the mean to 65.11%

The mean attitudinal rating for the class was 77.67% during the first quarter. The second quarter represented an overwhelming decrease of 7.67%, lowering the attitudinal mean to 77.00%. The third quarter also reflected an increase students' attitudes, 4.00%, raising the mean to 74.00%. A decrease of 1.78% was reported in students' attitudes during the fourth quarter.

The students' attendance rate during the first quarter was 71.60%. There was a tremendous decrease of 8.45% during the second quarter, lowering the mean attendance rate to 63.15%. Contrarily, during the third quarter, there was a significant increase of 12.55% in the attendance rate. The fourth quarter reflected a slight decrease of 0.03%, lowering the mean to 75.67%

TABLE 17

Comparison of Students' Grades, Attitudes, and Attendance for the First, Second, Third, and Fourth Quarters during the 1987-88 School Term in the Seventh Grade Level C Social Studies Class--Teacher #4

STUDENT	QTR. 1			QTR. 2			QTR. 3			QTR. 4		
	GR	ATT	ATTN	GR	ATT	ATTN	GR	ATT	ATTN	GR	ATT	ATTN
CA	90	95	96	40	40	11				80	85	98
CB	65	95	67	65	75	58						
CC	40	75	22	40	75	11						
CD	75	95	82				65	65	84	61	65	87
CE	65	75	87	65	75	91						
CF	65	40	62	65	65	67	40	65	24	40	40	32
CG	55	40	27	55	65	58	55	65	67			
CH	55	65	67	55	65	53	70	95	91	70	95	93
CI	70	95	89	70	95	93	80	75	100	70	75	87
CJ	80	95	89	80	75	91	80	95	98	85	85	96
CK	80	95	98	80	75	98	80	95	42	40	65	22
CL	65	75	62	55	65	44						
CM	80	85	93	65	75	53	75	75	87	75	75	80
CN	40	75	44	65	65	93	65	65	84	65	65	87
CO	65	65	89									
N	15	15	15	13	13	13	10	10	10	9	9	9
MEAN	66.00	77.67	71.60	61.54	70.00	63.15	65.00	74.00	75.70	65.11	72.22	75.67
STD	13.81	18.34	23.72	11.99	11.77	28.59	14.66	11.36	23.43	15.06	15.11	26.86

Tables 18-21 indicate the changes in the means of students' grades, attitudes, and attendance from the first through the second quarter, from the second through the third quarter, and from the third through the fourth quarter for the four classes during the 1987-88 school term.

Table 18 reveals that no positive changes occurred in the students' grades, attitudes, or attendance in the seventh grade level AP science class from the first through the second quarter. However, the third quarter revealed all positive changes, with the most significant change in attendance, 8.48%. There were no positive changes reported during the fourth quarter. A decrease of 4.4% occurred in the students' grades during the fourth quarter.



TABLE 18

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Changes in the Means of Students' Grades, Attitudes, and  
Attendance in the Seventh Grade Level AP Science Class

---

## 1st - 2nd Quarter

Grades	-3.46%
Attitudes	-2.11%
Attendance	-6.89%

## 2nd - 3rd Quarter

Grades	+3.96%
Attitudes	+2.34%
Attendance	+8.48%

## 3rd - 4th Quarter

Grades	-4.47%
Attitudes	-0.04%
Attendance	-0.65%

---

Table 19 reflects a positive change in the grades of the seventh grade level A social studies class from the first through the second quarter; however, negative changes were reported in students' attitudes and attendance.

The third quarter reported gains in two areas, grades and attitudes, with more gain occurring in students' grades. Attendance showed a slight decrease of 0.61%. During the fourth quarter, there were gains in two areas, grades and attendance, with the larger gain in students' attendance. Students' attitudes reflected a slight decrease of 0.35%.

TABLE 19

---

Changes in the Means of Students' Grades, Attitudes, and  
Attendance in the Seventh Grade Level A Social Studies Class

---

## 1st - 2nd Quarter

Grades	+1.26%
Attitudes	-0.29%
Attendance	-1.55%

## 2nd - 3rd Quarter

Grades	+2.39%
Attitudes	+0.43%
Attendance	-0.61%

## 3rd - 4th Quarter

Grades	+0.13%
Attitudes	-0.35%
Attendance	+2.59%

---

As revealed in Table 20, no positive changes were reported in students' grades, attitudes, or attendance in the seventh grade level B social studies class from the first through the second quarter. However, during the third quarter, increases were reported in students' attitudes, and attendance, with the largest increase of 7.14% in students' attitudes. The fourth quarter revealed negative changes in students' grades and attitudes. However, a slight increase of 0.86% was reported in students' attendance.

TABLE 20

---

Changes in the Means of Students' Grades, Attitudes, and Attendance in the Seventh Grade Level B Social Studies Class

---

## 1st - 2nd Quarter

Grades	-3.21%
Attitudes	-8.57%
Attendance	-3.28%

## 2nd - 3rd Quarter

Grades	+5.50%
Attitudes	+7.14%
Attendance	+1.21%

## 3rd - 4th Quarter

Grades	-4.07%
Attitudes	-3.93%
Attendance	+0.86%

---

As indicated in Table 21, there were no positive changes reported in students' grades, attitudes, or attendance in the eighth grade level C social studies class from the first through the second quarter. During the third quarter, positive changes were reported in students' grades, attitudes, and attendance, with attitudes representing the most significant increase of 7.14%. The fourth quarter revealed a slight positive change in one area, students' grades.

TABLE 21

---

Changes in the Means of Students' Grades, Attitudes, and  
Attendance in the Eighth Grade Level C Social Studies Class

---

## 1st - 2nd Quarter

Grades	-4.46%
Attitudes	-7.67%
Attendance	-8.45%

## 2nd - 3rd Quarter

Grades	+3.46%
Attitudes	+4.00%
Attendance	+12.55%

## 3rd - 4th Quarter

Grades	+0.11%
Attitudes	-1.78%
Attendance	-0.03%

---

Table 22 summarizes the changes in the means for students' grades, attitudes, and attendance in the seventh grade level AP science class, the seventh grade level A social studies class, the seventh grade level B social studies class, and the eighth grade level C social studies class at Roosevelt Junior Senior High School during the 1987-88 school term.

As revealed by Table 22, there was only one positive gain of 1.26% in students' grades from the first through the second quarter in the seventh grade level A social studies class. All other classes showed decreases in grades, attitudes, and attendance, with the largest decrease of



8.45% in attendance, recorded in the eighth grade level C social studies class. There were no overall positive changes in the means from the first through the second quarter in students' grades, attitudes, or attendance, with attendance reflecting the largest decrease of 5.07%.

From the second through the third quarter, the seventh grade level AP science class, the seventh grade level B social studies class, and the eighth grade level C social studies class showed positive changes in the means for grades, attitudes, and attendance. The seventh grade level A social studies showed positive changes in the means for grades and attitudes; however, there was a 0.61% decrease in the mean for attendance. There were overall positive changes in the means for grades, attitudes, and attendance from the second through the third quarter. The greatest change in the means of 5.71% was reported in attendance.

From the third through the fourth quarter, the seventh grade level AP science class reported negative change in the means for grades, attitudes, and attendance, while the other three classes recorded mixed changes in the means. The seventh grade level A social studies class showed positive changes in grades and attendance, with a negative change of the mean in attitudes. The seventh grade level B social studies class reported negative changes in grades and attitudes, while reporting a positive change in the mean for attendance. The eighth grade level C social studies class

reflected a positive change in the mean for students' grades, while reflecting negative changes in the means for students' attitudes and attendance. Overall, there were negative changes in the means for students' grades, attitudes, and attendance from the third through the fourth quarter.

TABLE 22

Summary of Changes in the Means of Students' Grades, Attitudes, and Attendance in the Four Classes during the 1987-88 School Term

	7th Grade AP Science	7th Grade A Social Studies	7th Grade B Social Studies	8th Grade C Social Studies	Mean Changes
1st - 2nd Quarter					
Grades	-3.46%	+1.26%	-3.21%	-4.46%	-2.71%
Attitudes	-2.11%	-0.29%	-8.57%	-7.67%	-4.64%
Attendance	-6.89%	-1.55%	-3.28%	-8.45%	-5.07%
2nd - 3rd Quarter					
Grades	+3.96%	+2.39%	+5.50%	+3.46%	+3.83%
Attitudes	+2.34%	+0.43%	+7.14%	+4.00%	+3.48%
Attendance	+8.48%	-0.61%	+1.21%	+12.55%	+5.71%
3rd - 4th Quarter					
Grades	-4.47%	+0.13%	-4.07%	+0.11%	-2.08%
Attitudes	-0.04%	-0.35%	-3.93%	-1.78%	-1.53%
Attendance	-0.65%	+2.59%	+0.86%	-0.03%	-0.69%

### Summary

Chapter 4 presented the results of implementing and assessing a staff development program to address seventh and eighth grade students' diverse learning styles and junior high teachers' varied teaching styles with the intent of improving academic achievement, attitudes, and attendance to class in four selected classes at Roosevelt Junior Senior High School. Based on a review of relevant literature, this study relied on four propositions related to adolescents' learning styles and junior high teachers' teaching styles. First, students in early adolescence include a wide range of needs and learning styles. Second, if students find appropriate instruction and concern for themselves, they will attend class. Third, a planned staff development project to expand the repertoire of teaching styles to accord more closely with students currently enrolled should increase opportunities for success in school. And fourth, a staff development program is more likely to be ongoing if participants are provided opportunities to "buy into" the process through collaborative planning.

This study involved four classes, three seventh grade classes (science AP, social studies A, and social studies B) and one eighth grade class (social studies C). Seventy-nine students participated in the study--56 females and 23 males. Ethnically, there were 52 Black females, 23 Black males, 3 Hispanic females, and 1 White female. The mean age of the

students was 13.6 years--females, 13.8 years and males, 13.4 years.

Academically, the females maintained a higher yearly average in the respective classes than the males. No males failed either of the four classes for the year, but five (12%) females failed for the year.

A five-question pre- and post-Student Attitudinal Survey was administered in April and June, 1988. The results indicated that the majority of the students stated that their classwork was usually interesting; they expected to pass their class; they were usually given assignments of interest to them; they liked coming to their class; and they expected to pass their class for the quarter. Students submitted a wide array of comments and suggestions intended to help teachers provide for students' individual learning needs.

An analysis of students' grades, attitudinal ratings, and attendance to class for the four classes revealed increases in the means during the third quarter of the 1987-88 school term in all three areas, with the largest increase of 12.55 percent reported in attendance by the students in the eighth grade level C social studies class. Mixed results were recorded for the four classes during the fourth quarter in three of the twelve areas for the four classes. Eight decreases in the means and four increases



in the means were reported for the four classes during the fourth quarter.

Chapter 5 will present effects, outgrowths, implications for future studies, recommendations for staff development, and conclusions.

## CHAPTER V

### OVERVIEW, EFFECTS, OUTGROWTHS, RECOMMENDATIONS FOR STAFF DEVELOPMENT, FUTURE IMPLICATIONS, AND CONCLUSIONS

#### Overview

This dissertation documented the process of designing, implementing, and evaluating a staff development program which provided junior high teachers with a repertoire of teaching styles to address the diverse learning styles of their seventh and eighth grade students at Roosevelt Junior Senior High School during the 1987-88 school term with the intent of increasing students' achievement, attitudes, and attendance to class. The study was conceived during the fall of 1984 by the researcher who observed that the failure and retention rates among junior high students at Roosevelt Junior Senior High School was alarmingly high. The researcher was motivated to investigate academic failures and retentions at the junior high level and to develop strategies upon discussing the concerns with students, parents, teachers, and administrators.

The researcher collaboratively designed workshops to help junior high teachers acquire a repertoire of teaching styles and to assist teachers in designing lessons and activities to motivate junior high students to increase their academic achievement, to improve their attitude about school, and to increase their attendance to class. Teachers

were involved in a variety of discussions and activities relating to their teaching and learning styles, ranging from discovering their learning and teaching styles to role-playing students and teachers, utilizing information they had acquired from the five teaching styles and learning styles workshops.

After completing the five workshops, the four voluntary teachers implemented varied teaching strategies into their selected classes, a seventh grade science level AP class, a seventh grade social studies level A class, a seventh grade social studies level B class, and an eighth grade social studies level C class, during the fourth quarter, April-June, 1988. The teachers collected data, students' grades, attitudinal ratings, and attendance to class, for their respective class for four quarters during the 1987-88 school term and reported it to the researcher for comparison and analysis.

The comparison and analysis of students' grades, attitudinal ratings, and attendance to class for four quarters revealed increases during the third quarter, with mixed results in the fourth quarter. Additionally, through shared experiences with the participating teachers, there was an increase in enthusiasm among other teachers and administrators who were interested in implementing programs designed to address the diverse learning styles of students at Roosevelt Junior Senior High School.

This study was designed to equip junior high teachers with a repertoire of teaching styles to address their students' diverse learning styles with the intent of increasing students' grades, attendance to class, and their attitudes about school. Although, no conclusive effects on students' grades, attendance, and attitudes occurred, a longer study employing the same methodology, may produce more conclusive results. More importantly, however, the process of staff development in an urban junior high school might be applied elsewhere using different themes or goals but many of the processes.

The following variables could have possibly affected the outcomes of this study: (a) small number of teachers participating in the study--four Black females; (b) homogeneous grouping of students in each of the four classes; (c) five short workshops to help teachers become more aware of teaching/learning styles; (d) additional attention given to the students by the teachers and the researcher; (e) teachers' higher expectations of the students participating in the study; (f) teachers possibly providing the researcher with expected results; (g) students' awareness of their participating in the study; (h) teachers utilizing varied teaching strategies while the workshops were conducted; (i) teachers utilizing varied teaching strategies after the workshops had concluded; and (j) time of the year the study was implemented (third and



fourth quarters--teachers were preparing students for end-of-year standardized tests and local final examinations immediately after the study ended).

Although changes in students' grades, attendance, and attitudes were not conclusive, there were some interesting effects on teachers, students, and the researcher. Through interviews, observations, discussions, and analysis of data, the researcher reports the effects of the study on the teachers, the students, and the researcher.

### Effects on Teachers

In April and June, 1988, Student Attitudinal Surveys were conducted to provide students more opportunities to express concerns regarding their teachers providing more opportunities for their educational needs to be addressed by various means. Based on the researcher's observations and discussions with the four teachers, there were concerns that the teachers and students shared and there were concerns that were not shared. The following effects are reported regarding teachers responding to the students' concerns.

Forty-two percent (42%) of the students in teacher #3's seventh grade science level AP class expressed a desire to have more projects and experiments in the April, 1988, survey. Eighteen percent (18%) also stated, "She could explain the work more vividly."

The post-Student Attitudinal Survey, June, 1988, revealed that only nine percent (9%) of the students stated that she gave them more experiments. However, twenty-three percent (23%) stated that she explained everything thoroughly. Teacher #3 clarified her instructions, but she did not provide more experiments, as a large percentage of her students had indicated in the April, 1988, survey.

As indicated by the survey results, students expressed a need for more hands-on activities, such as projects, experiments and field trips. She provided some hands-on activities, such as dissecting frogs, using the microscope, and planting seeds, but she felt compelled to complete the required "textbook materials" to prepare students for the state tests, as reflected by her explaining the lessons thoroughly.

Teacher #3 introduced some hands-on activities into her classes as the students had requested, but she taught basically the same, as indicated by thirty-six percent (36%) of her students in the June, 1988, survey.

Thirty-five percent (35%) of the students in the seventh grade social studies level A class (teacher #1) expressed a need to discuss their classwork openly among themselves. Teacher #1 responded to the students' concerns by dividing the class into small groups, thus, providing more opportunities for her students to interact and to share ideas among themselves. Also, in conjunction with teacher

#2, teacher #1's students constructed projects which were displayed at a Social Studies Fair at Roosevelt Junior Senior High School. She is a student-centered teacher who believes that students' suggestions should be incorporated into the learning process.

Based on teacher #1's beliefs that all students can learn if "nurtured" properly and teachers get more from students if they are "kind and gentle," the following concerns were in conflict with her beliefs: "There should be an extra class for slow people," and "She could be meaner." Conversely, teacher #1 praised her students often.

Fourteen percent (14%) of the students in the seventh grade social studies class expressed the following concerns which were in accord with teacher #2's educational goals: "Make the assignments more interesting by showing more films on the subject" and "More fun projects." Teacher #2's students constructed projects which were displayed at a Social Studies Fair. As indicated by the June, 1988, survey results, teacher #2 incorporated all the students' concerns into her teaching methodology.

Seventeen percent (17%) of the students in the eighth grade social studies level C class expressed a need for teacher #4 to explain the work more. Teacher #4 stated that she does not usually explain the lessons from the textbook in the "traditional way." She uses demonstrations, projects, news clippings, field trips, movies, records, and



videos to convey the essence of the written text to her students. As a result of the students' request for more explanations, she began to use the textbook more in class and explained the text more.

Teacher #4 also stated that she viewed herself as the students' friend rather than as their teacher. Students expressed their awareness of her humanistic approaches by the following comments: "She helps me all the time," "She was nice to us," "She laughed with us," and "She made the discussions interesting."

There were concerns that the teachers and students shared and there were concerns that were not shared, as indicated by the results of the April and June, 1988, Student Attitudinal Surveys. The results of the post-Student Attitudinal Survey indicated that most concerns expressed by the students were addressed by the teachers, as indicated by their teaching techniques, their lessons, their activities, and their attitudes.

To further determine the effects of the study on the four participating teachers, in September 1989, the researcher asked the teachers to respond to the following open-ended question: "What effects did the workshops on learning styles/teaching styles and your participating in the study have on you?"



Participant #1, who is still teaching seventh grade social studies at Roosevelt Junior Senior High School, stated:

I think it was just wonderful. Since I attended the workshops, I have tried so many different things in my classes. My students do individual and group projects. We go on field trips that relate to the lessons. We also watch historical movies that relate to the lessons. I give them choices, rather than making all the selections myself.

One great thing I see is that more teachers are sharing ideas with each other.

Participant #2, who is currently teaching ninth and tenth grade social studies at Roosevelt Junior Senior High School, stated:

Actually, I did not make too many changes in the way I was teaching, because my students have always made projects, read newspapers, worked in groups, watched films related to the lessons, and a variety of other things. But, what I found very helpful was knowing each student's learning style so I could design my lessons and activities broad enough to include most learning styles. From time to time I have to use specific examples to make sure all students are included in class discussions. However, when planning for my classes, my lesson plans must be more detailed and provide more options for my students.

I also listen to my students' suggestions, and I provide them more opportunities to participate in open discussions. I also provide a larger portion of time for them to participate in small groups. This seems to work well because the students helped each other do their work. I observed that students who had not done so well in the past have improved their grades as well as their oral participation in the groups.

Participant #3, who still teaches seventh grade science at Roosevelt Junior Senior High School found the workshops helpful," Her fears about following the mandated curriculum made her "hesitant" at first:

I think I changed somewhat in the ways I viewed students' opinions. Now, I ask them what kind of activities or lessons that would be interesting to them. They usually have good suggestions. I have also noticed that when they suggest activities or projects, most of them complete them, where as before they would usually give me excuses for not doing the work.

I feel that at this point I am more aware of different teaching styles, but I often go back to the lecture method that I used before. I know this is not good for all my students because of their reactions. For example, they talk, they sleep or they move around in class. I know I must change my teaching methods more often to incorporate the students' learning styles because these students are not the same as when I was in school. They demand more attention. We believed that the teacher knew what was best for the students. But, times have changed.

Teacher #4, who is currently teaching social studies in the newly developed Alternative School at Roosevelt Junior Senior High School, stated:

I was so excited about trying different things with my students in a constructive way. I have always tried innovative approaches with my students, but I did not have clearly defined goals for all of my students. Basically, I tried different techniques that generated enthusiasm among my students. Maybe, that's why I was always given the students other teachers had problems with. With these students, a teacher can't sit at the desk and read to them. They must be actively involved in the classwork.

I suppose the greatest effect that the study had on me was that I could explain to my co-workers that what I was doing in my classes was not crazy. Often when a teacher is not teaching in the traditional way and many different things are going on in the class--some may be noisy and seem unorganized--other teachers and administrators think you are crazy. I felt good that I could explain to my peers that most of my students learned best in an emotionally charged setting.

Observations, individual and group discussions, and interviews with the four teachers revealed that the teachers' attitudes and teaching styles have changed as a

result of attending workshops and participating in the study on learning styles and teaching styles. Attitudinally, teachers changed in the following ways: 1) acknowledged that students know how they learn best; 2) valued students' opinions and ideas; 3) shared teaching ideas with other teachers; 4) interacted more with other teachers in planning for their classes; and 5) sought assistance more often from other teachers and resource personnel when confronted by difficult situations in their classes.

Teachers changed their teaching styles in the following ways: 1) provided more opportunities for students to participate in open-class discussions; 2) provided students with opportunities to participate in cooperative learning groups; 3) incorporated students' suggestions into the lesson plans; 4) utilized a larger variety of teaching materials; 5) utilized more hands on activities; 6) utilized more electronic teaching aids; and 7) varied teaching techniques, homework assignments, tests, and evaluation procedures.

### Effects on Students

Through observations, interviews, discussions, and evaluations of the students' grades, attendance to class, and attitudinal ratings, the students, the teachers, and the researcher reported the following effects of the study on the participating students. Many students reported that



they felt better about attending class because (a) teachers seemed to care about them more; (b) they made better grades; (c) their teachers praised them more; (d) their teachers provided more options for assignments; (e) students misbehaved less in class; (f) students had more opportunities to work with others in class, and (g) students had more opportunities to express their opinions in class.

The teachers reported that students (a) complained less about being bored in class; (b) worked cooperatively on class assignments; (c) turned in their homework assignments more often; (d) arrived to class on time more often; (e) improved their grades on quizzes and tests; (f) displayed less inappropriate behavior in class; and (g) students offered ideas to make classes more interesting and relevant.

To further determine the effects of the study on the students, the researcher interviewed four students, one from each of the four participating classes, in October, 1989.

A female student from the seventh grade level AP science class--presently a ninth grader--stated:

When I don't understand something in my classes, I am now able to say to my teachers, "I understand best when you use illustrations on the board." I am basically a visual person, so I understand best when I can see what's being discussed in my classes.

A male student from the seventh grade level A social studies class--currently a ninth grade student--revealed:

Since we were in Mrs. X's (name withheld) social studies class in the seventh grade, we have been able to offer suggestions to teachers about different kinds



of projects that would make the classes more fun. The teachers usually listen to what we have to say.

A female student from the seventh grade level B social studies class--presently a ninth grader--stated:

I liked working in the groups when we were in the seventh grade. We had fun doing our work. The class was not so boring because we could talk to our friends when we were doing our work. My grades got better, too.

A male student from the eighth grade level C social studies class--presently a ninth grade repeater--stated:

I liked all the different things we did in Mrs. Y's (name withheld) social studies class in the eighth grade. School did not seem like school, but we still learned a lot. The teacher was nice, but we still did our work, because it was fun. She let us choose things we wanted to do in class.

### Effects on Researcher

Through reading related literature on learning styles and teaching styles, designing and conducting workshops for junior high teachers and new teachers in the District on learning styles and teaching styles, implementing a study on varied teaching strategies to address the diverse learning styles of adolescents, interviewing teachers and students, observing teachers' classes and evaluating the study, the researcher reports the following effects: 1) The trusting relationship between the researcher and the teachers has been reinforced because a greater understanding and appreciation of their roles in the school's culture; 2) The researcher became an "on-site" resource person for the

District to assist teachers in designing lessons to provide more diverse learning opportunities for students; 3) The researcher increased his confidence in teachers' abilities to provide learning environments to address students' social, educational, and emotional needs; 4) The researcher became more tolerant of the high level of "structured noise" in classes where teachers utilized emotionally charged activities to address students' diverse needs; 5) The researcher became more aware of research studies designed to address adolescents' diverse social, educational, and emotional needs; 6) The relationship among Junior high teachers and the researcher became more collegial rather than the traditional hierarchical administrator-teacher pattern; 7) The researcher became a more cooperative planner by soliciting input from parents, students, teachers, and administrators; and 8) The researcher expanded his repertoire of teaching styles through reading, conducting workshops, implementing the study, and observing teachers' classes.

### Outgrowths

As outgrowths of the staff development program on teaching styles and learning styles on the Junior high level at Roosevelt Junior Senior High School during the 1987-88 school term, three new programs, as well as a workshop for first year teachers, were implemented to provide students

more opportunities for their diverse learning styles to be addressed by their teachers. The programs were the following: Pathfinder Program; Modern Languages Tutoring Program; and English as a Second Language (ESL) Peer Assisted Teaching Program.

### Pathfinder Program

The Pathfinder Program, an example of individualized instruction, was conceived by Dr. Sampson, principal of Roosevelt Junior Senior High School, in October, 1988. She had observed that there was a need for a positive school climate at Roosevelt Junior Senior High School if learning were to take place as indicated by her interview in September, 1988. Dr. Sampson expressed the following:

There were too many students in the halls. They had several factors in common: 1) repeaters, 2) a history of negative encounters with school administration, and 3) poor attendance in class.

We needed to make a positive impact to get these students to return to class. Classes seldom offered any motivation to get these kids back into class. Many times these students were 2-3 years chronologically older than their classmates.

Dr. Sampson indicated that she is hoping that by June, 1989, students who are currently in the 7th grade can go directly to the 9th grade based on their performance in the Pathfinder Program. Some 8th graders may earn credit in math, science, and English to be promoted to the 10th grade. However, the students would still be required to pass state exams.



According to the Pathfinder Program's proposal, the program was designed to provide "at risk" students in grades 7-12, who have repeated one or more grades, opportunities to do computer assisted academic work which could be utilized to help them get in their proper grade. Students would utilize the computer room during non-academic time, study hall, lunch, before school, and after school, to complete their academic work. Students must attend their regularly scheduled classes and complete the assigned work in addition to participating in the Pathfinder Program.

#### English as a Second Language (ESL) Peer Assisted Teaching Program

For the past few years, there has been an increasing number of Hispanic students who have enrolled in Roosevelt Junior Senior High School. Many of the students speak very little or no English. Thus, they are placed in an English as a Second Language (ESL) class where they spend the majority of their time interacting only with other Hispanic students, which limits their opportunities to learn English and interact with English speaking students.

Mrs. Cassar, a seventh grade Spanish teacher at Roosevelt Junior Senior High School, and Dr. DeFina, an ESL teacher at Roosevelt Junior Senior High School, conceived the idea for the ESL Peer Assisted Teaching Program, an example of cooperative learning, by reviewing



the need of the students and planning educational strategies for them. Mrs. Cassar provided the researcher with the following description of the ESL Peer Assisted Teaching Program, which was implemented into her seventh grade Spanish class in December, 1988:

The goal of the group is to create a communication's network between Spanish speaking students and English speaking students. The students serve as a resource to each other. The vocabulary is repeated over and over by each student--first in the known language, then in the language that is being learned. Students will test each other, both oral and written.

A variety of teaching strategies was utilized in the ESL Peer Assisted Tutoring Program. Mrs. Cassar utilized one on one, small groups, student-directed groups, and teacher-directed groups, as well as arranged the classroom furniture to accommodate various learning styles, which she attributed to increased interest, improved behavior, and improved self-esteem among her students.

#### Modern Languages Tutoring Program

The Modern Languages Tutoring Program, an example of cooperative learning, designed by Dr. Doll, Project Director, State University at Old Westbury, New York, was implemented in October, 1988, by Mrs. Cassar, Junior high Spanish teacher at Roosevelt Junior Senior High School, and Mrs. Fader, program coordinator and senior high French teacher at Roosevelt Junior Senior high School, in one

seventh grade Spanish class and in one seventh grade French class, respectively.

Dr. Doll stated:

The use of tutors in a collaborative in-classroom effort with instructors is a radical departure from the current practice of having tutors meet privately with students outside of classroom time or of having tutors function as teaching assistants conducting their own classes.

Mrs. Fader's and Mrs. Cassar's seventh grade French and Spanish students participated in the Modern Languages Tutoring Program from October, 1988, to June, 1989. The teachers indicated that their students had improved their attendance to class and their interest in the classwork.

The Pathfinder Program, the English as a Second Language (ESL) Peer Assisted Teaching Program, and the Modern Language Tutoring Program have shown positive results, according to the teachers and administrators involved, such as increased students' attendance to class, positive interactions among students and teachers, increased interest in classwork, improved behavior, and increased self-esteem.

#### Workshop for First Year Teachers

This workshop was not originally planned as a part of the five staff development workshops for junior high teachers at Roosevelt Junior Senior High School, but Dr. Smith, Director of Supporting Services, Roosevelt Public Schools, Roosevelt, New York, saw a need for first year

teachers to receive training in teaching styles/learning styles. The researcher was asked to conduct a workshop on teaching styles/learning styles for first year teachers in the District as a part of their ongoing staff development activities. The workshop was conducted in the Upper Library at Roosevelt Junior Senior High School on December 1, 1988, from 2:45 p.m. to 3:45 p.m.

Objectives. Specific objectives for this workshop were the following:

1. To introduce teaching styles/learning styles by Fischer and Fischer
2. To introduce a Learning Styles Inventory by Dunn and Dunn
3. To generate discussions about teaching styles/learning styles
4. To introduce a researcher designed Teaching Styles Survey
5. To introduce teachers to research relative to teaching styles/learning styles
6. To introduce teachers to teaching styles/learning styles theorists
7. To introduce teachers to various learning styles assessment instruments

The researcher did not design activities to correspond to the objectives because of time constraints. Participants generated discussions on each objective, but objective #4

and #7 generated a disproportionate amount of discussion because the teachers expressed a desire to know their students' learning styles. They believed they could plan their lessons more meaningfully if they were aware of their students' learning styles. The teachers also expressed a desire for more workshops on teaching styles and learning styles because the researcher did not devote enough time on each objective due to the limited amount of time.

Feedback from Workshop Participants. The researcher did not design an assessment form for his presentation of teaching styles/learning styles for first year teachers in the District as a part of their ongoing staff development program. The assessment results were taken from Dr. Smith's evaluative instrument, which was used to assess the effectiveness of first year teachers' workshops.

Of fifteen first year teachers who had attended seven workshops, which were composed of fourteen presentations, four teachers indicated that the teaching styles/learning styles presentation was the most beneficial for them. One teacher stated that teaching styles/learning styles would be beneficial for all professional staff members.



### Recommendations for Staff Development

Staff members who are interested in designing, implementing, and evaluating a low-cost staff development program should build a broad base of support by administering a formal needs assessment to collect information from relevant stakeholders and encouraging feedback about developing plans. Feedback from the needs assessment should assist the staff developer in (a) determining the contents of staff development activities, (b) selecting interested staff members, (c) selecting appropriate topics, (d) determining the format for presentations, (e) determining the time and place, (f) determining the number of staff development activities, and (g) determining the cost.

In order to provide participants with relevant information in staff development activities, the staff developer should (a) utilize current research, (b) utilize district personnel who are experts in their fields, and (c) utilize outside resource personnel who are experts in their fields.

If the staff developer plans to use the results of the staff development activities for publication, he/she should secure permission from participants to use their comments. The staff developer should also secure permission from students' parents or guardians for their participation in the study.

Additionally, the staff developer should share the results of staff development activities with appropriate community and school personnel and solicit feedback to help determine future staff development needs.

Because of the changing demographics of the Roosevelt population, the Roosevelt School District might consider providing as a part of its orientation for new teachers, as well as experienced teachers, an ongoing staff development program to provide teachers with effective teaching strategies and effective managerial strategies which would accord more closely with students' diverse learning styles for improved success in school for teachers and students.

#### Ideas for Conducting Workshops

During the spring of the 1987-88 school term, the researcher conducted five staff development workshops for seventh and eighth grade teachers on teaching styles and learning styles at Roosevelt Junior Senior High School, and in December, 1988, the researcher conducted another workshop on learning styles and teaching styles for first year teachers in the Roosevelt School District. Each workshop was different as to contents, methods of presentation, levels of participation, etc.; yet, the workshops shared many commonalities, defined goals, objectives, and expected outcomes.

The methods of presentation were based on the goals, objectives, and activities of the workshops and the participants' interest and motivation. If the participants did not actively engage in verbal exchanges, as the activity may have required, it became necessary for the researcher to choose optional methods of presentation to accomplish the established goals.

Prospective workshop presenters should be aware that there is not an "only way" to conduct workshops on staff development. For those staff members who are considering conducting staff development workshops, these suggestions are offered:

1. Try to include participants from all subject disciplines in the workshops.
2. Schedule workshops at times which will cause the least amount of inconvenience for participants.
3. Use rooms where there will be few disturbances, for example, not near a gymnasium, a bathroom, or a cafeteria where students enter and exit frequently.
4. Use rooms where the Public Address System can be turned off.
5. Begin each workshop with a warm-up activity.
6. Provide opportunities for participants to become acquainted during the first session.
7. Schedule sufficient time for each workshop to complete goals and objectives.

8. Adhere to the established time for each workshop.
9. Provide as many opportunities as possible for participants to engage in relevant discussions.
10. Value participants' opinions.
11. Make topics as relevant as possible for participants.
12. Use current research to support goals, workshop's objectives, and activities.
13. Encourage participants to share class experiences with other participants.
14. Solicit a recorder for each session.
15. Solicit a "gate keeper" for each session to keep the group on task.
16. Seek immediate feedback from participants regarding workshop's presentations and contents.
17. Share feedback with participants and other staff members.
18. Incorporate participants' suggestions into future workshops.
19. End each session with a brief summary and introduce key points of discussion for the next session.

#### Verification that Teachers Made Changes in their Classes

When staff development workshops are conducted and teachers are expected to make changes in their classes using acquired teaching methodologies, researchers should verify changes through a variety of relatively unobtrusive



measures. The researcher should not "stand guard" over teachers to verify that they made changes in their classes, because the teachers may feel that their integrity is being questioned. However, the researcher may assist teachers in the implementation process so he/she will have "first hand" knowledge of the procedures the teachers utilized in their classes. The researcher used the following means to assure that the teachers made changes in their classes using the methodologies they acquired in the staff development workshops:

1. Reviewed teachers' lesson plans on a regular basis
2. Observed participating classes on a regular basis
3. Interviewed participating teachers
4. Interviewed participating students
5. Conducted a Teaching Styles Survey for participating teachers
6. Conducted a pre- and post-Student Attitudinal Survey for participating students
7. Acquired copies of lessons used in participating classes
8. Reviewed copies of quizzes and tests used in participating classes
9. Documented activities teachers employed in their classes

The degrees of implementation of the acquired teaching methodologies from the staff development workshops varied

from teacher to teacher based on her teaching preference(s) and her ability to address students' concerns as expressed in the Student Attitudinal Surveys, April and June, 1988.

### Implications for Future Studies

Through observations and discussions with students, teachers, parents, and administrators, there is a need to sensitize teachers to the social, emotional, and educational needs of Black students who live in urban settings. To assist with the process of sensitizing teachers to the needs of poor Black urban students, the following studies could be designed and implemented in Roosevelt Junior Senior High School to specifically address the following concerns:

1. Motivating Black, low socioeconomic, urban, junior high students to learn
2. Increasing attendance to class of Black, low socioeconomic, urban, junior high school students
3. Providing teachers with effective teaching skills to address the diverse learning styles of Black, low socioeconomic, urban, junior high students

There is also an emerging need to design staff development activities to provide teachers with varied instructional approaches to accord more closely with the diverse learning styles of the increasing number of immigrants from El Salvador, Jamaica, and Haiti, who are enrolling in Roosevelt's public schools.

### Conclusions

This study was designed to provide Junior high teachers at Roosevelt Junior High School with a repertoire of teaching styles to address the diverse learning styles of seventh and eighth grade students with the intent of improving academic achievement, attitudes about school, and attendance to class. Five staff development workshops were conducted by the researcher from February 1, 1988, to April 4, 1988, for four voluntary Junior high teachers to acquire varied teaching techniques to foster positive changes in their classes, with the intent of increasing students' grades, attendance, and attitudes.

The researcher concluded from this study that the four classes that participated in this staff development project displayed a range of educational needs and learning styles as indicated by the Student Attitudinal Surveys, April and June, 1988, and the Dunn and Dunn Learning Styles Inventory. Therefore, students in early adolescence are at a stage of high variability and changing identity so that seventh and eighth grade students-- whether tracked or not--included a wide range of learning styles.

Instructionally, teachers used different teaching techniques in their classes that they acquired in the staff development workshops and from their fellow teachers, which increased their students' interest in the classwork; increased their students' self-esteem; and increased their



students' social interactions in class as supported by observations of classes, discussions with students and teachers, and by the Student Attitudinal Surveys, April and June, 1988.

The four voluntary teachers enhanced their repertoire of teaching styles from the five staff development workshops and implemented a variety of teaching strategies to accord more closely with the learning styles of their students as evidenced by teachers introducing varied lessons, activities, and projects into their classes, as well as teachers' increased sensitivity to students' needs, which provided increased opportunities for success in school.

Additionally, the researcher became a more cooperative planner by soliciting input from parents, students, teachers, and administrators. The researcher expanded his repertoire of teaching styles through reading, conducting workshops, implementing the study, and observing teachers' classes. Most specifically, this project demonstrated the potential of school-based improvement projects that respond to identified needs. These efforts will be supported by staff time and commitment if viewed as important by administrators and others. The key to successful staff development is not a series of workshops, but fostering a climate that encourages a variety of school improvement efforts to flourish over time.



## APPENDICES

APPENDIX A  
STUDENT QUESTIONNAIRE

ROOSEVELT SCHOOL DISTRICT  
Roosevelt, New York

STUDENT QUESTIONNAIRE

Please respond to the following questions honestly to help your teacher plan appropriate lessons for the class:

1. What can your teacher do to make this class more interesting?

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2. What can your teacher do to help you improve your grades and attendance in this class?

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APPENDIX B  
LEARNING STYLES INVENTORY



ROOSEVELT JR. - SR. HIGH SCHOOL  
Roosevelt, New York

LEARNING STYLES INVENTORY

Date: \_\_\_\_\_

Grade: \_\_\_\_\_

- |   |   |   |
|---|---|---|
| 1. I study when it is quiet.  | N | Y |
| 2. I can block out noise when I work.   | N | Y |
| 3. I like studying with lots of light.  | N | Y |
| 4. I study best when the lights are dim.  | N | Y |
| 5. I concentrate best when I feel warm.   | N | Y |
| 6. I concentrate best when I feel cool.   | N | Y |
| 7. When I study, I like to sit on a soft chair or couch.                                | N | Y |
| 8. I feel sleepy if I do not sit on a hard chair when I study.                          | N | Y |
| 9. I feel good when I do well in school.  | N | Y |
| 10. When I do well in school, grown-ups in my family are proud of me.                   | N | Y |
| 11. Things outside of school are more important to me than my school work.              | N | Y |
| 12. I try to finish all of my work.   | N | Y |
| 13. I hardly ever finish all of my work.  | N | Y |
| 14. I have to be reminded often to do something.  | N | Y |
| 15. I remember to do what I am told.  | N | Y |
| 16. I like to be told exactly what to do.   | N | Y |
| 17. When I really have a lot of studying to do, I like to work alone.                   | N | Y |
| 18. When I really have a lot of studying to do, I like to work with a group of friends. | N | Y |

- |     |  |   |   |
|-----|--|---|---|
| 19. | I like to study with one or two friends.   | N | Y |
| 20. | Sometimes I like to study alone and sometimes with friends.  | N | Y |
| 21. | The things I remember best are the things I read.  | N | Y |
| 22. | I study better when I eat while I study.   | N | Y |
| 23. | I like to eat, drink, or chew--but only after I finish studying.   | N | Y |
| 24. | I often nibble something as I study.   | N | Y |
| 25. | I think best just before lunch.  | N | Y |
| 26. | I remember things best when I study them early in the morning.   | N | Y |
| 27. | I remember things best when I study them in the afternoon.   | N | Y |
| 28. | I hate to go to sleep at night.  | N | Y |
| 29. | I usually start my homework after dinner.  | N | Y |
| 30. | When I study, I often get up to do something (like take a drink, get a cookie, etc.) and then go back to work. | N | Y |
| 31. | When I study, I stay with it until all of my work is finished.   | N | Y |
| 32. | Noise usually keeps me from concentrating.   | N | Y |
| 33. | I can ignore most sound when I study.  | N | Y |
| 34. | At home I usually study under a shaded lamp while the rest of the room is dim.                                 | N | Y |
| 35. | When I study, I put on many lights.  | N | Y |
| 36. | I usually feel more comfortable in cool weather than I do in warm weather.                                     | N | Y |
| 37. | I usually feel more comfortable in warm weather than I do in cool weather.                                     | N | Y |
| 38. | When it's warm outside, I like to go out.  | N | Y |
| 39. | I study best at a table or desk.   | N | Y |

- |     |  |   |   |
|-----|--|---|---|
| 40. | I like to study on carpeting or rugs.  | N | Y |
| 41. | I think my teacher feels good when I do well in school.                      | N | Y |
| 42. | I like making my teacher proud of me.  | N | Y |
| 43. | Nobody really cares if I do well in school.                                  | N | Y |
| 44. | My mother wants me to get good grades.                                       | N | Y |
| 45. | I want to get good grades for me.  | N | Y |
| 46. | I love to learn new things.  | N | Y |
| 47. | I usually finish my homework.  | N | Y |
| 48. | I often forget to do or finish my homework.                                  | N | Y |
| 49. | I have to be reminded often to do something.                                 | N | Y |
| 50. | I keep forgetting to do the things I've been told to do.                     | N | Y |
| 51. | I always do what I promise to do.  | N | Y |
| 52. | I like to be told exactly what to do.  | N | Y |
| 53. | I like to be able to do things my own way.                                   | N | Y |
| 54. | I do better if I know my work is going to be checked.                        | N | Y |
| 55. | When I really have a lot of studying to do, I like to work alone.            | N | Y |
| 56. | When I really have a lot of studying to do, I like to work with friends.     | N | Y |
| 57. | I like adults nearby when I work alone or with a friend.                     | N | Y |
| 58. | The things I like doing best in school I do with a group of friends.         | N | Y |
| 59. | The thing I like doing best in school I do with grown-ups.                   | N | Y |
| 60. | If I have to learn something new, I like to learn about it by playing games. | N | Y |

- |  |   |   |
|--|---|---|
| 61. The things I remember best are the things I hear.  | N | Y |
| 62. I really like people to talk to me.  | N | Y |
| 63. I really like to watch television.   | N | Y |
| 64. I really like to mold things with my hands.  | N | Y |
| 65. I really like to do experiments.   | N | Y |
| 66. I like to eat or drink, or chew while I study.   | N | Y |
| 67. I do not like to eat or drink, or chew while I study.                                      | N | Y |
| 68. I study best near lunchtime.   | N | Y |
| 69. I remember things best when I study them early in the morning.                             | N | Y |
| 70. I remember things best when I study them before dinner.                                    | N | Y |
| 71. If I could go to school anytime during the day, I would choose to go in the early morning. | N | Y |
| 72. When I can, I do my homework in the afternoon.   | N | Y |
| 73. I stay awake for a long time after I get into bed.   | N | Y |
| 74. When I study I stay with it until all my work is finished.                                 | N | Y |
| 75. It's hard for me to sit in one place for a long time.                                      | N | Y |
| 76. I can sit in one place for a long time.  | N | Y |
| 77. Noise bothers me when I am studying.   | N | Y |
| 78. My father wants me to get good grades.   | N | Y |
| 79. There are many things I like doing better than going to school.                            | N | Y |
| 80. I hardly ever finish all my work.  | N | Y |
| 81. I often get tired of doing things and want to start something new.                         | N | Y |



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|------|---|---|---|
| 82.  | I keep my promises most of the time.  | N | Y |
| 83.  | I like to be given choices of how I can do things.  | N | Y |
| 84.  | When I really have a lot of studying to do I like to work with two friends.                 | N | Y |
| 85.  | I like to study by myself.  | N | Y |
| 86.  | Things I like doing best in school, I do with one friend.                                   | N | Y |
| 87.  | The things I like doing best in school, I do with a grown-up.                               | N | Y |
| 88.  | If I have to learn something new, I like to learn about it by having it told to me.         | N | Y |
| 89.  | If I have to learn something new, I like to learn about it by seeing a filmstrip or a film. | N | Y |
| 90.  | The things I remember best are the things I write about.                                    | N | Y |
| 91.  | I really like to draw, color, or trace things.  | N | Y |
| 92.  | I really like to listen to people talk.   | N | Y |
| 93.  | I often nibble on something as I study.   | N | Y |
| 94.  | I feel wide awake after 10:00 in the morning.   | N | Y |
| 95.  | It's hard for me to sit in one place for a long time.                                       | N | Y |
| 96.  | I can sit in one place for a long time.   | N | Y |
| 97.  | I think my teacher wants me to get good grades.   | N | Y |
| 98.  | I like to do things in my own way.  | N | Y |
| 99.  | I really like to build things.  | N | Y |
| 100. | I can work best for short amounts of time with rest periods.                                | N | Y |

## APPENDIX C

COMPILATION OF STUDENTS' LEARNING STYLES IN THE SEVENTH  
GRADE LEVEL AP SCIENCE CLASS, THE SEVENTH GRADE  
LEVEL A SOCIAL STUDIES CLASS, THE SEVENTH GRADE  
LEVEL B SOCIAL STUDIES CLASS, AND THE EIGHTH  
GRADE LEVEL C SOCIAL STUDIES CLASS

Compilation of Students' Learning Styles in the Seventh Grade  
Level AP Science Class, the Seventh Grade Level A Social  
Studies Class, the Seventh Grade Level B Social Studies Class,  
and the Eighth Grade Level C Social Studies Class

	7th Grade AP Science N = 22		7th Grade A Social Studies N = 23		7th Grade B Social Studies N = 14		8th Grade C Social Studies N = 10	
	% NO	% YES	% NO	% YES	% NO	% YES	% NO	% YES
LEARNING CONDITIONS								
I study when it is quiet.	45	55	22	78	29	71	20	80
I can block out noise when I study.	64	36	39	61	50	50	40	60
I like studying with lots of light.	64	36	57	43	43	57	30	70
I study best when the lights are dim.	50	50	52	48	50	50	70	30
I concentrate best when I feel warm.	41	59	39	61	29	71	20	80
I concentrate best when I feel cool.	55	45	52	48	86	14	60	40
When I study, I like to sit on a soft chair or couch.	36	64	17	83	14	86	0	100
I feel sleepy if I do not sit on a hard chair when I study.	73	27	52	48	71	29	90	10
I feel good when I do well in school.	9	91	4	96	0	100	10	90
When I do well in school, grown-ups in my family are proud of me.	9	91	13	87	0	100	20	80
Things outside of school are more important to me than my school work.	64	36	87	13	86	14	90	10

## LEARNING CONDITIONS

	% NO	% YES	% NO	% YES	% NO	% YES	% NO	% YES
I try to finish all of my work.	23	77	9	91	7	93	10	90
I hardly ever finish all of my work.	59	41	70	30	57	43	60	40
I have to be reminded often to do something.	68	32	61	39	43	57	60	40
I remember to do what I am told.	32	68	39	61	21	79	40	60
I like to be told exactly what to do.	36	64	30	70	50	50	10	90
When I really have a lot of studying to do, I like to work alone.	32	68	22	78	21	79	30	70
When I really have a lot of studying to do, I like to work with a group of friends.	55	45	61	39	64	36	60	40
I like to study with one or two friends.	55	45	30	70	29	71	30	70
Sometimes I like to study alone and sometimes with friends.	27	43	26	74	14	86	20	80
The things I remember best are the things I read.	41	59	30	70	14	86	60	40
I study better when I eat while I study.	50	50	39	61	29	71	60	40
I like to eat, drink, or chew--but only after I finish studying.	64	36	57	43	79	21	70	30
I often nibble something as I study.	32	68	22	78	29	71	30	70
I think best just before lunch.	77	23	70	30	79	21	80	20
I remember things best when I study them early in the morning.	55	45	70	30	79	21	90	10
I remember things best when I study them in the afternoon.	32	68	43	57	36	64	50	50
I hate to go to sleep at night.	55	45	70	30	71	29	70	30
I usually start my homework after dinner.	59	41	83	17	50	50	50	50



## LEARNING CONDITIONS

When I study, I often get up to do something (like take a drink, get a cookie, etc.) and then go back to work.	% NO	% YES	% NO	% YES	% NO	% YES	% NO	% YES
	18	82	17	83	14	86	20	80
When I study, I stay with it until all of my work is finished.	82	18	39	61	71	29	70	30
Noise usually keeps me from concentrating.	32	68	35	65	29	71	40	60
I can ignore most sound when I study.	64	36	26	74	50	50	30	70
At home I usually study under a shaded lamp while the rest of the room is dim.	64	36	52	48	71	29	80	20
When I study, I put on many lights.	64	36	52	48	64	36	50	50
I usually feel more comfortable in cool weather than I do in warm weather.	45	55	65	35	64	36	40	60
I usually feel more comfortable in warm weather than I do in cool weather.	27	73	39	61	21	79	30	70
When it's warm outside, I like to go out.	18	82	13	87	21	79	20	80
I study best at a table or desk.	50	50	22	78	50	50	70	30
I like to study on carpeting or rugs.	41	59	61	39	36	64	30	70
I think my teacher feels good when I do well in school.	23	77	26	74	7	93	20	80
I like making my teacher proud of me.	36	64	30	70	29	71	30	70
Nobody really cares if I do well in school.	55	45	48	52	79	21	20	80
My mother wants me to get good grades.	9	91	26	74	0	100	0	100
I want to get good grades for me.	5	95	4	96	0	100	0	100
I love to learn new things.	23	77	9	91	14	86	10	90
I usually finish my homework.	23	77	22	78	14	86	30	70

## LEARNING CONDITIONS

	% NO	% YES	% NO	% YES	% NO	% YES	% NO	% YES
I often forget to do or finish my homework.	55	45	65	35	50	50	60	40
I have to be reminded often to do something.	50	50	52	48	57	43	80	20
I keep forgetting to do the things I've been told to do.	68	32	70	30	43	57	70	30
I always do what I promise to do.	36	64	13	87	50	50	30	70
I like to be told exactly what to do.	41	59	39	61	43	57	30	70
I like to be able to do things my own way.	32	68	26	74	29	71	20	80
I do better if I know my work is going to be checked.	45	55	17	83	14	86	0	100
When I really have a lot of studying to do, I like to work alone.	41	59	26	74	29	71	30	70
When I really have a lot of studying to do, I like to work with friends.	45	55	57	43	57	43	40	60
I like adults nearby when I work alone or with a friend.	45	55	48	52	64	36	60	40
The things I like doing best in school I do with a group of friends.	32	68	26	74	14	86	50	50
The thing I like doing best in school I do with grown-ups.	95	5	78	22	79	21	10	90
If I have to learn something new, I like to learn about it by playing games.	45	55	43	57	43	57	70	30
The things I remember best are the things I hear.	36	64	26	74	50	50	70	30
I really like people to talk to me.	27	73	13	87	29	71	50	50
I really like to watch television.	23	77	13	87	21	79	20	80
I really like to mold things with my hands.	50	50	43	57	57	43	50	50

## LEARNING CONDITIONS

	% NO	% YES	% NO	% YES	% NO	% YES	% NO	% YES
I really like to do experiments.	9	91	17	83	14	86	20	80
I like to eat or drink, or chew while I study.	32	68	30	70	29	71	40	60
I do not like to eat or drink, or chew while I study.	59	41	61	39	50	50	50	50
I study best near lunchtime.	86	14	65	35	71	29	80	20
I remember things best when I study them early in the morning.	59	41	57	43	71	29	60	40
I remember things best when I study them before dinner.	55	45	43	57	50	50	60	40
If I could go to school anytime during the day, I would choose to go in the early morning.	50	50	65	35	57	43	50	50
When I can, I do my homework in the afternoon.	27	73	22	78	21	79	30	70
I stay awake for a long time after I get into bed.	50	50	52	48	71	29	50	50
When I study, I stay with it until all my work is finished.	64	36	52	48	43	57	70	30
It's hard for me to sit in one place for a long time.	23	77	43	57	36	64	40	60
I can sit in one place for a long time.	68	32	61	39	86	14	80	20
Noise bothers me when I am studying.	36	64	43	57	21	79	50	50
My father wants me to get good grades.	23	77	35	65	7	93	50	50
There are many things I like doing better than going to school.	27	73	39	61	29	71	50	50
I hardly ever finish all my work.	45	55	57	43	57	43	70	30

## LEARNING CONDITIONS

	% NO	% YES	% NO	% YES	% NO	% YES	% NO	% YES
I often get tired of doing things and want to start something new.	32	68	17	83	7	93	30	70
I keep my promises most of the time.	27	73	43	57	57	43	30	70
I like to be given choices of how I can do things.	23	77	26	74	14	86	40	60
When I really have a lot of studying to do, I like to work with two friends.	45	55	61	39	64	36	60	40
I like to study by myself.	27	73	26	74	14	86	40	60
Things I like doing best in school, I do with one friend.	59	41	30	70	64	36	70	30
The things I like doing best in school, I do with a group-up.	86	14	83	17	57	43	70	30
If I have to learn something new, I like to learn about it by having it told to me.	41	59	30	70	43	57	60	40
If I have to learn something new, I like to learn about it by seeing a filmstrip or a film.	18	82	35	65	21	79	80	20
The things I remember best are the things I write about.	59	41	26	74	43	57	40	60
I really like to draw, color, or trace things.	32	68	26	74	21	79	40	60
I really like to listen to people talk.	50	50	39	61	36	64	40	60
I often nibble on something as I study.	36	64	13	87	21	79	40	60
I feel wide awake after 10:00 in the morning.	32	68	43	57	21	79	40	60
It's hard for me to sit in one place for a long time.	41	59	52	48	36	64	40	60



## LEARNING CONDITIONS

	% NO	% YES	% NO	% YES	% NO	% YES	% NO	% YES	% NO	% YES
I can sit in one place for a long time.	64	36	35	65	79	21	80	20		
I think my teacher wants me to get good grades.	9	91	13	87	0	100	20	80		
I like to do things in my own way.	14	86	26	74	29	71	50	50		
I really like to build things.	41	59	26	74	21	79	40	60		
I can work best for short amounts of time with rest periods.	23	77	22	78	43	57	80	20		

APPENDIX D  
CONSENT FORM

ROOSEVELT PUBLIC SCHOOLS  
Roosevelt, New York

CONSENT FORM

Dear Colleague:

I am a doctoral student at the University of Massachusetts. Your professional judgment is needed to help formulate a staff development program which addresses teaching styles and learning styles at the junior high level.

Participation in this project will involve:  
1) completing a teaching styles survey, 2) participating in workshops, 3) sharing opinions, and 4) completing evaluation forms. Individual evaluation and survey forms will be reviewed and results will be shared with participants. The summarized survey data will be included in my dissertation. Your name will not be used in my dissertation. Statements made by workshop participants may be quoted in the dissertation. Written permission to quote an individual workshop participant will be obtained if necessary.

Participation in this project is voluntary and you may withdraw at any time. Any questions regarding staff development will be welcome.

Thanking you in advance for your support.

Sincerely,

Roy R. Taylor

-----  
Please sign below if you intend to be a voluntary participant in this project.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

APPENDIX E  
TEACHING STYLES SURVEY



## TEACHING STYLES SURVEY

SCHOOL: \_\_\_\_\_

SUBJECT TAUGHT: \_\_\_\_\_

DATE: \_\_\_\_\_

Dear Colleague:

Your professional judgment is needed to survey teaching styles and learning styles at the Junior high level. For purposes of this survey, teaching styles and learning styles will be explored.

Participation in this survey is voluntary. Individual surveys will be reviewed, results will be summarized, and shared with survey participants. The summarized data will be used for a study at the University of Massachusetts; therefore, names should not be included to protect confidentiality.

Thank you for your participation.

Roy R. Taylor

Please circle your response.

- |   |                                   |
|---|-----------------------------------|
| 1. I plan my lessons equal concern for students and curricular objectives.                | Always Frequently Sometimes Never |
| 2. I provide an atmosphere that allows my students to pursue activities that interest me. | Always Frequently Sometimes Never |
| 3. I plan my class activities with student input.   | Always Frequently Sometimes Never |
| 4. I demand that my students perform academically at a specific level.                    | Always Frequently Sometimes Never |

- |  |                                   |
|--|-----------------------------------|
| 5. I must finish teaching the textbook in order to meet curricular requirements. | Always Frequently Sometimes Never |
| 6. I prescribe materials for a student to learn based on his/her learning style. | Always Frequently Sometimes Never |
| 7. I become emotionally involved in my teaching.                                 | Always Frequently Sometimes Never |
| 8. I use different techniques to involve all activities.                         | Always Frequently Sometimes Never |
| 9. My students ask questions for clarification.                                  | Always Frequently Sometimes Never |
| 10. My students complain of boredom.   | Always Frequently Sometimes Never |
| 11. My students complete their homework assignments.                             | Always Frequently Sometimes Never |
| 12. I rephrase questions or statements when my students do not understand.       | Always Frequently Sometimes Never |
| 13. I use the same materials with all students.                                  | Always Frequently Sometimes Never |
| 14. Individualization enables me to involve more students in class.              | Always Frequently Sometimes Never |

15. I would attend workshops that would provide me with a variety of teaching techniques.
- | Yes | No |
|-----|----|
|-----|----|

16. If yes, please list topics about which you would like additional information.

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Comments: \_\_\_\_\_

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APPENDIX F  
GRADE REPORT



ROOSEVELT SCHOOL DISTRICT  
Roosevelt, New York

GRADE REPORT

Explanation of Marks

SUBJECTS

90 and above -- Excellent

80 - 89 -- Good

70 - 79 -- Fair

65 - 69 -- Poor

64 and below -- Failing

ATTITUDE

A -- Excellent

B -- Very Good

C -- Satisfactory

D -- Needs Improvement

F -- Unsatisfactory

APPENDIX G  
PRE-STUDENT ATTITUDINAL SURVEY

ROOSEVELT/UMASS STAFF DEVELOPMENT  
Roosevelt, New York

PRE-STUDENT ATTITUDINAL SURVEY  
April, 1988

Date: \_\_\_\_\_

Grade: \_\_\_\_\_

Dear Students,

Please answer the following questions so we may make learning more pleasant for you.

1. Is the classwork usually interesting? \_\_\_\_\_
2. Do you expect to pass this class this quarter? \_\_\_\_\_
3. Are you usually given assignments that are of interest only to you? \_\_\_\_\_
4. Do you like coming to this class? \_\_\_\_\_ If no, why not? \_\_\_\_\_  
\_\_\_\_\_
5. What could the teacher do differently that would help you improve your learning in this class? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX H  
POST-STUDENT ATTITUDINAL SURVEY



ROOSEVELT/UMASS STAFF DEVELOPMENT  
Roosevelt, New York

POST-STUDENT ATTITUDINAL SURVEY  
JUNE, 1988

Date: \_\_\_\_\_

Grade: \_\_\_\_\_

Dear Students,

Please answer the following questions so we may make learning more pleasant for you.

1. Is the classwork usually interesting? \_\_\_\_\_
2. Do you expect to pass this class this quarter? \_\_\_\_\_
3. Are you usually given assignments that are of interest only to you? \_\_\_\_\_
4. Do you like coming to this class? \_\_\_\_\_ If no, why not? \_\_\_\_\_  
\_\_\_\_\_
5. What did your teacher do differently that helped you improve your learning in this class this quarter? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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