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A CRITICAL EXAMINATION OF THE ATTENDANCE RATES AND GRADE POINT AVERAGES OF STUDENTS FROM DIFFERING SOCIOGEOGRAPHIC AREAS PRIOR TO AND AFTER THE IMPLEMENTATION OF A HIGH SCHOOL ATTENDANCE POLICY presented by

Blanche E. Fraser

has been accepted towards fulfillment of the requirements for

Ph.D. degree in <u>Administrat</u>ion and Curriculum

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DIFFERING SOCIOGEOGRAPHIC AREAS PRIOR TO

AND AFTER THE IMPLEMENTATION OF A

HIGH SCHOOL ATTENDANCE POLICY

bу

Blanche E. Fraser

A DISSERTATION

Submitted to
Michigan State University
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Department of Administration and Curriculum

ABSTRACT

A CRITICAL EXAMINATION OF THE ATTENDANCE RATES
AND GRADE POINT AVERAGES OF STUDENTS FROM
DIFFERING SOCIOGEOGRAPHIC AREAS PRIOR TO
AND AFTER THE IMPLEMENTATION OF A
HIGH SCHOOL ATTENDANCE POLICY

By

Blanche E. Fraser

The development and implementation of attendance policies have been a frequent response of secondary administrators and faculties to the problem of excessive absenteeism among high school students. While research suggests that such policies can be effective in reducing student absenteeism, there is limited knowledge of the total impact these policies have on students and whether some students are affected differently by attendance policies.

Northwest High School in Jackson, Michigan, implemented an attendance policy in 1979 designed to curb high absenteeism among its students. This research analyzed the attendance rates and cumulative grade point averages of graduates of the classes of 1976 through 1982. Nine zip codes are represented in the Northwest School District. U.S. Census data indicated differences in the socioeconomic status of these zip code areas.

Using the data obtained from students' permanent record cards, the mean attendance rates and the mean grade point averages were computed for the aggregate, the males and the females for each graduating class, and each zip code area. The data were plotted on polygraphs and presented in charts.

Comments of the Comments of th

This research concluded that changes in attendance rates and grade point averages occurred following the implementation of the attendance policy. Mean attendance rates which had been on the decline prior to the attendance policy improved for the subsequent graduating classes. Mean grade point averages initially declined after the implementation of the policy. By the class of 1982, former levels were basically regained.

Variances were found to exist among the sociogeographic areas. Graduates from Jackson 49201, the highest socioeconomic group, ranked highest in mean attendance rates and mean grade point averages prior to and after implementation of the attendance policy. The data indicated that no significant changes occurred among the rankings of those zip codes registering the lowest attendance rates and grade point averages prior to and following the implementation of the attendance policy.

Of the graduating classes studied, females had consistently lower attendance rates and higher grade point averages than the males. Both sexes demonstrated comparable improvement in their attendance rates, but female grade point averages showed slightly more improvement.

DEDICATION

To my husband, Mike,
for his understanding of the
inherent sacrifices and rewards
of this endeavor

ACKNOWLEDGEMENTS

Throughout the development of this dissertation, I was fortunate to have the support, encouragement, and assistance from my academic, professional, and family circles, deriving benefits from their independent and collective contributions.

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A final acknowledgement goes to my family whose influences contributed to this accomplishment. I extend a special thank you to my father and mother, Stanley and Vivian Fraser, for their love and support, and to my daughters, Sara and Lauren, for helping me keep things in perspective.

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CHAPTER I

THE PROBLEM

Since 1973, high school principals in annual surveys conducted by the National Association of Secondary School Principals have named student absenteeism as the biggest problem facing them. Principals consider student absenteeism as one of the biggest deterents to their handling of their job responsibilities.

On an average day, more than 10% of students enrolled in the nation's public schools are absent. National health officials estimate a normal rate of student absence due to illness to be approximately four to five percent per year. Although student absenteeism is viewed as one of the major problems facing secondary education, a 1975 monograph published by the NASSP reported that few studies dealing with this problem had been conducted.

It is generally accepted that students with good attendance obtain the maximum benefits from the educational program. Students who attend

Jack L. Brimm, John Forgety, and Kenneth Sadler, "Student Absenteeism: A Survey Report," NASSP Bulletin 62 (February 1978): 65-69.

²Rena M. McDowell and Elaine J. Price, "Statistics of Public Elementary and Secondary School Systems," National Center for Education Statistics, U. S. Department of Education (Fall 1979): 21..

³Scott Thomson and David Standard, "Student Attendance and Absenteeism," <u>The Practioner</u> 1 (National Association of Secondary School Principals, March 1975): 1-12.

⁴Ibid, 5.

regularly are thought to achieve higher grades, to enjoy school more, and to be more employable after leaving high school.⁵

In addressing the issue of schooling and achievement, Annegret Harnischfeger and David Wiley state.

It is obvious that if a child does not go to school at all, he will not directly benefit from schooling. If a child goes to school every day, he will achieve his maximum benefit from that schooling, other circumstances being equal. It would also seem clear that if he attends school less than a full year, but more than not at all, the benefits derived from schooling should be in between. That is, the amount of schooling should be a major determination of school outcomes.⁶

In an effort to encourage better attendance patterns from their students, many secondary schools have developed and instituted restrictive and punitive attendance policies. Typically, such policies specify the number of absences students may not exceed without jeopardizing their grades and/or credits. While research suggests that such policies can be effective tools in reducing student absenteeism, there is inadequate knowledge of the total impact these policies are having on the daily performance of students. 7

Background

The Northwest School District of Jackson, Michigan, is a rural-suburban school system covering an area of 143 square miles. Nine zip code areas and portions of two counties, Jackson and Ingham, are

⁵Robert L. Carruthers, J., "An Attendance Policy that Works," NASSP Bulletin 64 (December 1980): 117-118.

⁶Annegret Harnischfeger and David E. Wiley, "Schooling Cutbacks and Achievement Declines: Can We Afford Them?" <u>Administrator's Notebook</u> 24 (September 1975): 1-4.

William W. Brokowski and Richard A. Dempsey, "Attendance Policies and Student Performance," <u>Clearinghouse</u> 53 (November 1979): 129-130.

represented in the district, indicating geographically a widely dispersed population. U. S. Census Bureau data indicate differences in the socio-economic make up of the nine zip code areas (see Table 1).

The district was formed in 1954 when 16 primary school districts reorganized to form the Northwest Rural Agricultural School System. At that time enrollment in greades one through eight was 1129 students. By 1959 the high school included classes through the twelfth grade.

In the past the district was known as a rural agricultural area. Over the years, however, suburban residential areas have developed, particularly in the southern portion of the district. It is this area which now provides the largest concentration of the district's students and population.

Most of the residents work in the Jackson area with the Consumers' Power Company being the largest employer in the district. There is no major municipality located within the school district. Therefore, the school system serves as a primary unifying element in the area.

In January, 1979, Northwest High School in Jackson, Michigan, implemented a 10 day attendance policy. (A copy of this policy appears in Appendix A.) Simply stated, students exceeding 10 absences in a semester jeopardize the credits in their classes. This attendance policy, sanctioned by the Northwest Board of Education, was the result of a joint effort by the high school administration and faculty to address and rectify the problem of high absenteeism among its students.

The absentee rate for the 1977-78 school year averaged 10.5%.

This high rate of absenteeism was reflected in such problems as lack of student self-discipline, lowering of student morale, since many students received the same number of credits for far less time in

class and a neglect of student responsibility to contribute to their classes.

Teachers felt their efficiency was lowered by the necessity to repeat the explanation of subject matter for returning absentees. Their frustration was increasing since many types of classroom work, such as lectures, films, panels, and class discussions could not be made up. The effectiveness of the examination as a learning instrument was lessened since results often could not be discussed until absentees had made up the test. It was also a faculty conclusion that the high rate of student absenteeism at Northwest High School had lowered educational standards, as work tended to be geared to the rate of absenteeism.

These problems identified by the Northwest High School faculty parallel the negative results of poor attendance listed by 1,414 American Association of School Administration (AASA) members, most of them superintendents, who responded to the organization's critical issues survey in 1979. They named permanent intellectual and/or vocational damage to students, overall lowering of academic standards and achievement in the school, frustration and moral problems experienced by teachers, poor impression of the school by the community, increased paperwork and record keeping for teachers and administrators, vandalism and petty crime caused by truants, and reduced state aid computed on the basis of average daily attendance. 8

The attendance policy that was developed by administration and faculty of Northwest High School and implemented in January, 1979, was

⁸ "Keeping Students in School, Problems and Solutions," <u>AASA Criti</u>cal Issues Report, Shirley Boes Neill (Ed.) (1979): 1-77.

based upon the premise that there is a positive relationship between attendance and success in school, that the formulation of good attendance patterns is necessary in order to prepare students for the world of work, and that the responsibility for attendance needs to be placed more directly on the student.

This attendance policy has been in effect for four years. The yearly average attendance rate has been increased from 89.5% to 94.5%. This represents a 52% improvement in Northwest High School's attendance rate. A graph depicting the improvement is found in Appendix B. It is clearly evident that the attendance policy has been successful in reducing student absenteeism at Northwest High School.

Purposes of the Study

The first purpose of this study is to determine whether student achievement at Northwest High School has changed since the implementation of the school's attendance policy. A second purpose of this study is to determine if students from the differing socio-geographic areas within the Northwest School District were impacted differently by the attendance policy with respect to achievement and attendance rates. A third purpose is to compare the attendance rate and the academic averages of seven graduating classes, 1976 through 1982. The fourth purpose of the study is to determine if differences in attendance and achievement exist between male and female students in these seven graduating classes and which group may have been impacted more by the attendance policy.

6

Need for the Study

The development and implementation of attendance policies has been a relatively recent response by secondary schools to the problem of high school absenteeism. Research has demonstrated a positive correlation between school attendance and academic achievement. But the question of whether a school policy that mandates good attendance has a positive impact on student grades has not been adequately addressed.

The studies which have been conducted on the effectiveness of attendance policies in reducing student absenteeism produced data relative to average absentee rates for entire high school student bodies. Such studies have also only examined a relatively short span of time, generally not more than one year beyond the implementation of the attendance policy. 10

The question of whether the attendance of all or only some students improves as the result of an attendance policy and the longitudinal effects of such a policy needs further research.

Research Questions

The following questions will be addressed by this study:

1. Have there been any changes in the cumulative grade point averages of Northwest High School graduates following the implementation of an attendance policy?

⁹William Walter Brokowski, "A Comparison of Secondary School Student Performance in Attendance Achievement and Related Variables Prior to and During a Restrictive and Punitive Administrative Control Policy for Attendance" (Ph.D. dissertation, The University of Connecticut, 1973.

¹⁰Lee Clark Malbon, "A Multivariate Model to Predict Changes in Student Behavior and Achievement Attributable to a Set of Attendance Policy Practices for Secondary Students" (Ph.D. dissertation, Boston College, 1979).

- 2. Do attendance rates and cumulative grade point averages of students from the various socio-geographic areas in the Northwest School District vary prior to and following implementation of the attendance policy.
- 3. Have male or female students shown any or more improvement in attendance rates and cumulative grade point averages since the implementation of the attendance policy?

Assumptions and Limitations of the Study

The validity of this study is affected by the following factors:

- 1. The study assumes that cumulative grade point average is a measure of student academic achievement.
- 2. This study assumes socio-economic differences exist between some of the zip code areas within the Northwest School District as determined from 1970 U. S. Census data.
- This study is limited to a single, selected high school.
- 4. Because the researcher was the administrator charged with the responsibility of enforcing the attendance policy for two and a half years, the results of this study have been affected.
- 5. Since this study is not experimental in nature, but rather a critical examination, it will seek to describe differences that existed before and after the implementation of the Northwest High School attendance policy. It will not attempt to present cause and effect relationships.

Definition of Terms

<u>Absence</u>

Missing school for an entire day. No differentiation will be made between absences considered to be excusable by the school and those not considered excusable. 11

¹¹ Joseph Lwanto, "High School Absenteeism," NASSP Bulletin 59 (October 1975): 100-104.

Absenteeism

The chronic absence of students from school.

Achievement

For the purposes of this study, achievement will be measured by the cumulative grade point averages earned by students.

Attendance Policy

A set of governing principles that establish standards for acceptable student attendance and outline the consequences of excessive absence. The basic intent of an attendance policy is to improve student attendance.

Attendance Rate

The percentage of days a student is in attendance out of a 180 day school year.

Grade Point Average

Using a 0.0 to 4.0 scale, the grade point average is the cumulative, numerical average of all grades earned by a graduate of Northwest High School.

High School

A high school is an educational organization with grades 9-12 or 10-12. Northwest High School is a three grade high school--grades 10-12.

Socio-Geographic Area

For the purposes of this study, socio-geographic area refers to a zip code area within the Northwest School District which differs

from the other zip code areas in the school district in terms of mean family income and median value of owner-occupied housing units.

Review of Related Literature

The literature reviewed for this study will address the following five topics:

- 1. the problem of student absenteeism;
- 2. the attendance policy as an administrative response to student absenteeism;
- the relationship of absenteeism and achievement/grades;
- 4. the relationship of socio-economic status and/or geographic factors, absenteeism, and achievement/ grades; and
- 5. attendance policies and student achievement/grades.

Procedures

The Population

The population with which the study will be concerned will consist of the seven graduating classes of Northwest High School from 1976 to and including 1982.

General Procedures

For each graduating class, students will be grouped according to the zip codes found on the mailing labels on their permanent record cards. From the information on the permanent record cards, the cumulative grade point mean of the students in each zip code group will be calculated. Also, for each group, the average attendance rate for each student will be computed, then averaged together to yield an attendance rate mean for each zip code group.

The attendance rate mean and the cumulative grade point mean will be computed for males and females by zip code group for each graduating class.

Treatment of the Data

The various attendance rates and grade point means will be plotted on polygraphs.

Overview

This research is an attempt to determine if a high school attendance policy which has demonstrated success in improving student attendance has had an effect on the achievement of students and whether or not the attendance rate and achievement of some students has been more affected than others. The study is limited to Northwest High School in Jackson, Michigan.

Chapter II contains a review of the literature pertinent to the study. The research design and the procedures used to collect the data are found in Chapter III. In Chapter IV the data from the study are presented and analyzed.

The conclusions of the study are presented in Chapter V in addition to implications and suggestions for additional research.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter reviews the literature as it pertains to the issues examined in this research. For each issue, the review of the literature was structured to answer related questions.

Regarding the problem of student absenteeism, what is the incidence of student absenteeism? Who is absent and why? What are the solutions to the student absenteeism problem?

The attendance policy has become a common administrative response to student absenteeism. Why and how have they developed? Are they effective tools in reducing student absenteeism?

With regard to the relationship of absenteeism and achievement/ grades, two questions emerged. What is the relationship of absenteeism and achievement/grades? Is the use of grade point average as indicator of secondary student achievement an accepted research practice and commonly used in the literature?

One aspect of this research is the impact of socioeconomic studies and/or geographic functions on attendance rates and achievement. The question becomes, what is the relationship of socio-economic statuses and geographic factors on attendance rates and achievement?

Lastly, with regard to the issue of the attendance policy and student achievement/grades, how have policies impacted the daily performance of students? Do attendance policies improve achievement?

The Problem of Student Absenteeism

Student absenteeism is viewed as a major problem in many schools and school systems. On an average day, 4.2 million students, or 10% of those enrolled in the nation's public schools, are absent from school.

Given a 180 day school year, health officials estimate that a "normal" rate of pupil absence due to illness would be seven to nine days for each student. This translates into an absence rate of four to five percent a year. Less than one percent of the student enrollment would exceed this rate because of long-term illness. Today, however, absentee rates of 10 to 15% are not uncommon with the rate exceeding 30% in some urban schools.²

Accurate statistics on high school student absenteeism are difficult to find. Students attempt to protect themselves from the negative consequences of being marked absent for the entire day. Practicing administrators find that if the school does not have an effective method for determining when students cut classes, a student may attend his/her first period class--so as not to be considered absent for the day--then cut some or all of the remaining classes.

^{1&}quot;Statistics of Public Elementary and Secondary School Systems,"
National Center for Educational Statistics, U. S. Department of Education, Rena M. McDowell and Elaine J. Prince (Eds.) (Fall 1979): 21.

²Thomson and Stanard, 1975, p. 1.

³Beatrice F. Birman and Gary Natriello, "Perspectives in Absenteeism--High Schools," <u>Journal of Research and Development in Education</u> 11 (1978): 29-38.

Few states or school districts employ the same method for taking attendance counts of students. AASA contends that many do not count absentees on a daily basis. Some take and report an official absentee rate based on a headcount of only one or two days in a reporting period. Some schools only count unexcused absences.⁴

Finally, in order to protect a school's resources which may be based on average attendance rates, school records may exaggerate student attendance. 5

In spite of the possible overestimates of school attendance figures, rates of absenteeism are on the rise. Responding to an Equality of Educational Opportunity Survey in 1965, 12% of the 517 high school principals reported average attendance rates of 90% or lower. The same survey conducted a 1970 revealed that 36% of the principals reported average attendance figures of 89% or below.

In 1979 it was estimated, based upon 1975-76 school year data, that approximately 3.5 million students or eight percent of the students enrolled in public schools were absent. Today, based upon 1979-80 school year data, average daily absenteeism has risen from eight to ten percent, a 20% gain.

⁴AASA, 1979, p. 11.

⁵Birman and Natriello, 1978, p. 30.

⁶Birman and Natriello, 1978, p. 30.

⁷Birman and Natriello, 1978, p. 30.

⁸Educational Research Service Report, "Student Absenteeism" (Arlington, VA: ERS, Inc., 1977): 1-52.

⁹Statistics for Public School Systems, 1979, p. 21.

The phenomenon of school absenteeism is not new, but the perception of it as a major problem is a relatively recent development.

Beatrice F. Birman and Gary Natriello state:

From a historical perspective, the problem of high school absenteeism is only as old as compulsory attendance laws. Only when school attendance is mandated does non-attendance become a crime. Only when school attendance becomes universal is non-attendance viewed as deviant (Everhart, 1977; Tyack, 1976). In fact, there is some historical evidence which suggests that compulsory attendance laws were passed only after high school attendance was relatively widespread. With the increasing American emphasis on education in the late 1950s and 1960s, it is sometimes easy to forget that only in the past 25 years have high schools been attended by more than 50% of adolescents (Martin, 1974). Absence from school is nothing new. But the negative impact of absenteeism may be greater now than was true in the past.

John R. Hoback, a high school principal in Boulder, Colorado, refers to compulsory attendance as being "far more of a compulsion in the educator than in the student. We no longer have a captive audience. We no longer have power inherent in one position or in one institution."

Those professionals charged with accounting for and managing to-day's high school student attendance, the secondary principals and assistant principals cite their frustration with the problem "that won't go away" in annual polls conducted by the National Association of Secondary School Principals (NASSP).

In 1973, 1974, and 1975, NASSP members listed poor attendance as their biggest headache in the daily management of the schools. In the

¹⁰Birman and Natriello, 1978, pp. 29-38.

¹¹ John R. Hoback, "The Problem of Attendance," NASSP Bulletin, 60 (February 1976): 29-29.

¹² Thompson and Standard, 1975, p. 1.

1973 and 1974 surveys, NASSP members rated poor attendance as "their most perpexing student problem" by a ratio of two to one over discipline, the second most often mentioned problem with students. Only vandalism outranked absenteeism as their biggest problem in the 1976 poll. And again, the NASSP's 1978 survey, attendance was referred to as the "most troublesome day-to-day problem in the administration of secondary schools. 14

A 1971 study conducted by Stanford University cited that absenteeism was seen by school administrators as their major discipline problem. Seven years later in 1978, Duke reported similar findings. 15

School superintendents agree with secondary principals that keeping students in school is a major problem for school administrators. This conclusion emerged from a critical issues survey conducted in 1979 for inclusion in AASA's critical issues report "Keeping Students in School, Problems and Solutions."

More than 95% of the 1,414 AASA members responding to the survey cited one or more attendance problems. Specifically, 58% expressed concern about casual class cutting, and 51% said casual cutting of entire school days was a problem in their districts. Only 4.7% of the respondents to the survey said they had no attendance problems. ¹⁶

The public is also concerned with the problem of poor attendance by high school students, linking it with what has been perceived as the school's failure to equip students with basic educational skills.

^{13&}lt;sub>Ibid</sub>.

Nancy DeLeonibus, "Absenteeism: The Perpetual Problem," <u>The Practioner</u>, V (October 1978): 1.

¹⁵Birman and Natriello, p. 29. 16AASA, p. 7.

High rates of absenteeism have been given as one cause for the continuing decline of SAT scores. 17

National enrollment and population trends are expected to exacerbate the problem of rising absenteeism in the secondary schools. Declining school enrollments have continued and will continue to depress school budgets and, subsequently, the levels of staffing problems and services designed to deal with absentee problems.

The March, 1980, ERS Bulletin reports:

Between 1980 and 1983, more students will come from single parent homes, and increasing number will come from minority backgrounds, additional students will come from non-English speaking families, and a higher proportion of teenagers will become pregnant. Each of these factors has been found to be positively correlated with attendance problems. 18

Although recognized as a major problem facing the nation's public schools, research on student attendance is in short supply. One such study, however, was conducted by Joseph Levanto in 1973. Among his findings were the following.

- Distinguishable patterns of absenteeism are displayed when daily absentee data are geographically plotted. For example, weekly cyclical patterns were apparent, with Wednesdays and Thursdays having the lowest absenteeism, and days of important test and examinations reflecting an increase in absenteeism.
- 2. The boys in the first three years of high school generally have lower rates of absenteeism than girls at the same gradel level. Boys in the senior year of high school have a slightly higher rate of absenteeism than girls in the same class.

¹⁷Birman and Natriello, 1977, p. 29.

^{18&}quot;Student Attendance," <u>Educational Research Service Bulletin</u> (Arlington, VA: March 1980): 2.

- 3. With each succeeding class and age group, from the ninth through the twelfth, absenteeism increased.
- 4. Students who lived with both parents generally had a lower rate of absenteeism than those who lived with one parent or guardian.
- 5. Students in the college preparatory program generally had the lowest rate of absenteeism followed by students in the business education and the general program respectively.
- 6. For senior students, absenteeism generally is lowest for students with the highest I.Q. scores.
- 7. For senior students, absenteeism generally is lowest for students with the highest ranks in academic achievement.
- 8. Students who participated in both school sponsored athletic and non-athletic type activities generally have lower rates of absenteeism than those who participate in one or none of these activities.
- The absentee rate generally was higher for black students than for white students.
- 10. Students of the Jewish faith had the lowest rate of absenteeism followed in order by Catholics, other religions, protestant, and those who reported no religion.
- 11. The poorer the students' personality rating by teachers on a scale developed for this study, generally the higher the rate of absenteeism.

The Levanto findings were generally confirmed by James Nelson in his 1972 study. ²⁰ Nelson also found a strong correlation between high rates of absenteeism and failing grades.

The October, 1978, issue of <u>The Practioner</u> reports:

¹⁹Joseph Francesco Levanto, "The Identification and Analysis of Factors Related to Secondary School Absenteeism (Ph.D. dissertation, The University of Connecticut, 1973).

²⁰James Nelson, "Student Non-attendance, Class Truancy, and Failure at the Secondary School Level," unpublished paper (Evanston, IL: Evanston Township High School, 1972).

Most student absences in the past were attributable to illness. For example, in a 1928 study illness was found to cause 63% of absences while truancy accounted for only two and a half percent. A 1939 Oregon study found illness as the overwhelming cause of absenteeism with "colds, sore throats, and the flu" alone accountable for 50% of the missing students. Today, however, absences are likely to be for personal convenience or recreation and not for illness.21

The causes of student absenteeism today are complex and varied. It was difficult for Tennessee high school principals in a 1977 study to identify any one cause for student absenteeism. Instead, they felt that such factors as compulsory attendance laws, changes in student attitudes toward authority and school, and erosion of parental control were the primary forces leading to increased absenteeism. The ERS report on student absenteeism outlined the reasons for excessive absenteeism found in the literature as follows:

I. In-school factors

- A. Staff
 - Unsatisfactory relations between the school staff and the student and his/her parents
 - 2. Personality conflicts with teachers
 - 3. Ineffective teaching
 - 4. Lack of teacher training programs
 - 5. Inadequate or poor staff direction and supervision
 - 6. Unsound teacher/staff attitude toward attendance
- B. Instruction
 - 1. Poor learning environment
 - 2. Inadequate program selection
 - 3. Poor educational preparation
 - 4. Lack of personal achievement and responsibility
 - 5. Perceived inequity of school reward structure
 - 6. No personal identification with school assignments
 - 7. Task and subject repetitiveness
 - 8. Little variety in class scheduling
 - 9. Arbitrary and inappropriate curricula and standards
 - 10. Fragmentation of instruction due to absences of regular teachers

²¹NASSP, p. 1.

²²DeLeonibus, p. 2.

- C. Other
 - 1. Unclear school duties and responsibilities
 - 2. Ineffective grievance procedures
 - 3. Ineffective attendance monitoring system
 - 4. Inappropriate student transfer policies and procedures
- II. Personal and family factors
 - A. Personal
 - 1. Illness
 - 2. Accident
 - 3. Lack of motivation
 - 4. Poor self-image or other personality conflicts
 - 5. Physical, mental, emotional handicapts
 - 6. Learning disabilities
 - 7. Disregard for the seriousness of unexcused absences
 - B. Parental
 - 1. Marital problems in the home
 - 2. Unfavorable parental opinion towards school
 - 3. Erision of parental control
 - C. Social
 - 1. Race and ethnic group status
 - 2. Religious or ethnic holidays
 - 3. Over-ageness in grade
 - 4. Habits--drugs, alcohol, etc.
 - 5. Peer pressure
 - D. Monetary
 - 1. Economic status
 - 2. Need to seek employment
 - E. Other
 - 1. Household or parental duties
 - 2. Recreational activities
 - 3. Winter vacations
 - 4. Novel life-styles
- III. General environmental factors
 - A. Inadequate means of transportation
 - B. Lack of facilities for child care, care of the aged and sick
 - C. Lack of business, governmental, medical, and personal services at convenient out-of-school hours
 - D. Inclement weather conditions
 - E. Strong competition from community events and out-of-building educational opportunities.²³

Beatrice F. Birman and Gary Natriello categorize the explanations of absenteeism into three groups: "student-level explanations," "school-level explanations," and "societal-level explanations." These

²³ERS report, pp. 4-5.

categories provide a useful framework for the discussion of the reasons for high absenteeism among students. 24

Student-Level Explanations

Student-level explanations of absenteeism are the most frequently used by psychologists and educators in response to the question, why are certain students chronically absent from school?

School absence may be viewed as an expression of non-conformist behavior and as the result of inadequate socialization in childhood. Students may not attend school because attendance is not rewarding to them or because other activities outside of school are considered to be more rewarding. 25

School-Level Explanations

Many social scientists propose school-level explanations to the problems of excessive student absenteeism. The question becomes, why do some schools have higher rates of absenteeism than others?

The power of the peer group is seen to have an impact. If the students in a school do not value school attendance, then rates of absenteeism can be expected to be higher than in schools where students value regular attendance.

Explanations focusing on the influences of peer groups have been joined by a growing body of research on the effect of school context on students. The literature proposes that "a school-level characteristic

²⁴Birman and Natriello, pp. 32-34.

²⁵ Ibid, p. 32.

such as average achievement affects the performance of a given student independent of the student's individual characteristics. ²⁶

Extending this concept to predict high school absences, it has been argued that given students with identical characteristics, those who attended schools with high rates of absenteeism would be more likely to be absent but would also be less likely to perceive themselves as having high absenteeism rates. 27

Beyond the impact of the peer group, other social scientists have pointed to the structural arrangements within the school to explain high rates of absenteeism among students. Student alienation from a lack of participation in the governance of the school, outdated curriculum, and the impersonal nature of larger schools have been cited. ²⁸

Societal-Level Explanations

Only recently have educators begun to recognize societal-level explantions for school absenteeism. Here the question becomes, why are high rates of absenteeism more common in some societies and during certain times than in others?

John Hoback states:

Our society has indeed changed; so that almost half the adolescents are not living with both natural parents or near to other relatives; so that it is increasingly difficult for adolescents to find positions of responsibility and worth in the family or in the community; so that authoritarianism has dramatically diminished in the home, in the military, in law enforcement, and in business organizations.²⁹

²⁶Birman and Natriello, 1978, p. 32.

^{28&}lt;sub>Thid</sub>

²⁷Ibid.

²⁹Hoback, 1976, p. 23.

It is the view of Carnoy and Levin that "differential rates of absenteeism and high school completion merely reflect the social order." Birman and Natriello further explain, "The social order perpetuates higher absenteeism and drop out rates for some students as a way of preparing them for their later social status." Schools, they suggest, "are structured to discourage attendance among certain groups of students and that absenteeism rates are a function of a society's rate of unemployment." 31

As social values have changed, so have perceptions of the student's role changed. Hoback contends,

Yet another aspect of the social (and legal) change with which senior high schools must cope is the newly organized majority status of the 18-year-olds. These young adults are often justifiably resentful of paternalism and illogical attendance policies.³²

The new perception of adolescents is as adults and citizens with legitimate needs and interests which can be fulfilled outside of the educational system. ³³ Rather than blaming students for non-attendance, schools are criticized for failing to recognize the new social status of students and for failing to provide them with activities that hold their interests.

High unemployment rates result in school no longer being seen as a guarantee of future employment. Students, therefore, perceive school as less useful in meeting their future needs and, therefore, put less effort into school.

³⁰ Birman and Natriello, 1978, p. 34.

³¹ Ibid.

³² Hoback, 1976, p. 32.

³³ Birman and Natriello, 1978, p. 34.

Whatever the causes of student absenteeism, the charge to school administrators and school personnel for attendance still exists. They are seen as the responsible parties for imparting basic educational skills and employability skills to students, maintaining discipline standards and running an efficient organization to maximize learning.

In the 1979 critical issues survey conducted by AASA, school administrators were asked to indicate what was the most negative result of poor school attendance. The seven results cited are listed in rank order of importance:

1.	Permanent intellectual and/or vocational damage to student dropout	38.2%
2.	Overall lowering of academic standards and achievement in the school	24.7%
3.	Frustration and moral problems experienced by teachers	21.1%
4.	Poor impression of the schools by the community at large	18.4%
5.	Increased paperwork and record keeping for teachers and administrators	16.8%
6.	Vandalism and petty crime perpetuated by truants	3.4%
7.	Reduced state aid computed on basis of average daily attendance ³⁴	2.5%

Recognizing that the problem impacts all the components of the school community and for the students extends into adulthood, many schools have sought solutions to the problem of excessive absenteeism among high school students.

The intervention employed to promote attendance among high school students depends upon which explanation for high absenteeism is

³⁴AASA, p. 11.

accepted. A wide range of possible explanations have been reviewed. These explanations cover three levels: the student, the school, and the society. Each level of explanation suggests a different method of intervention.

Student-level explanations, i.e., non-conformity, inadequate socialization, and attendance are not perceived as a rewarding activity support interventions which are focused on the student. These interventions can be either punitive or rehabilitory in nature.

Absenteeism is viewed as a discipline problem if students are viewed as rebellious and non-conforming. The solution becomes policy and rule enforcement. Rehabilitation would be offered in a group or individual counseling approach to help students change their attitudes and behavior patterns. In both these approaches, the problem and the solution lie within the student.

School-level explanations for poor attendance require intervention strategies aimed at modifying present school structure and facilitating more favorable peer group attitudes with regard to attendance. Attempts would be made to increase student participation in student government and/or increasing student input into the curriculum. Intervention concerning peer group attitudes would focus on efforts to place greater emphasis on extracurricular activities, to increase school spirit through competitive athletics, or to create a more friendly, relaxed atmosphere in school.

Such school-level interventions have met with criticism. Some schools exist where students attend primarily to socialize with their friends, not to attend class. 35 Recommendations calling for increased

^{35&}lt;sub>Meyer et al., p. 35.</sub>

student participation in school governance and curriculum were popular in the late 1960s but have been given in recent years by Wirtz 36 as a cause of the decline in high school academic standards.

Short of a complete social restructuring, some societal level explanations do not translate easily into workable intervention strategies. 37 Timpane et al. 38 proposed flexible hours and schedules for secondary students, competency based graduation requirements, elimination of compulsory attendance laws, and the dispersion of the education of students to the workplace and the community as interventions that could positively impact high school student attendance.

A 1979 Educational Research Service report on student absenteeism listed five major categories of specific approaches that school systems have used in attempting to improve attendance:

- 1. Rewards for good attendance
 - a. Exam exemption
 - b. Inter- or intra-school competition for prizes, etc.
- 2. Punishments for excessive absenteeism
 - a. Withholding of course credit
 - b. Lowering of grades
 - c. Suspensions, expulsions, etc.
- 3. Home-school contacts

By mail or telephone, resulting in increased parental awareness leading to active involvement in conferences, etc.

- 4. Community-school contacts
 - a. Law enforcement involvement
 - b. Participation in community services, etc.
- 5. Alternative programs for poor attenders.³⁹

³⁶Birman and Natriello, 1978, p. 29.

³⁷Ibid. ³⁸Ibid.

^{39&}quot;Student Absenteeism," 1977, p. 22.

NASSP reports that "numerous variations exist on these themes, community by community. Schools simply take the approach that makes the most sense for local conditions." 40

According to Robert Byrne,

In the final analysis, the problem of attendance will not be solved until all levels of the system affirm its importance and express resolve to seek and find the solution that works. 41

The Attendance Policy as an Administrative Response to Student Absenteeism

The review of the literature led this researcher to conclude that school boards and school administrators, while recognizing the school-level and societal-level explanations for absenteeism, primarily view the student as the focus of the problem and of the solution. Brokowski and Dempsey state, "A policy to control attendance appears to be a frequent response to the problem of increasing student absenteeism." 42 This is reflected in the literature dealing with the development and implementation of high school attendance policies. $^{43-52}$

⁴⁰NASSP, p. 8.

Al Robert Byrne, "Capturing the Elusive Student: Putting Accountability Theory into Attendance Practice," NASSP Bulletin, 65 (May 1981): 33.

⁴²Brokowski and Dempsey, p. 129. 43Carruthers, pp. 117-118.

⁴⁴Byrne, p. 33.

⁴⁵ Don C. Rodgers, "Stepping-up School Attendance," NASSP Bulletin, 64 (December 1980): 122-24.

⁴⁶ Martin A. McKnight and Susan C. Hines, "Read This Before Adopting a Policy on School Attendance," <u>Executive Educator</u>, 2 (September 1980): 34-38.

⁴⁷ Brokowski and Dempsey, pp. 129-130. 48 NASSP, p. 8.

The 1979 survey conducted by AASA for its critical issues report revealed that four out of five (79%) of the responding administrators reported that their school boards follow a written policy for student attendance. The larger the school district, the more likely it is to follow a written policy. Slightly more than 90% of the largest school districts (more than 25,000 students) follow written policies, according to respondents, compared with 77% of the smallest districts (under 5,000 students). ⁵³

In a survey by the Connecticut Association of Secondary Schools (CASS) which is an affiliate of the National Association of Secondary School Principals (NASSP), 80% of the principals reported that they had a formal attendance policy. ⁵⁴

What constitutes a written policy varies greatly from a one sentence recognition of the expectation of attendance to printed booklets outlining responsibilities of all involved parties, definitions, procedures, and consequences of excessive absences. 55

School board policies on attendance are impacted by federal, state and local considerations. Federal law prohibits school districts from discriminating in providing education on the basis of race, sex, and

⁴⁹Ronald L. Feist, "Development and Implementation of a New Attendance Policy at Napa High School (Nova University Practicum Report, June 1977): 83.

⁵⁰Tom Fatinos, "Napa High School Attendance Policy. An Experiment to Reduce Unnecessary School Absences" (unpublished, July 1976).

⁵¹ Daniel L. Jett and Melva Platt, "Pupil Attendance: The Bottom Line," NASSP Bulletin, 63 (February, 1979): 32-38.

⁵²Richard L. Suprina, "Cutting Down on Student Cutting," NASSP Bulletin, 63 (February 1979): 27-29.

⁵³AASA, p. 39. ⁵⁴Brokowski and Dempsey, p. 129.

marital status of the student. The Supreme Court has addressed the issue of due process for students.

At the state level, constitutional provisions, state laws, court decisions, and various rules and regulations provide the legal framework that shape school attendance policies.

At the local level, school board members, acting as a body, determine the policy and its scope. The school attendance policy they adopt may give little or considerable discretion to administrators and teachers.

It can be concluded that great variation can be found in attendance policies and procedures from state to state and from school district to school district, and sometimes even between schools within the same school district. 56

"The basic intent of school attendance policies is to help students in school." They generally quote compulsory attendance statues and/or provide a rationale for regular school attendance. The policies usually make reference to the parents' legal responsibility for their children's attendance.

The wording of the attendance policy determines the enforceability of the policy. For example, strong, clear language can result in strong, consistent enforcement by school administrators. A weak policy with ambiguous language provides loopholes which make enforcement difficult, if not impossible.

AASA recorted the following trends in school district interventions in its 1979 report:

⁵⁵AASA, p. 39. ⁵⁶Ibid., p. 43. ⁵⁷Ibid.

- 1. The attitude that school attendance is the responsibility of parents and students is more prevalent among administrators than in the past.
- 2. School policies that base grades, course credits, and promotion on attendance rates are being adopted.
- 3. Some districts are reserving the right to determine the legality of excuses, thereby overriding unacceptable excuses even if they have been condoned by the students' parents.
- 4. Formulas for converting class skips and lateness to official absences have been developed so that, for example, three tardies may be equal to one absence.
- 5. Policies with strict due process protections are being formulated. 58

Schools identified by NASSP as making headway in curbing absenteeism responded to a questionnaire requesting a summary of attendance policies, procedures, and subsequent attendance data. The policies of these schools were developed because absenteeism was interfering with the educational process, and it had become an administrative burden.

While the schools vary in size and location and the polcies varied in form and scope, "their common feature is a dedication to finding an acceptable solution to the problem of student absence." ⁵⁹

The following conclusions were drawn from the successful policies and published by NASSP:

- 1. Participation in the formulation of attendance policy is broad based. Administrators, teachers, students, and parents usually are involved in policy making.
- 2. The policies are strong. When little or nothing is done about attendance, the problem gets worse. Schools making headway on attendance are schools that expand considerable thought and effort on solving the problem.

⁵⁸ERS Bulletin, p. 2.

- 3. Policies clearly specify, in writing, attendance expectations and delineate the outcomes of good and poor attendance.
- 4. Policies are well publicized. Parents and students clearly are informed of attendance requirements.
- 5. Policies are consistently enforced. At each level of enforcement--teacher, counselor, assistant principal, principal--compliance with policy is expected.
- 6. Immediate follow-up on absences is made by a letter, 60 a telephone call to the home, or by some other means.

The provisions of such policies typically restrict the number of student absences to specific limits and impose penalties affecting course grades or course credits on violators. Eighty-five percent of the principals responding to the CASS survey reported that their policies were restrictive and punitive and did not reward good attendance. 61

Attendance policies appropriately worded and consistently enforced appear to be effective tools in reducing student absenteeism. Many schools that have implemented attendance policies have cut their absentee rates in half. 62 Eighty percent of the Connecticut principals responding to the CASS survey reported that their policies were moderately effective. 63 Specific examples reported to NASSP are:

Absenteeism has dropped from 11% to five percent in the past three years at Lake Oswego (Oregon) High School since the implementation of their attendance policy.

Presque Isle (Maine) High School reported their absenteeism dropped two to three percent in the past three years.

The Leavenworth (Kansas) Senior High School attendance policy has been attributed with reducing the absence rate from ten to five percent.

⁶⁰Ibid., pp. 6-7. ⁶¹Brokowski and Dempsey, p. 129.

^{62&}lt;sub>NASSP</sub>, p. 8. 63_{Brokowski} and Dempsey, p. 129.

Howe (Texas) High School was able to improve its already high attendance rate of 94% to 96% since implementation of its attendance policy.

Hannibal (Missouri) High School credits its attendance policy with the return of 60% of its dropouts--the 1973-74 school year and the marked improvement in attendance of 50% of the students with attendance problems.⁶⁴

The following schools were among those identified by NASSP in 1978 has having attendance policies that have reduced absenteeism rates:

Bristol (Connecticut) Eastern High School cited a reduction in absenteeism from 12 to 6.5% in the three years since the implementation of its attendance policy.

A policy involving loss of credit at Maynard (Massachusetts) High School reduced class absences from 22.9% in 1973-74 to 6.3% in 1976-77. More significantly, since students are no longer permitted to be in school and not go to class, student failure has been reduced by 50%.

William J. Palmer High School of Colorado Springs, Colorado, reported their absenteeism had declined to 4.6%. There had also been a 37% decrease in period truancies per girl and a 41% decrease in period truancies per boy. Furthermore, a comparative study of first semester grades in 1976 and 1977 showed that more students achieved honor grades and fewer students earned D or F grades. 65

The Northwest High School attendance policy has demonstrated increasing success since its implementation in January, 1979 (see Appendix B). In the year preceding its implementation, the average attendance rate was 89.5%. In the 1978-79 school year, the year of implementation, the attendance rate rose to 91.4%. The 1979-80 school year registered another increase in attendance, to 92.5%. Ninety-three point four percent of Northwest students were in attendance in 1980-81. Last year, 1981-82, attendance was again up, to 94.5%. A 52% improvement has occurred in the attendance of Northwest High School students since the implementation of the school's attendance policy.

⁶⁴NASSP, pp. 9-12.

⁶⁵Ibid., pp. 7-12.

The Relationship of Absenteeism and Achievement/Grades

Although students who attend school regularly are thought to achieve higher grades, Richard M. Rozelle indicates that the research in this area is inconclusive. ⁶⁶ The results of 11 studies conducted from 1925 to 1960 indicate significant relationships between absence and grades when measured in the same term. ⁶⁷

However, 12 other studies administered from 1923 to 1962 could find no relationship between absence and grades. 68

For the purposes of this research, the focus will be on more recent research on the absenteeism-achievement relationship for secondary students.

Harnischfeger and Wiley, concerned about current events and policies resulting in decreases in the total amount of schooling, conducted a study in 1975 which examined the relationship of quality of schooling and achievement. They concluded that (a) promoting changes in the average daily attendance of pupils results in positive achievement consequences, and (b) increases in achievement would be obtained if educational policy could effect higher attendance rates. ⁶⁹

In the most recent research on the relationship between attendance and grades, there is an indication of a positive relationship, as evidenced by the following studies.

⁶⁶Richard M. Rozelle, "The Relationship Between Absenteeism and Grades," Educational and Psychological Measurement 28 (Winter 1968): 1151-1158.

^{67&}quot;Student Absenteeism," 1977, p. 10.

⁶⁹Harnischfeger and Wiley, 1975, pp. 1-4.

Anita A. Summers and Barbara L. Wolfe reported in their 1975 study that unexcused absences have a negative effect on achievement of twelfth grade students. Five or more unexcused absences per year means .4 national percentile points less growth in achievement. 70

In a study conducted by Huberto Molina in 1974 to determine the effects of periodic and occasional absenteeism on student performance, Molina discovered that pupils who maintained continuous contact with the teacher attained the course objectives. Students who were periodically absence, did not. 71

Project Mack, a program at McClymonds Hugo School in Oakland, California, in 1974, was designed to reduce the dropout rate, improve student achievement, reduce absenteeism and class cutting. At the conclusion of the 1974-75 school year, the absentee rate was reduced by 14.1%, and the reading and mathematics scores of students enrolled in reading and math programs showed significant gains. ⁷²

The Beginning Teacher Evaluation Study (BTES) sponsored by the National Institute of Education addressed the importance of "time on task" or the actual amount of time a pupil is engaged in an academic task. BTES researchers concluded that "regular school attendance improves achievement--provided classroom time is spent on actual learning tasks." 73

⁷⁰Anita A. Summers and Barbara Wolfe, "Which School Resources Help Learning? Efficiency and Equity in Philadelphia Public Schools," <u>Business Review</u> (February 1975): 28.

⁷¹ Huberto Molina, "Evaluating the Effectiveness of a Program Used in School Situations Characterized by High Pupil Absenteeism and Attention," paper presented at the annual AERA meeting (Chicago, April 1974).

⁷²Joseph Adwere-Boamah, "Project Mack Final Evaluation Report 1974-75," (Washington, DC: Bureau of Elementary and Secondary Education, November 1977).

^{73&}quot;Keeping Students in School...," 1979, p. 22.

In 1968 Richard Rozelle attempted to determine if poor attendance caused poor grades or if poor grades resulted in poor attendance.

While his results were not conclusive, they indicated that poor attendance caused subsequent low grades. 74

The school experiences of students with cancer was the focus of Nancy Cairns' 1980 study. She determined that the most frequent problem was absenteeism and that high absenteeism was coupled with declining grades for 18.1% of the sample and failing grades with 10.6% of the sample. 75

Harnischfeger and Wiley contend that the quantity of education is usually not addressed in discussions of the determinants of academic achievement. It is their belief that large variations in the amount of exposure to schooling exists as do large effects of exposure on achievement. 76

Karawiett argued with Harnischfeger and Wiley in her 1975 report entitled "Is Differential Access to School an Important Factor in Student Outcomes." She explored whether differential access to school as measured by student attendance, length of school day, and school term is an important determinant of student achievement. She concluded that individual attendance is a mediating variable between individual background factors, school factors, and achievement outcomes. 77

⁷⁴Rozelle, 1968, p. 1156.

⁷⁵ Nancy U. Cairns, "Meeting the Educational Needs of Children with Cancer" (Bethesda, MD: National Cancer Institute, April 1980).

⁷⁶Harinschfeger and Wiley, 1975, p. 1.

⁷⁷Nancy L. Karawiett, "Is Differential Access to Schools an Important Factor in Student Odtcomes?" (Baltimore, MD: Johns Hopkins University Center for the Study of Social Organization of Schools, December 1975) (unpublished manuscript).

Benefits other than improved academic achievement were identified by Colderon and Shiffington in 1975. They cited evidence "that higher attendance at the secondary level . . . was related to a more responsible attitude, enjoyment of school, and success in school settings." ⁷⁸

Early in the development of this research, the question of how to measure the achievement of high school graduates surfaced. No standardized achievement tests are given to all students at Northwest High School beyond the Michigan Educational Assessment Program in the fall of their tenth grade year. Some junior and senior students take the SAT, PSAT, and ACT tests, but generally only those who are in college preparatory programs. The only universal measure of achievement for Northwest High School students is the cumulative grade point average.

In reviewing the literature it became evident that grade point averages were frequently used by researchers as measures of secondary student achievement. Apparently other researchers encounted a similar dilemma: an absence of achievement testing of all secondary students in the latter years of high school. Seven doctoral dissertations written between 1971 and 1981 utilize grades and grade point averages as measures of achievement for high school students.

In Hedgpath's 1981 doctoral dissertation entitled "A Comparison Among Students' Extracurricular Involvement, School Attendance, Grade Point Average, and Other Selected Variables as Measured in Four Large Urban High Schools in Texas," he determined females consistently had higher grade point averages than males, while males consistently had

^{78&}quot;Student Absenteeism," 1977, p. 11.

lower absentee rates than females. Tenth graders usually had the highest grade point averages and the lowest absenteeism. Eleventh graders had the lowest grade point averages, while twelfth graders had the highest absentee rates.⁷⁹

English course grades were analyzed as measures of academic achievement in Lynch's 1981 dissertation, "An Analysis of the Relationships Among Academic Achievement, Attendance, and the Learning Style Time Preferences of Eleventh and Twelfth Grade Students in a Suburban New York School District." In this study Lynch hypothesized that comparisons among groups of students would reveal no significant differences in the mean English course grades or the mean number of days of partial or full truancy among initial and chronic secondary school truants. Following the analysis of his data, he found that a correlation did exist between academic achievement and the number of days of partial or full truancy. 80

Malborn's 1979 dissertation entitled "A Multivariate Model to Predict Changes in Student Behavior and Achievement Attributable to a Set of Attendance Policy Practices for Secondary Students" utilized mean cumulative grade point averages of senior students for analysis of achievement changes. The new set of attendance policy practices improved student attendance by 3.7% during the first year for the entire

⁷⁹Walker David Hedgpeth, Jr., "A Comparison Among Students' Extracurricular Involvement, School Attendance, Grade Point Average, and Other Selected Variables as Measured in Four Large Urban High Schools in Texas" (Ph.D. dissertation, East Texas State University, 1981).

⁸⁰ Peter Kevin Lynch, "An Analysis of the Relationships Among Academic Achievement, Attendance, and the Learning Style Time Preferences of Eleventh and Twlefth Grade Students Identified as Initial or Chronic Truants in a Suburban New York School District" (Ed.D. dissertation, St. John's University, 1981).

population at the high school. The mean cumulative grade point average increased for the total population of seniors during the school year with the new set of attendance policy practices. Malborn suggests that additional research is needed to determine whether similar results will occur beyond the first year of the new attendance policy. 81

Williams also used grade point averages in his 1975 dissertation, "A Model of Improving Attendance and Achievement in an Urban High School." Following the implementation of a four part program to improve attendance and achievement at an Ohio high school, attendance improved 15.1% in 1974-75 over 1973-74. When comparing 1973-74 and 1974-75 results, achievement, as determined by the grade point average, showed a .62% improvement. 82

High school achievement based on grade point averages of students was again cited in Venable's 1971 dissertation entitled "Variation in Achievement in High School of Students from Various Feeder Elementary School Districts and Attendance Centers Within a Unit District." She found significant differences based on grade point averages of students from various districts and attendance centers in three of four grade levels. 83

⁸¹Lee Clark Malbon, "A Multivariate Model to Predict Changes in Student Behavior and Achievement Attributable to a Set of Attendance Policy Practices for Secondary Students" (Ph.D. dissertation, Boston College, 1979).

⁸² Lofell Williams, "A Model for Improving Attendance and Achievement in an Urban High School" (Ph.D. dissertation, University of Cincinnati, 1976).

⁸³ Connie Lee Venable, "Variation in Achievement in High School of Students from Various Feeder Elementary School Districts and Attendance Centers Within a Unit District" (Ph.D. dissertation, Southern Illinois University, 1971).

One of her findings revealed a tendency for students from higher socioeconomic communities to achieve higher grade point averages in high school with two exceptions. In one district representing a closely knit community, students received relatively high grade point averages in spite of relatively low socioeconomic conditions. In another district, representing a loosely organized area, students received relatively poor grade point averages in spite of relatively high socioeconomic conditions.

In 1979 Brokowski attempted to ascertain whether the performance of high school students on selected variables differed from before and after the implementation of an attendance policy in his dissertation, "A Comparison of Secondary School Student Performance in Attendance, Achievement, and Related Variables Prior to and During a Restrictive and Punitive Administrative Control Policy for Attendance." The two variables of attendance and achievement were measured respectively by mean numbers of days in attendance and mean academic averages. Comparison of means was made for students grouped by their grade, sex, and IQ level. 84

Brokowski concluded that students with high IQs showed no significant difference for performance in attendance and achievement variables. Grouping students by sex was of no significance in nearly every performance measure. He determined from the findings that the implementation of a restrictive and punitive attendance policy may result in

⁸⁴ William Walter Brokowski, "A Comparison of Secondary School Student Performance in Attendance, Achievement and Related Variables Prior to and During a Restrictive and Punitive Administrative Control Policy for Attendance" (Ph.D. dissertation, The University of Connecticut, 1973).

improved performance in attendance and achievement for certain students.

In his 1973 dissertation, "The Identification and Analysis of Factors Related to Secondary School Absenteeism," Joseph Levanto obtained attendance data, student achievement grades, and personal information from student records. Among his findings were that boys, with the exception of the senior year, have lower absentee rates than girls and that for senior students, absenteeism was generally lowest for students with the highest ranks in academic achievement. ⁸⁵

A 1980 study in the Charlotte-Mecklenberg school system in Charlotte, North Carolina, analyzed grades and days absent for 4,000 students. This analysis revealed a high correlation (0.89) between the number of days attended and the grades that were made. Thirty percent of those tenth grade students who failed the competence test in October 1977 missed 20 or more days of school in the ninth grade. 86

Ronald N. Gillespie, Director of Guidance for the Northwest School District, proposed an explanation for the limited use of achievement tests in the final years of high school. Gillespie explained,

The primary purpose of achievement testing in elementary through junior high school is to identify academic weaknesses that can, as a result of identification, be addressed and corrected. By the time a student is in the eleventh or twelfth grade, little time remains for correction of academic weaknesses; therefore, mass achievement testing is generally not employed. 87

Hoback, critical of the traditional high school system, offers another point of view when he states,

^{85&}lt;sub>Levanto</sub>, 1973. 86_{Rogers}, 1980, p. 122.

⁸⁷ Interview with Ronald Gillespie, Director of Guidance, Northwest School District, Jackson, Michigan, July 28, 1982.

Achievement is measured primarily in terms of time spent in class (or time endured as the case may be). Instead of establishing achievement criteria in terms of behavioral outcomes, anecdotal descriptions of achievements or comprehensive standardized measurements, we almost universally use vague guesstimates as "years in school" or "credit hours," Carnegie units or "high school diploma." Along with the subjectively granted letter grade, time is the primary language used to measure learning. 88

The Relationship of Socioeconomic Status and/or Geographic Factors on Attendance Rates and Achievement

Three studies were found that address the relationships of socioeconomic status on attendance rates and achievement. In 1969 Alvin L.
Bertrand and Marion B. Smith examined environmental factors and school
attendance to account for rural youths having lower attendance and
lower educational attainment than urban youths. They concluded that
the negative educational values in the homes examined in their study
were largely responsible for influencing the educational opportunities
of rural youth.

Sheila Mitchell and Michael Shepherd studied the attitude toward school of a random sample of British students. The children's family socioeconomic status, achievement attainments, and attendance records were among the variables examined. Mitchell and Shepherd concluded that pupils ages 11-15 are absent more than the 5-10 year age group and disliked school more. From the socioeconomic information obtained from the parents, they determined that pupils who dislike school are more

⁸⁸Hoback, 1976, pp. 21-22.

⁸⁹Alvin L. Bertrand and Marion B. Smith, untitled paper (Baton Rouge, LA: Louisiana State University, and Wsshington, DC: Department of Agriculture; September 1969).

prone to physical ailments. They also discovered from their sample that a higher proportion of pupils who like school and have good attendance have fathers in non-manual occupations. 90

A direct correlation was found between socioeconomic position and academic achievement by Richard Cloward and James Jones in 1962. One cause of low achievement among poor youth was the fact that they received less instructional time due to higher absentee rates, poor health care, and the fact that more of the teachers' time was consumed by discipline problems. 91

Attendance Policies and Student Achievement/Grades

There has not been much research conducted on the impact that specific school attendance policies have had on the academic achievement of students. The 1977 ERS report on student absenteeism reported that,

... writing for the New York State Education Department, John J. Heim (1973) found that of the six studies he reviewed, pupil absenteeism had a negative impact on achievement in four of them. Since the studies attempted to control for socioeconomic status (a factor outside the school setting), he declares that "the relationship found between absenteeism and student achievement at least partially results from variations in schools' policy toward absenteeism." 92

The research that most directly addresses the impact of an attendance policy on student achievement was conducted by Brokowski in 1979.

⁹⁰Sheila Mitchell and Michael Shepherd, "The Child Who Dislikes Going to School," reprint from <u>The British Journal of Educational</u> Psychology 37, Part I (February 1967).

⁹¹Richard A. Cloward and James A. Jones, "Social Class--Educational Attitudes and Participation" (New York: Columbia University School of Social Work) (unpublished and undated).

^{92&}quot;Student Absenteeism," 1977, p. 12.

While cautioning that his conclusions should not be generalized beyond the study sample except for schools similar to New Milford, a suburban high school with an enrollment of 1,250 students in grades nine through 12, he determined that a correlation exists between high attendance rates and high achievement scores. Punitive attendance policies, he suggested, appear to result in higher attendance rates for most students and higher achievement scores for students with low IQs. He found no achievement gains for students with high IOs. 93

Brokowski recommended that the maturity and ability levels of students be recognized for the appropriateness and desireability of such attendance policies. He further recommended the development of additional strategies for improving attendance and achievement beyond restructure or punitive rules since the finding of his study indicated that all students evidently do not perform more favorably on these variables.

Summary

The review of the literature focused on five issues related to the research. For each issue questions were identified and answered.

The problem of student absenteeism is widespread and growing. The causes are many and varied as are the suggested solutions.

The attendance policy has been a frequent administrative response to the problem of student absenteeism. They have developed as an attempt to curb rising absentee rates. Evidence exists that they are effective tools in reducing student absenteeism, particularly in the short term.

^{93&}lt;sub>Brokowski</sub>, 1979.

Research seems to indicate a negative correlation between absenteeism and achievement/grades. While not used universally, the grade point average is commonly used by researchers as a measure of acheivement for secondary students.

The research review indicated a positive correlation among low socioeconomic status, low achievement, and high absenteeism.

More research appears to be needed in the area of the impact of attendance policies on the daily performance of students. While an ample number of studies demonstrate the effectiveness of such policies in the reduction of student absenteeism, there is limited research on their impact on student achievement.

CHAPTER III

DESIGN OF THE STUDY

The problem of high absenteeism among secondary students in the nation's public schools is of great concern to high school administrators. Excessive student absenteeism disrupts the instructional process, frustrates administrators and teachers in their efforts to record and to account for pupil attendance, and jeopardizes the finances of school districts that must rely on attendance for state aid.

Beyond the immediate scope of the school, others are impacted by this problem. Attendance officers and law enforcement officials must notify parents, locate and return absent students to school. Judges are charged with trying cases involving violation of state compulsory attendance statutes. Merchants complain that loitering teenagers who are absent from school result in financial losses due to misbehavior and shoplifting.

Attendance policies have been implemented in schools across the nation, and many have been successful in improving the attendance rate of students. Several questions remain unanswered with regard to the impact of these policies. Do attendance policies which improve student attendance also improve student achievement? Does the attendance and achievement of all or only some students improve? Is the impact of such policies on attendance and achievement continual or short termed?

This study was designed to address these questions. In this chapter the design of the study is described under the following headings: population, sources of data, procedures, research questions, and summary.

Population

Northwest High School in Jackson, Michigan, housing grades 10 through 12, implemented in January, 1979, an attendance policy designed to curb high absenteeism among its students. The researcher was interested in analyzing the attendance rates and cumulative grade point averages of the students prior to and following the implementation of this attendance policy.

The population used for this study were 1,777 students from seven graduating classes, the class of 1976 to and including the class of 1982 of Northwest High School.

The classes of 1976, 1977, and 1978 will represent the pretreatment group. These graduating seniors had no exposure to the expectations and consequences of the ten day attendance policy.

The classes of 1979, 1980, 1981, and 1982 will represent the post-treatment group. The policy was only in effect for the final semester of the students in the class of 1979. The class of 1980 functioned under the limits set by the policy for one and one half years, and the class of 1981 for two and one half years. The policy was in effect for all three years that the class of 1982 attended Northwest High School.

The graduates from the classes of 1976 through 1982 who transferred into Northwest High School and/or did not attend Northwest High School for three academic years were excluded from this study. This was done to keep the attendance procedures and the awarding of grades and credits standard for the groups examined.

The total population of graduating seniors from the classes of 1976 through 1982 of Northwest High School in Jackson, Michigan, excluding transfer students, was the focus of this study.

Sources of Data

There were two primary sources of data for this study, student permanent record cards and U. S. census data obtained from the Michigan Metropolitan Information Center of Wayne State University, Detroit, Michigan.

Student Permanent Record Cards

Data on 1,777 students' attendance and grades were taken from individual student permanent record cards on file at Northwest High School. Joseph Levanto and Nancy L. Karweit also used student records as source documents in their research on factors related to student attendance problems.

The information contained on these cards used for this research included name, address and sex of the student. His/her graduating class, a computed cumulative grade point average for grades 10 through 12, and his/her attendance record for those three years. It could also be determined from the card if a student transferred into Northwest High School from another school.

Michigan Metropolitan Information Center

The Michigan Metropolitan Information Center, MIMIC, is a major repository for U. S. census data. From the U. S. Bureau of the Census

| Levanto, 1975. 2 | Karweit, 1973.

1970 summary tape files, MIMIC provided the researcher with standard format data tabulations on mean family income and median value of owner-occupied housing units for the geographic zip code areas for which data were needed. This census information, Table 1, indicated socioeconomic differences among the nine zip code areas.

The 1980 U. S. census data on mean family income and median value of owner-occupied housing units are not readily available. Unlike in 1970, the U. S. government is no longer funding the computer programming of census data by zip code areas.

The \$250,000 cost of this project is being funded by a consortium of 16 companies and organizations who desire access to the data for their marketing purposes. This consortium will have exclusive rights to the data for 18 months, with no availability to the general public until late 1982. It will be 1984 before these special tabulations of census information will be available from the U. S. Census Bureau.

Procedures

The researcher pulled the permanent record cards of 1,777 graduates from the classes of 1976 through 1982 from the files of Northwest High School. For each graduating class, the sex, grade point average, and attendance rate data for each of its members were recorded by zip code area.

As mentioned earlier, nine zip code areas are represented in the Northwest School District. These are Jackson 49201 and 49202, Pleasant Lake 49272, Rives Junction 49277, Leslie 49251, Munith 49259, Onondaga 49264, Parma 49269, and Springport 49284, all in Michigan.

Four of the zip code areas, 49201, 49202, 49272, and 49277, provide approximately 97% of the high school enrollment. The remaining five zip code areas, 49251, 49259, 49264, 49269, and 49284, contribute the remaining three percent of the enrollment.

Data for graduates who had transferred from other schools were excluded and not recorded.

The mean cumulative grade point average and the mean attendance rate were computed for each graduating class as a whole, for the females in each class, for the males in each class, for each zip code area as a whole, for the females in each zip code group, and for the males in each zip code group.

Research Questions

The collected and computed data are presented in table and graph format in Chapter IV. Such presentation of the data facilitated analyses to determine the answers to these research questions:

- 1. Have there been any changes in the cumulative grade point averages of Northwest High School graduates following the implementation of an attendance policy?
- 2. Do attendance rates and cumulative grade point averages of students from the various socio-geographic areas in the Northwest School District vary prior to and following implementation of the attendance policy?
- 3. Have male or female students shown any or more improvement in attendance rates and cumulative grade point averages since the implementation of the attendance policy?

Summary

This study attempts to ascertain what impact a high school attendance policy, with demonstrated effectiveness in improving the overall attendance of the students, has had on specific groups of students relative to attendance rates and cumulative grade point averages.

A pre-treatment group and a post-treatment group of graduating classes from Northwest High School, spanning seven graduating classes and 1,777 students were studied. Arithmetic means were calculated for various groups and sub-groups of students. From these data, analyses were made as to the differences between and among the groups, before and after implementation of the ten day attendance policy. This detailed analysis follows in Chapter IV.

CHAPTER IV

ANALYSIS OF DATA

The analysis of the data is presented in the chapter in written and graphic form. The written form expands upon the data presented in the graphs. Additional data in table form are contained in Appendix C, Tables 1-7; Appendix D, Tables 1-9; and Appendix E.

Six sets of graphs and one chart are contained in this chapter:

Mean Attendance Rate Comparisons by Graduating Class (Graph 1), Mean

Grade Point Average Comparisons by Graduating Class (Graph 2), 1970

Census: Socioeconomic Data by Zip Codes for Jackson County (Table 1),

Mean Attendance Rate Comparisons of Graduating Classes Within the

Same Zip Code (Graphs 4-12), Mean Grade Point Average Comparisons of

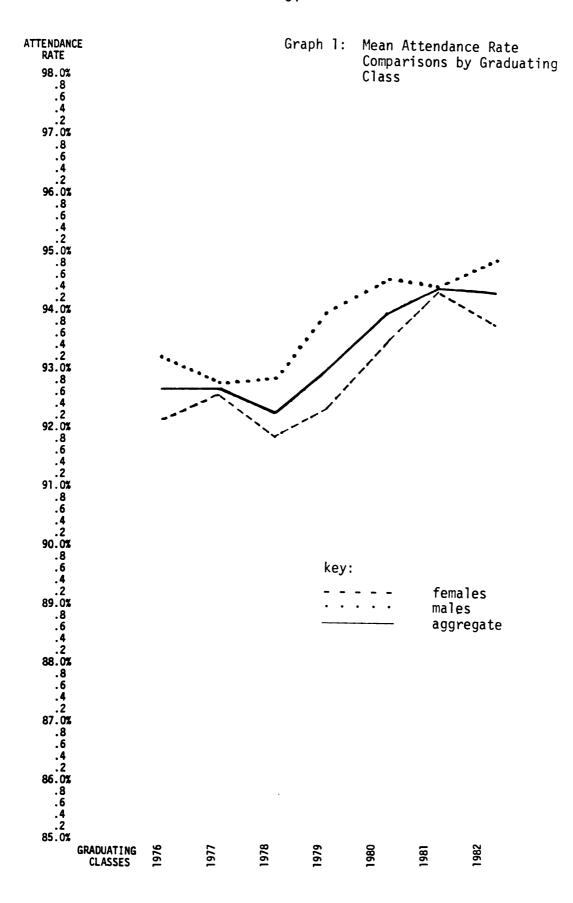
Graduating Classes Within the Same Zip Code (Graphs 13-21), Mean Attendance Rate Comparisons by Zip Codes (Graphs 22-28), and Mean Grade

Point Average Comparisons by Zip Codes (Graphs 29-35).

Each graph depicts data for females, males, and the aggregate group.

Comparison of Mean Attendance Rates by Graduating Class

An analysis of the mean attendance rates for the classes on the whole showed the attendance rates for Northwest High School graduates began to improve following the class of 1978 and the implementation of the school's attendance policy. The mean attendance rate for the class of 1978 (Graph 1) was 92.4%; for the class of 1979, it was 93.2%;



for the class of 1980, it was 93.6%; for the class of 1981, it was 94.5%; and for the class of 1982, it was 94.4%.

The data revealed that male graduates had higher mean attendance rates than female graduates in every graduating class with the exception of the class of 1981, where the mean male attendance rate of 94.5% was the same as the mean female attendance rate. A marked improvement in the mean attendance rate began following the class of 1978 and the implementation of the school's attendance policy. The mean attendance rate for males in the class of 1978 was 92.9%. By 1982 the mean attendance rate for males was 94.9%.

A parallel improvement in the mean female attendance rate also occurred following the class of 1978 and the implementation of the attendance policy. The mean attendance rate for females in the class of 1978 was 92.0%. By the class of 1982, the rate had improved to 94.0%.

Comparison of Mean Grade Point Averages by Graduating Class

Graph 2 reveals that for the classes taken as a whole, the highest mean grade point average was 2.787 for the class of 1978. Following a decline to 2.607 in the class of 1979, steady improvement in aggregate grade point average is evidenced as the class of 1982 registered a 2.787 mean grade point average.

The data revealed that female students had higher mean grade point averages than male students in every graduating class studied. The mean grade point averages of female students declined in 1979 after the introduction of the Northwest High School attendance policy and after a leveling period from 1976 to 1978. The females in the class of 1981

Graph 2: Mean Grade Point Average Comparisons by Graduating Class GRADE POINT **AVERAGE** 3.700 .650 3.600 .550 3.500 . 450 3.400 . 350 3.300 .250 3.200 .150 3.100 .050 3.000 . 950 2.900 .850 2.800 .750 2.700 .650 2.600 .550 2.500 .450 2.400 .350 2.300 .250 2.200 key: .150 females 2.100 males .050 aggregate 2.000 .950 1.900 . 850 1.800 GRADUATING 1977 1978 1979 1982 1981

CLASSES

had the lowest mean grade point average of the seven classes studied at 2.756. The mean grade point average of the females in the class of 1982, however, was the highest of the seven classes at 2.984.

The data on male students in the seven graduating classes reveal a similar decline in mean grade point averages following the class of 1978 and the implementation of the attendance policy. The males in the class of 1978 had the highest mean grade point average of the classes studied at 2.640. While not quite reaching the low mean grade point average of 2.490 of 1977, males in the succeeding classes did not record mean grade point averages that ever came close to approximating the high mean grade point average of males—the class of 1978. Males in the class of 1982 registered a mean grade point average of 2.542.

1970 U. S. Census Bureau Socioeconomic Data by Zip Codes

The mean family income and median value of owner occupied housing units for the nine zip codes in the Northwest School District are given in Table 1. As mentioned earlier, approximately 97.0% of the student enrollment lives in four zip code areas: 49201, 49202, 49272, and 49277. The other five zip codes--49251, 49259, 49264, 49269, and 49284--supply the district with the remaining 3.0% of the student population.

A comparison of the four major zip codes shows 49201 as the wealthiest in terms of mean family income and median value of owner occupied housing units. The Jackson 49202 zip code is the poorest of the four with a mean family income of \$10,476, \$1,382 less than the mean family income of 49201. The median value of owner-occupied

Table 1: 1970 Census: Socioeconomic Data by Zip Codes for Jackson County, Michigan	onomic Data by A	Zip Codes for Ja	sckson County,	Michigan
Zip Code:	49201	49202	49272	49277
Number of Families:	7868	5708	371	585
Aggregate Family Income:	\$9,330,293	\$5,980,029	\$418,073	\$627,619
Mean Family Income:	\$11,858	\$10,476	\$11,268	\$10,783
Owner-Occupied Housing Units:	7306	5437	388	292
Value of Owner-Occupied Units:				
< \$5,000	145	155	2	28
\$ 5,000 - \$ 7,499	484	554	43	=
\$ 7,500 - \$ 9,999	462	942	57	43
\$10,000 - \$14,999	1237	1796	61	52
\$15,000 - \$19,999	1460	941	52	09
\$20,000 - \$24,999	877	226	50	35
\$25,000 - \$34,999	718	108	38	30
\$35,000 - \$49,999	256	18	14	2
\$50,000	25	2	0	0
Median Value:	\$16,770	\$12,000	\$14,505	\$14,805

Table 1, continued

Zip Code:	49251	49259	49264	49269	49284
Number of Families:	1199	529	317	286	537
Aggregate Family Income:	\$1,299,045	\$509,222	\$310,840	\$1,102,069	\$569,443
Mean Family Income:	\$10,834	\$9,773	\$9,805	\$11,165	\$10,604
Owner-Occupied Housing Units:	1101	492	303	934	455
Value of Owner-Occupied Units:					
\$5,000	62	15	24	19	7
\$ 5,000 - \$ 7,499	108	32	21	56	27
\$ 7,500 - \$ 9,999	87	53	19	43	32
\$10,000 - \$14,999	145	45	21	138	86
\$15,000 - \$19,999	110	47	23	88	41
\$20,000 - \$24,999	88	30	2	73	_
\$25,000 - \$34,999	25	20	2	83	12
\$35,000 - \$49,999	12	8		17	
\$50,000	4				
Median Value:	\$12,185	\$12,775	\$9,340	\$15,990	\$12,190

housing units in the 49202 zip code was also the lowest of the four major zip code areas at \$12,000. This amount is \$4,770 less than the median value of owner-occupied housing units in 49201.

The Jackson 49201 zip code area had the highest of the nine zip codes in terms of mean family income at \$11,858, according to the 1970 census information. This amount is \$2,085 greater than the lowest mean family income amount of \$9,773 for the Munith 49259 zip code. The 49201 zip code was also the wealthiest in terms of median value of owner-occupied housing units. With a median value of \$16,770 it surpassed the Onondaga 49264 zip code by \$7,430.

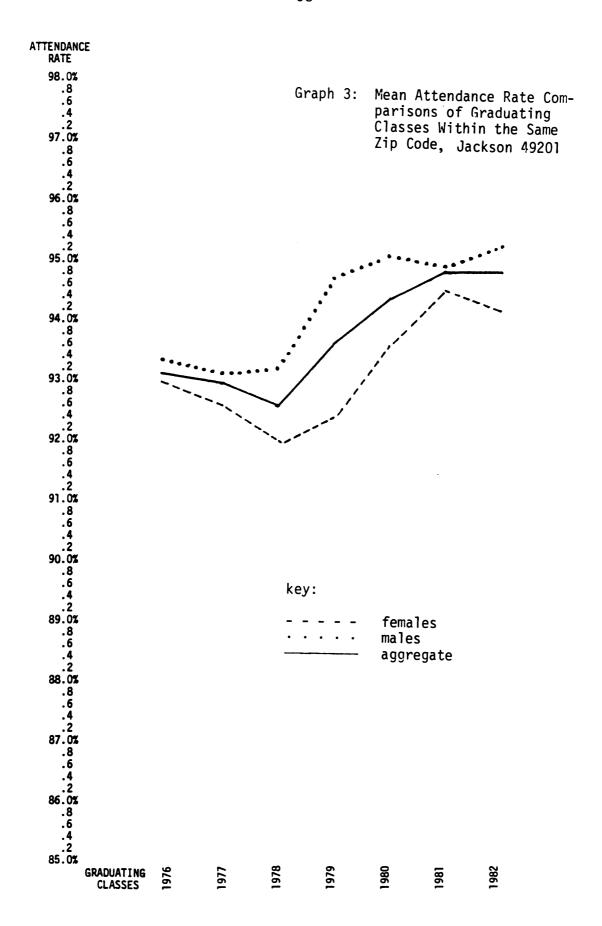
The Onondaga 49264 zip code could be classified as the poorest of the nine zip codes if mean family income and media value of owner-occupied housing are taken together.

Although 1980 U. S. Census Bureau data by zip code areas are not readily available, it is expected that when released, the 1980 data will generally parallel the 1970 census data. Jackson 49201 continues to be the wealthiest socioeconomic zip code in the school district with most of the new home construction during the past 10 years occurring in this zip code.

Attendance Rate Comparisons of Graduating Classes Within the Same Zip Code

Jackson 49201

The mean attendance rate by Northwest High School graduates living the Jackson 49201 zip code and graduating between 1976 and 1982 decreased between the years 1976 and 1978 (Graph 3). From a 93.1% mean attendance rate in 1976, the mean dipped to 92.6% in 1978.



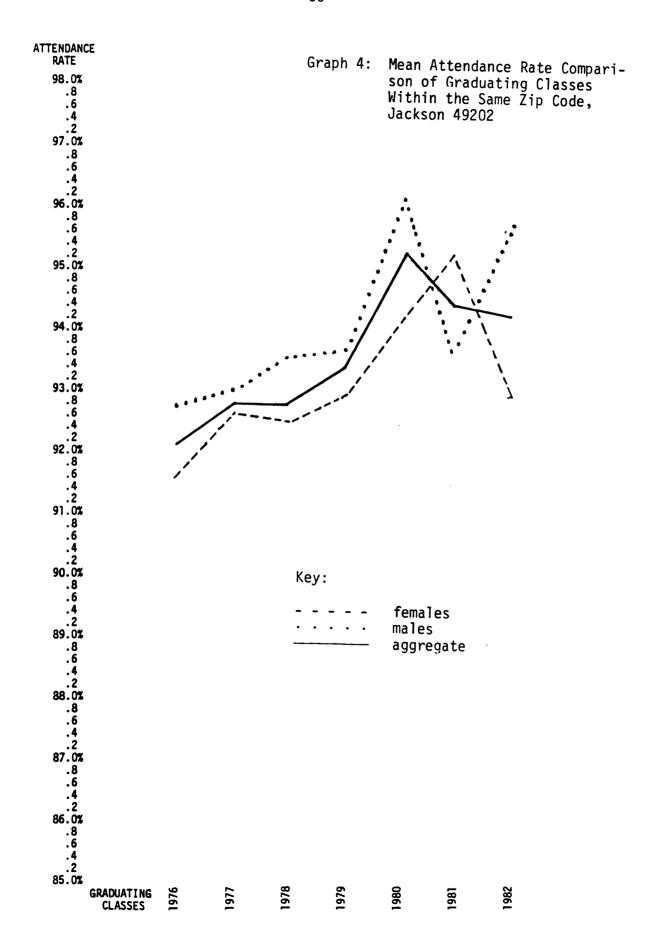
Subsequent graduating classes, however, showed marked improvements, culminating in a 94.7% mean attendance rate for the graduates of the class of 1982. This reflected a 23.2% improvement in mean attendance rates between 1976 and 1982 and a 17.2% improvement between the years 1979 and 1982.

The attendance rate pattern for males and females generally paralleled these changes with attendance rates being better for males than females and females in class of 1982 showing a slight decrease in their attendance rate. Between the years 1976 and 1982, females improved their mean attendance rates by 17.2%, and between 1979 and 1982 by 24.7% Males improved their mean attendance rates 29.9% between 1976 and 1982 and 11.3% between 1979 and 1982.

Jackson 49202

The mean attendance rate for Northwest High School students living in the Jackson 49202 zip code and graduating between 1976 and 1982 showed steady improvement from 1976 to 1980, after which it began to taper off (Graph 4). The class of 1976 had a mean attendance rate of 92.1%. The class of 1980 had a mean attendance rate of 95.2%. By the class of 1982, the mean attendance rate had declined to 94.2%. This reflected a 16.6% increase in the mean attendance rate between 1976 and 1982 and a 12.1% improvement between 1979 and 1982.

While the mean attendance rate for males steadily improved between 1976 and 1979, sporadic improvements and declines occurred afterwards. Males in the class of 1980 had a mean attendance rate of 96.1%. The mean attendance rates for males in the class of 1981 dipped to 93.6% but rose to 95.5% in the class of 1982. This reflected a 38.4%



increase in mean attendance rates between 1976 and 1982 and a 28.6% increase between 1979 and 1982.

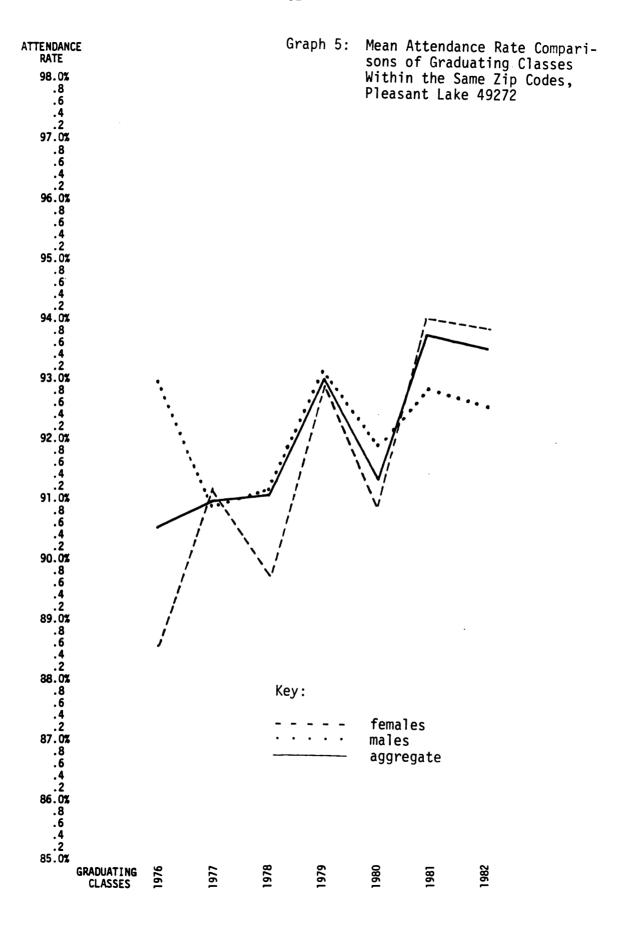
The mean attendance rates for females graduates living in the 49202 zip code showed steady improvement between 1976 and 1982 but fell off sharply in 1982. The mean attendance rate for the female graduates in the class of 1976 was 91.6%. By 1981 the mean attendance rate for female graduates from Jackson 49202 was 95.2%. For the class of 1982, the mean attendance rate for females had fallen to 92.8%. This reflected a 14.3% improvement in the mean attendance rate between 1976 and 1982 and a 1.4% decrease between 1979 and 1982.

Only in the class of 1981 did the mean attendance rate for females surpass that of the males. For every other class, males demonstrated better attendance patterns.

Pleasant Lake 49272

The mean attendance rate for Northwest High School students living in the Pleasant Lake 49272 zip code and graduating between 1976 and 1982 showed marked improvement after 1978 and the implementation of the Northwest High School attendance policy, dipping only in 1980 (Graph 5). The class of 1976 had a mean attendance rate of 90.5%. By 1979 the rate had increased to 93.1%. It dipped to 91.4% in 1980 but recovered, ending with mean attendance rate of 93.6% for the class of 1982. This reflected a 32.6% improvement—mean attendance rate between the years 1976 and 1982 and a 7.2% improvement between 1979 and 1982.

Male mean attendance rates surpassed female mean attendance rates in the classes of 1976, 1978, 1979, and 1980. Female mean attendance



rates exceeded male mean attendance rates in the classes of 1977, 1981, and 1982. Between the years 1976 and 1982, the mean attendance rate for males declined 5.4%; between 1979 and 1982 the rate declined 8.0%. The female mean attendance rate improved 47.4% between 1976 and 1982 and increased 15.5% between 1979 and 1982.

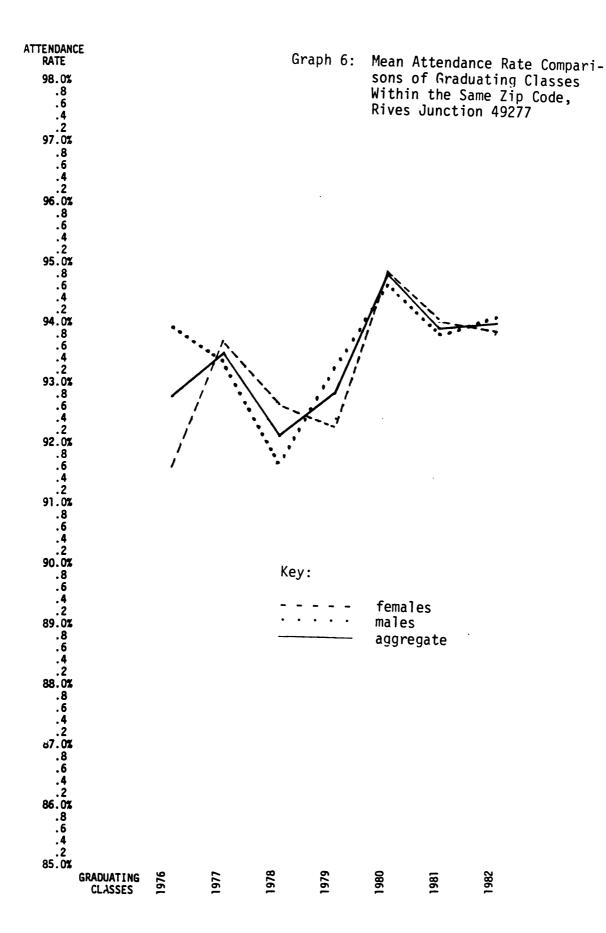
Rives Junction 49277

The mean attendance rates for Northwest High School students living in the Rives Junction 49277 zip code and graduating between 1976 and 1982 showed improvement following the class of 1978 and the implementation of the high school attendance policy (Graph 6). Following the decline registered by the class of 1978 at 92.2%, mean attendance rates improved for graduates from Rives Junction 49277 to a mean of 94.1% for the class of 1982. This was down slightly from the highest attendance rate, 94.8%, for this zip code attained by the class of 1980. This reflected an 18.1% increase between 1976 and 1979 and a 16.9% increase between 1979 and 1982.

In four of the seven years studied, 1977, 1980, 1981, and 1982, the difference between male and female attendance rates was less than .3%. Females improved their mean attendance rates 38.9% between 1976 and 1982 and 23.4% between 1979 and 1982. Males improved their mean attendance rates 4.9% between 1976 and 1982 and 13.4% between 1979 and 1982.

Other Zip Codes

As mentioned earlier, the remaining five zip codes--Leslie 49251, Munith 49259, Onondaga 49264, Parma 49269, and Soringport 49284--contribute fewer than 3.0% of the student enrollment of Northwest High



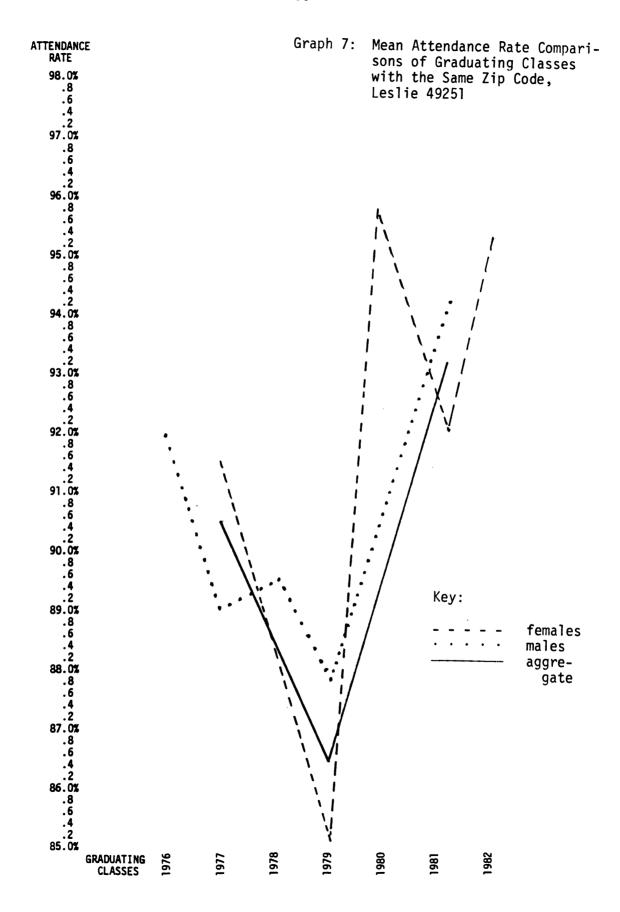
School. Consequently, patterns or trends in attendance rates are more difficult to plot, due to the small number of students, means of one or two students, and the absence of males or females in particular graduating classes. The data are included, however, for comparative purposes; but due to very small populations, broad generalizations would be unsound.

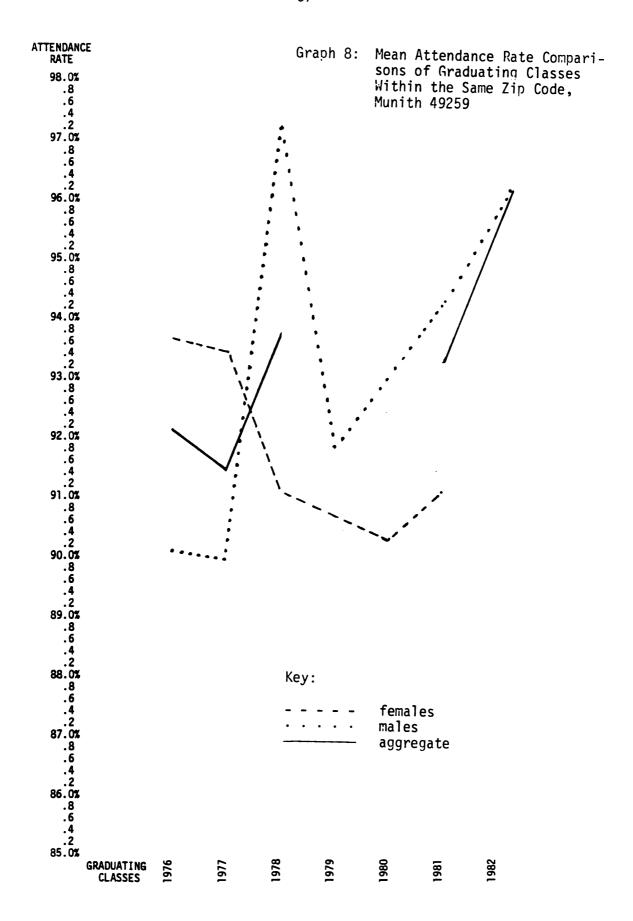
Leslie 49251. The mean attendance rates for Northwest High School students living in the Leslie 49251 zip code and graduating between 1976 and 1982 showed a downward trend in attendance rates from 1976 and a marked improvement following 1979 (Graph 7).

In 1977 the mean attendance rate was 90.6%, dipping to a low of 86.5% in 1979 and climbing to 93.3% in 1981. This reflects a 43.7% increase in the attendance rates between 1976 and 1982 and a 68.1% increase between 1979 and 1982.

Female students demonstrated better attendance rates than males in the class of 1977, but males had better attendance rates in the classes of 1979 and 1981. Between 1976 and 1982 females improved their attendance by 56.4% and between 1979 and 1982 by 69.6%. Males demonstrated a 70.0% improvement in their attendance rates between 1976 and 1982 and a 53.8% improvement between 1979 and 1982.

Munith 49259. The mean attendance rates for Northwest High School students living in the Munith 49259 zip code and graduating between 1976 and 1982 showed an upward trend from 92.2% in 1976 to a high of 93.8% in 1978, tapering off slightly to 93.3% in 1981 (Graph 8). This was a 51.3% increase between 1976 and 1982 and a 52.5% increase between 1979 and 1982.





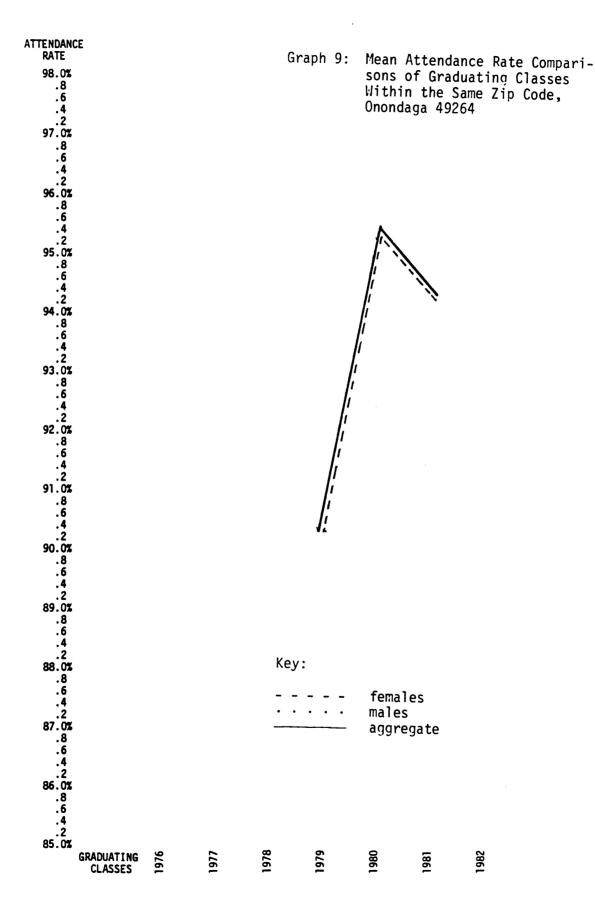
The mean attendance rate for females living in 49259 decreased between the years 1976 and 1981. The rate declined from 93.7% in 1976 to a low of 91.4% in 1980, gaining somewhat to 92.0% in 1982. This relfected a 20.6% improvement between 1976 and 1982.

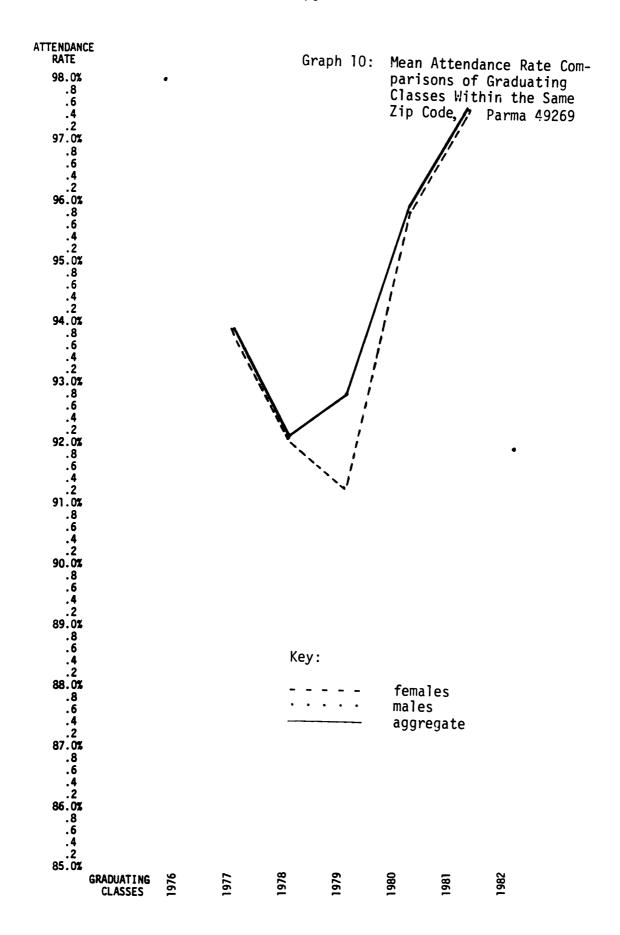
Males living in 49259 with the exception of 1976 and 1977 had better mean attendance rates than their female counterparts. They demonstrated a 61.6% improvement in mean attendance rate between 1976 and 1982 and a 52.5% improvement between 1979 and 1982.

Onondaga 49264. Only six students from Onondaga 49264, five females and one male, who attended Northwest for three complete years have graduated in the past seven years. The females in the classes of 1980 and 1981 had better attendance rates than did the females in the class of 1978 (Graph 9).

The aggregate groups' mean attendance rate increased 30.6% between 1979 and 1982. Females improved their attendance rates 41.8% during this same period.

Parma 49269. Five males and seven females from Parma 49269 who attended Northwest for three complete years have graduated in the past seven years. Graph 10 shows a decline in female attendance rates from 93.9% in 1977 to 91.4% in 1979, then an increase to 95.9% in 1980. This reflected a 60.7% decrease between 1977 and 1979 and a 72.1% increase in attendance between 1979 and 1980. Male attendance rates were highest in 1976 at 98.0% and lowest in 1982 at 92.0% reflecting a 30.0% decline in attendance rates.





98.0% -8 -6 -4 -2 -97.0% -8 -6 -4 -2 -95.0% -8 -6 -4 -2 -95.0% -8 -6 -4 -2 -95.0% -8 -6 -4 -2 -95.0% -8 -6 -4 -2 -95.0% -8 -6 -4 -2 -95.0% -8 -6 -4 -2 -95.0% -8 -6 -4 -2 -95.0% -8 -6 -4 -2 -2 -95.0% -8 -6 -4 -2 -2 -95.0% -8 -6 -4 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	CE .	•		Gr	raph 11:	paris Class	ons of es With	nce Rate Graduatir in the Sa ringport	ng ame
.2 93.0% .8 .6 .4 .2 92.0% .8 .6 .4 .2 90.0% .8 .6 .4 .2 .2 90.0%				Key 	/: 	femal males aggre			
.6 .4 .2 88.0% .8 .6 .4 .2 87.0% .8 .6 .4 .2 86.0%	GRADUATI NG CLASSES	1976	1977	1978	1979	1980	1981	1982	

Springport 49284. Only two male students who attended Northwest for three complete years have graduated between the years of 1976 and 1982. As indicated in Graph 11, both male students had extremely high attendance rates. A 30.6% improvement in the two attendance rates occurred between 1976 and 1981.

Mean Grade Point Average Comparison of Graduating Classes Within the Same Zip Code

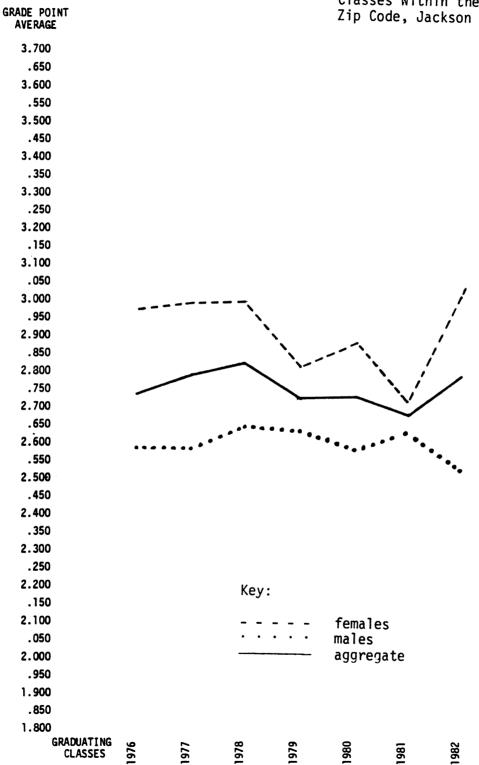
Jackson 49201

The mean grade point average of Northwest High School graduates living in the Jackson 49201 zip code and graduating between 1976 and 1982 remained relatively constant (Graph 12). The highest mean grade point average, 2.827, was attained by the class of 1978 and the lowest mean grade point average, 2.705, was attained by the class of 1981. This reflected a 1.9% improvement in the mean grade point average between 1976 and 1982. Between the years 1979 and 1932, there was a 2.7% increase in the mean grade point average.

The mean grade point average for female graduates living in the 49201 zip code dropped from 2.997 in 1978 following implementation of Northwest's attendance policy to 2.742 in 1981. The mean grade point average for females in the class of 1982 rose to 3.043. The reflected a 1.9% increase in mean grade point average between 1976 and 1982 and a 7.3% increase between 1979 and 1982.

The mean grade point average for male graduates living in the 49201 zip code declined slightly over the seven years. The highest mean grade point average, 2.651, was attained by the class of 1978 and 1981 and the lowest mean grade point average, 2.548, was attained by the class of 1982. This reflected a 1.3% decrease in mean grade point

Graph 12: Mean Grade Point Average Comparisons of Graduating Classes Within the Same Zip Code, Jackson 49201



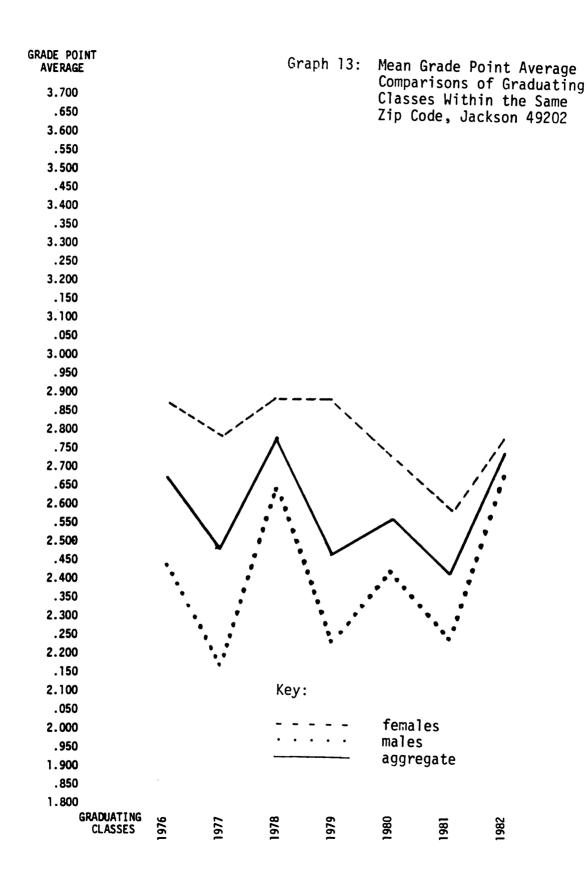
average between 1976 and 1982 and a 4.3% decrease between 1979 and 1982.

Jackson 49202

The mean grade point average of Northwest High School graduates living in the Jackson 49202 zip code and graduating between 1976 and 1982 dropped after reaching a high of 2.809 in 1978 to a low of 2.418 in 1981 (Graph 13). The mean grade point average for the class of 1982 showed an improvement to 2.693. This reflected a .6% improvement in mean grade point average between 1976 and 1982 and a 7.9% improvement between 1979 and 1982.

The mean grade point average for female graduates living in the 49202 zip code remained relatively constant between 1976 and 1979, then fell from 2.846 in 1979 to 2.609 in 1981. The mean grade point average for females in the class of 1982 showed an improvement to 2.740. This reflected a 4.2% decrease in mean grade point average between 1976 and 1982 and a 3.7% increase between 1979 and 1982.

The mean grade point averages for male graduates living in the 49202 zip code are sporadic. The mean grade point average of 2.643 was attained by the class of 1978, preceded in 1977 by the lowest mean grade point average, 2.184, and followed in 1979 by another decline to 2.243. The highest mean grade point average for males was requested by the class of 1982. The fluctuation computed to a 7.9% improvement in mean grade point average between 1976 and 1982 but a 15.4% improvement between 1979 and 1982.



Pleasant Lake 49272

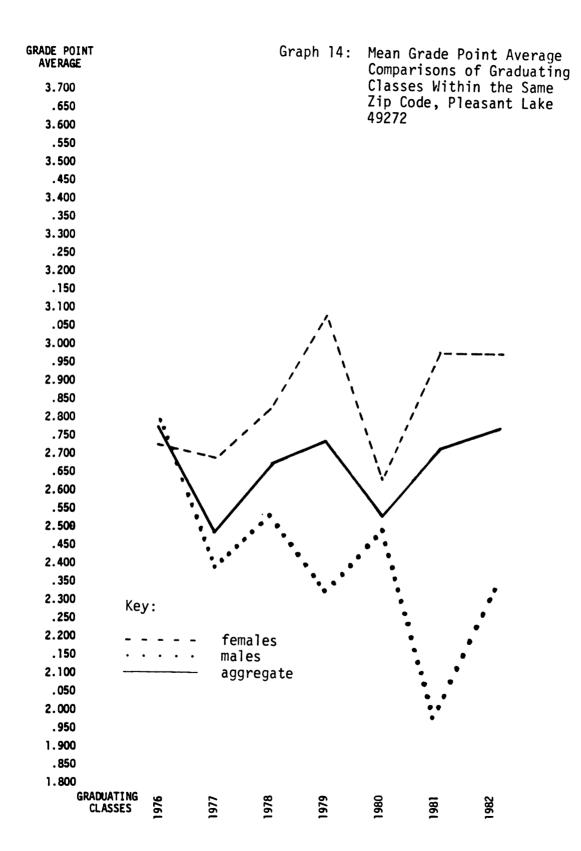
The mean grade point average of Northwest High School graduates living in Pleasant Lake 49272 zip code and graduating between 1976 and 1982 dropped from 2.762 in 1976 to 2.50 in 1977, rose to 2.729 in 1979, dropped again to 2.556 in 1980, and improved to 2.750 in 1982 (Graph 14). The mean grade point average declined .4% between 1976 and 1982 and declined .8% between 1979 and 1982.

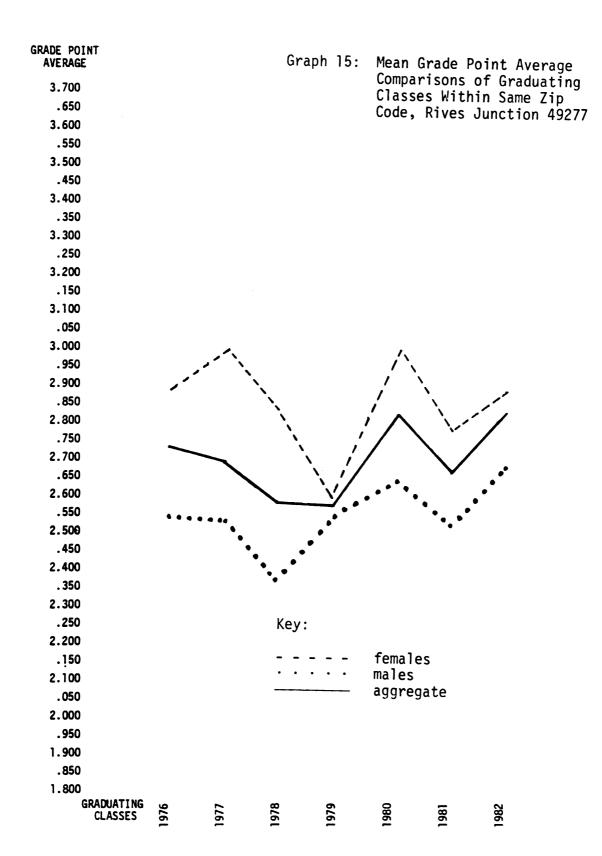
The mean grade point average for female graduates living in the 49272 zip code rose from 2.736 in 1976 to a high of 3.072 in 1979. It dropped to 2.601 in 1980 and improved to 2.968 in 1981 with females in the class of 1982 registering a 2.995 mean grade point average. Females, therefore, improved their mean grade point averages 7.4% between 1976 and 1982 and improved 3.8% between 1979 and 1982.

The mean grade point average for male graduates living in the 49272 zip code dropped from 2.798 in 1976 to 2.400 in 1977. In 1981 the mean grade point average for males had fallen to 1.990. The males in the class of 1982 attained a mean grade point average of 2.313. This reflected a 7.3% decline between 1976 and 1982 and a .9% decline between 1979 and 1982.

Rives Junction 49277

The mean grade point average of Northwest High School graduates living in Rives Junction 49277 zip code and graduating between 1976 and 1982 gradually declined from 2.732 in 1976 to 2.576 in 1979 (Graph 15). The highest mean grade point average, 2.820, was attained by the class of 1980. Following a slight decline to 2.679 in 1981, the class of 1982 attained the highest mean grade point average of 2.838. This





reflected a 3.7% increase between 1976 and 1982 and a 9.2% increase between 1979 and 1982.

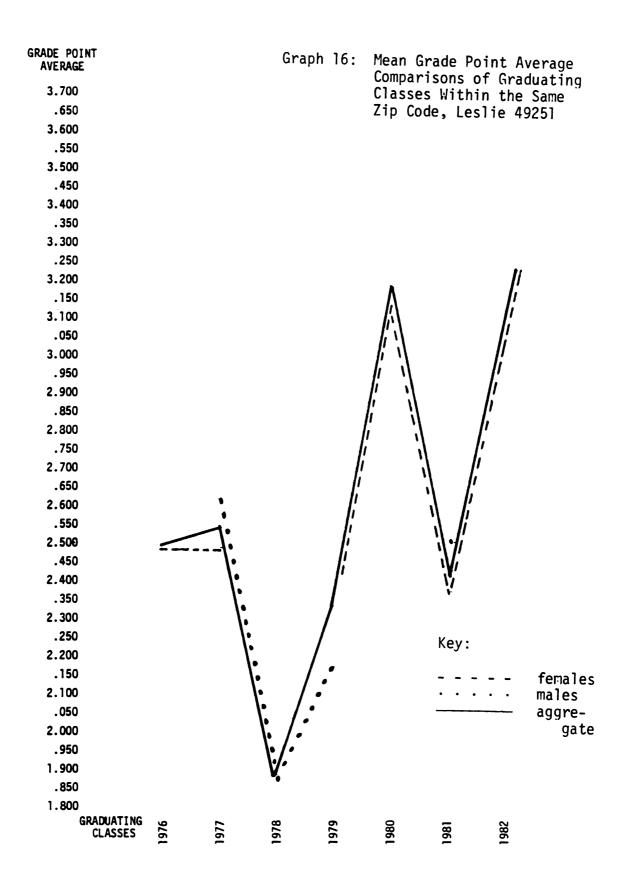
The mean grade point average for female graduates living in the 49277 zip code plummeted to a low of 2.587 in 1979. The highest mean grade point average, 3.017, was attained by the class of 1980. Following a drop to 2.759 in 1981, the females in the class of 1982 registered a mean grade point average of 2.915. Females, therefore, improved their mean grade point average by 1.9% between 1976 and 1982 and improved their mean grade point average 11.3% between 1979 and 1982.

The mean grade point average for male graduates living in the 49277 zip code declined to a low of 2.389 in 1978 and rose to a high of 2.650 in 1980. Following a drop to 2.537 in 1981, the males in the class of 1982 registered a mean grade point average of 2.645. This reflected a 3.3% increase in mean grade point average between 1976 and 1982 and a 2.9% increase between 1979 and 1982.

Leslie 49251

The mean grade point average for Northwest High School graduates living in Leslie 49251 zip code and graduating between 1976 and 1982 dropped to a low of 1.878 in 1978 and rose to 3.216 in 1980 (Graph 16). Following a sharp decline to 2.544 in 1981, the class of 1982 attained the highest mean grade point average of 3.243. This reflected a 22.9% increase in mean grade point average between 1976 and 1982 and 17.2% increase between 1979 and 1982.

The mean grade point average for females graduates living in the 49251 zip code reached a low of 2.442 in 1981 and a high of 3.243 in



1982. This was an 11.1% improvement between 1976 and 1982 and a 25.3% improvement between 1979 and 1982.

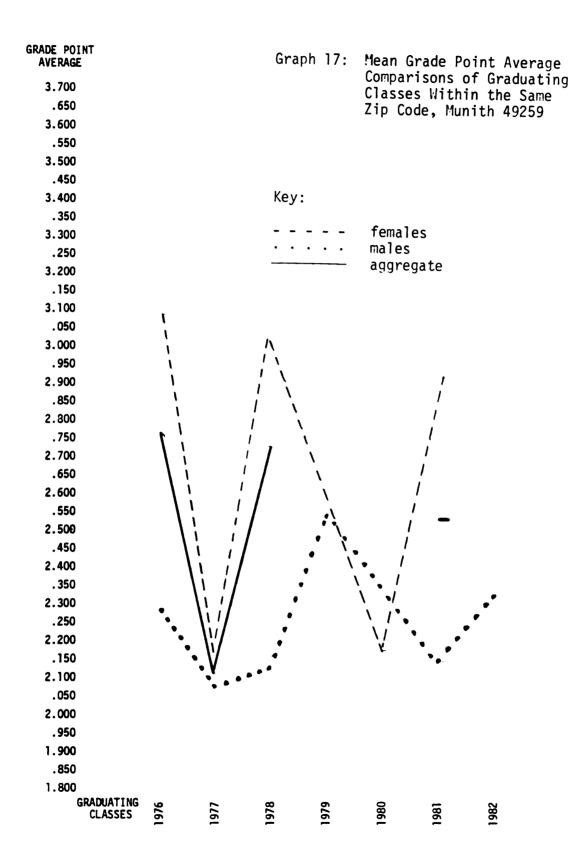
The mean grade point average for male graduates living in the 49251 zip code plummeted from 2.611 in 1977 to a low of 1.878 in 1978. The mean grade point average for males in 1981 was 2.514. This was only a .6% improvement between 1976 and 1982 but a 13.5% improvement between 1979 and 1982.

Munith 49259

The mean grade point average for Northwest High School graduates living in Munith 49259 zip code and graduating between 1976 and 1982 was sporadic (Graph 17). The highest mean grade point average, 2.767, was attained in 1976; and the lowest mean grade point average, 2.138, was registered in 1977. A 26.4% decrease in mean grade point average occurred between 1976 and 1982 and a 9.5% decrease between 1979 nad 1982.

The mean grade point average for female graduates living in 49259 zip code also fluctuated greatly. The highest mean grade point average, 3.091, was attained in 1976; and the lowest mean grade point average, 2.183, was recorded in 1977. This reflected a 5.5% decline in mean grade point average between 1976 and 1982.

The mean grade point average for male graduates living in 49259 zip code rose to a high of 2.558 in 1979, and after dropping to 2.167 in 1981 improved slightly to 2.314 in 1982. This reflected a 1.5% decrease in mean grade point average between 1976 and 1982 but a 9.5% decrease between 1979 and 1982.



GRADE POINT AVERAGE			Graph	18:	Mean Gr	ade Poi	nt Average	
3.700					Comparisons of Graduat			
	.650				Classes Within the Same Zip Code, Onondaga 4926			
3.600					Zip Cou	e, unun	udyd 49204	
.550								
3.500								
. 450								
3.400								
. 350								
3.300								
.250								
3.200								
.150					<i>ا</i> لح.			
3.100					// 📉			
. 050					//	11		
3.000					//			
. 950					/			
2.900					"			
. 850				1	1			
2.800				- /				
.750								
2.700				1				
.650				1				
2.600				•				
. 550								
2.500								
. 450								
2.400								
. 350								
2.300								
. 250								
2.200			Key:					
.150			key:					
2.100					females		•	
. 050				•	males			
2.000					aggregat	te		
. 950					•			
1.900								
. 850								
1.800								
GRADUATING CLASSES	1976	1977	1978	1979	1980	1981	1982	

Onondaga 49264

The mean grade point average for female graduates living in Onon-daga 49264 zip code and graduating between 1979 and 1981 was lowest at 2.651 in 1979 and highest at 3.228 in 1980. Graph 18 reflected a 13.6% improvement.

The grade point average for the lone male graduate living in Onon-daga and graduating in 1982 was 2.128.

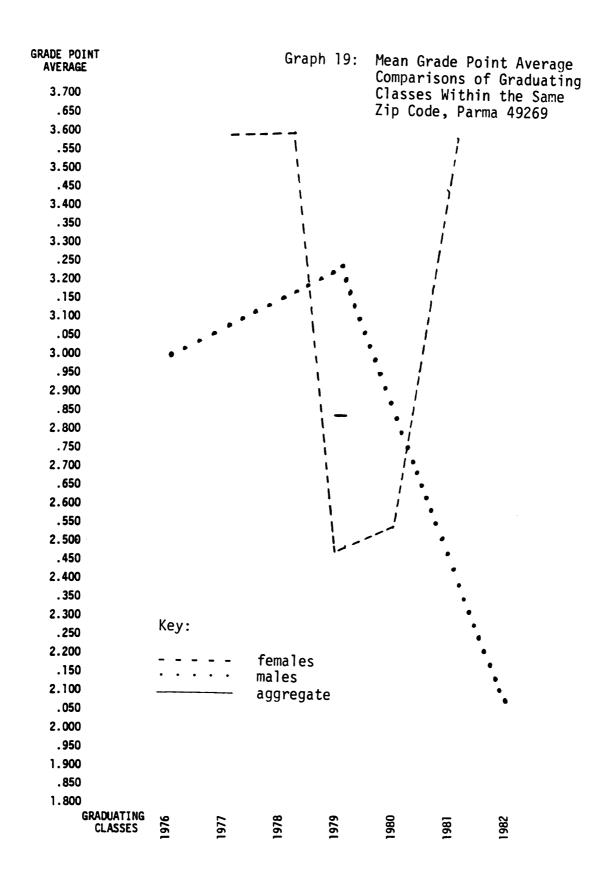
Parma 49269

The mean grade point average for female graduates living in Parma 49269 zip code and graduating between 1977 and 1981 was relatively constant in 1977, 1978, and 1981, at approximately 3.600, but dropped to 2.424 in 1979. Graph 19 relfected a 1.3% decline between 1976 and 1982 but a 31.2% increase between 1979 and 1982.

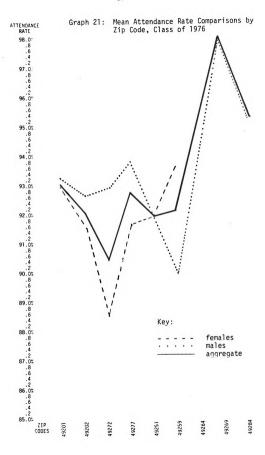
The mean grade point average for male graduates living in Parma 49269 zip code was the highest, 3.030 in 1976, and the lowest, 2.098 in 1982, relfected a 30.8% decrease between 1976 and 1982 and a 55.5% decrease between 1979 and 1982.

Springport 49284

The lone male 1976 graduate of Northwest High School living in the Springport 49284 zip code had a grade point average of 2.492. The lone male 1981 graduate had a grade point average of 2.608. Graph 20 thus reflected a 4.5% improvement in the mean grade point average between the years 1976 and 1981.



GRADE POINT AVERAGE			Graph	20:	Mean Gr	ade Poi	nt Avera	ge
3.700	3.700				Compari	ina		
.650					Viasses	Within Spri	the Sam	e 0204
3.600					Zip Cou	e, spri	ngport 4	9284
.550								
3.500								
. 450								
3.400								
. 350								
3.300								
. 250								
3.200								
.150								
3.100								
. 050								
3.000								
. 950								
2.900								
. 850								
2.800								
. 750								
2.700								
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GRADUATING CLASSES	1976	1977	1978	1979	1980	1981	1982	



Mean Attendance Rate Comparisons of Graduating Classes by Zip Codes

Class of 1976

Graduates of the class of 1976 from Jackson 49201 zip code had the highest mean attendance rate, 93.1%, of the four major zip codes--49201, 49202, 49272, 49277 (Graph 21). Those 1976 graduates from Pleasant Lake 49272 had the lowest mean attendance rate at 90.5%.

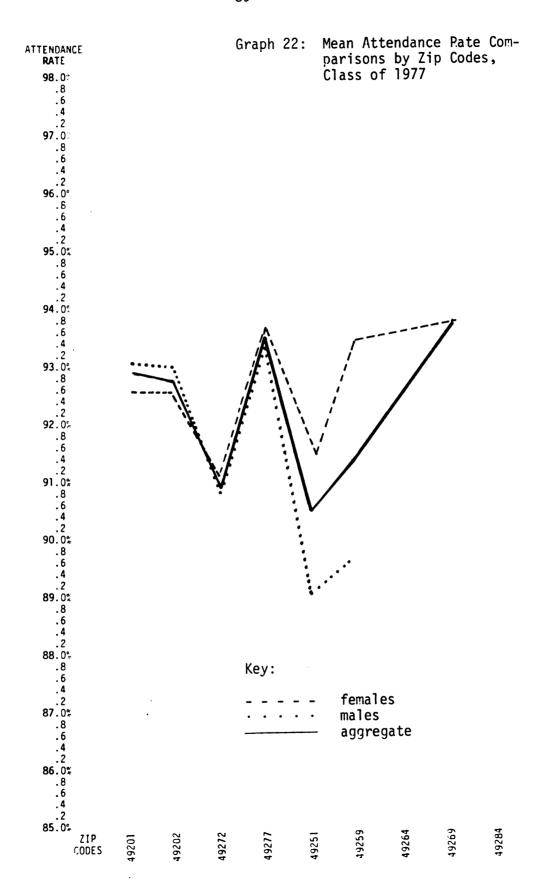
A comparison of the nine zip codes showed that the mean attendance rate was highest, 98.0% for the Parma 49269 zip code, and lowest, 90.5% for the students from Pleasant Lake 49272.

Female students graduating in the class of 1976 from Jackson 49201 had the highest mean attendance rate, 93.0%, of the four major zip codes. Female graduates from Pleasant Lake 49272, on the other hand, had the lowest mean attendance rate at 88.6%.

An examination of the nine zip code areas indicated that female graduates of the class of 1976 from Munith 49259 had the highest mean attendance rate, 3.091, while females from Pleasant Lake 49272 had the lowest mean attendance rate at 88.6%.

Male students graduating in the class of 1976 from Rives Junction 49277 had the highest mean attendance rate, 93.9%, of the four major zip codes. Male graduates from Jackson 49202 had the lowest mean attendance rate at 92.7%.

An examination of the nine zip codes indicated that the lone male graduate in the class of 1979 from Parma 49269 had the highest mean attendance rate, 98.0%, while males from Munith 49259 had the lowest mean attendance rate, 2.279.



Class of 1977

A comparison of students graduating from Northwest High School in 1977 and residing in the four major zip codes indicated that the mean attendance rate was highest, 93.5%, for those from Rives Junction 49277 (Graph 22). The mean attendance rate was lowest, 91.0%, for graduates from the Pleasant Lake 49272 zip code

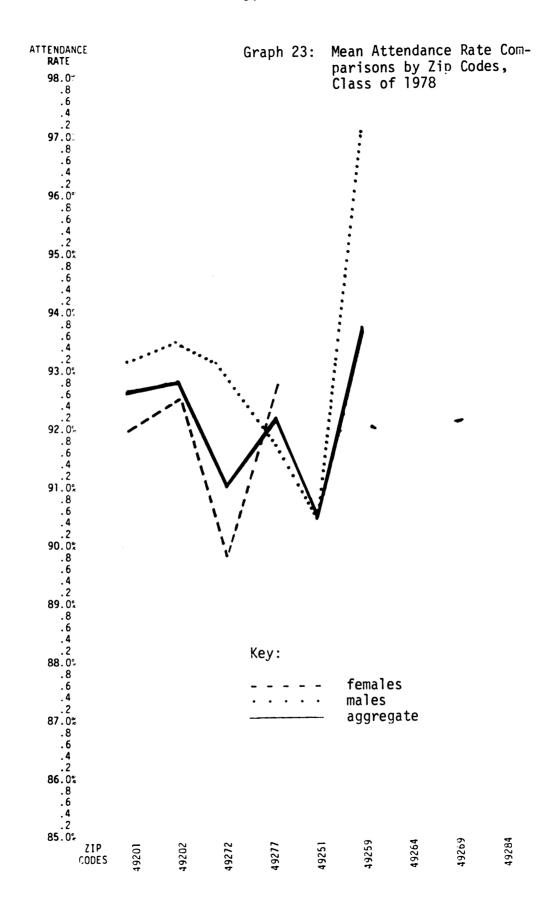
A comparison of all nine zip codes indicated that the mean attendance rate was highest, 93.5%, for the Rives Junction 49277 zip code and the lowest, 2.557, for the Leslie 49251 zip code.

A comparison of female students graduating from Northwest High School in 1977 and residing in the four major zip codes indicated that the mean attendance rate was highest, 93.7%, for those from Rives Junction 49277. The mean attendance rate for females was lowest, 91.2%, for those residing in the Pleasant Lake 49272 zip code.

An analysis of the nine zip codes indicated that the mean attendance rate was highest, 93.9%, for the lone female from Parma 49269 and the lowest, 91.2%, for those from Pleasant Lake 49272.

An examination of male students graduating from Northwest High School in 1977 and residing in the four major zip code areas revealed that the mean attendance rate was highest, 93.4%, for those residing in Rives Junction 49277. The mean attendance rate was the lowest, 90.9%, for the males from Pleasant Lake 49272.

A comparison of all nine zip codes indicated that the mean attendance rate was highest, 93.4%, for males from Rives Junction 49277 and lowest, 89.1%, for males from Leslie 49251.



Class of 1978

Of the students graduating from Northwest High School in the class of 1978, those in the Jackson 49202 zip codes had the highest mean attendance rate, 92.5%, of the four major zip codes (Graph 23). The 1978 graduates from Pleasant Lake 49272 had the lowest mean attendance rate at 91.1%.

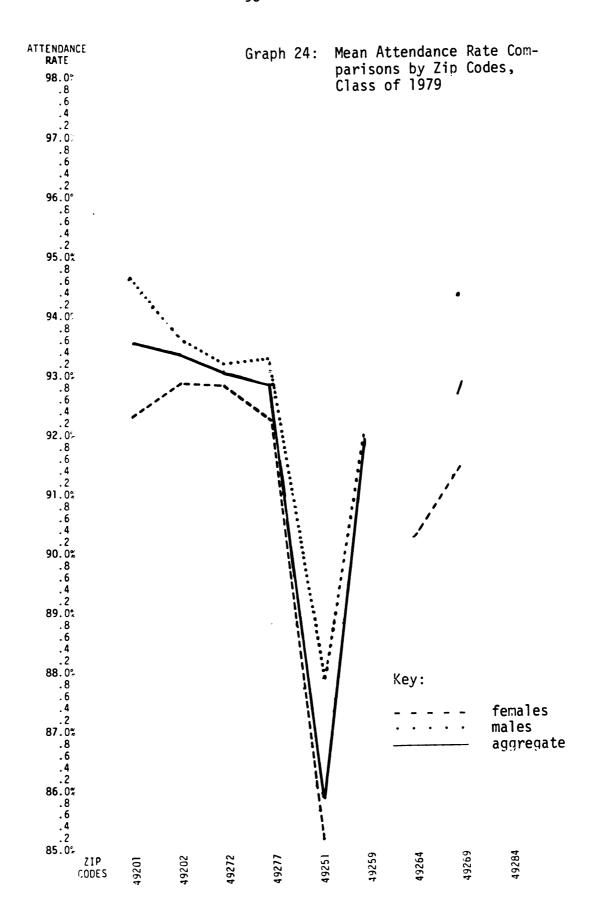
Comparing the nine zip codes showed that the mean attendance rate was highest, 93.8%, for the Munith 49259 zip codes and lowest, 90.6%, for the students from Leslie 49251.

A comparison of female students graduating from Northwest High School in 1978 and residing in the four major zip codes indicated that the mean attendance rate was highest, 92.7%, for those from Rives Junction 49277. The mean attendance rate for females was lowest, 89.8%, for those from Pleasant Lake 49272.

Rives Junction remained the zip code with the highest mean attendance rate for females, and Pleasant Lake remained the zip code with the lowest mean attendance rate when all nine zip codes were studied.

A comparison of male students graduating from Northwest High School in 1978 and residing in the four major zip codes showed the mean attendance rate to be highest, 93.5%, for those from Jackson 49202. The mean attendance rate for males was lowest, 91.7%, for those from Rives Junction 49277.

An examination of all nine zip codes revealed that the mean attendance rate was highest, 97.2%, for males from the Munith 49259 zip code and lowest, 90.6%, for males from Leslie 49251.



Class of 1979

Graduates of the class of 1979 from the Jackson 49201 zip code had the highest mean attendance rate, 93.6%, of the four major zip codes (Graph 24). Those 1979 graduates from Rives Junction 49277 had the lowest mean attendance rate at 92.9%.

A comparison of the nine zip codes showed that the mean attendance rate was highest, 93.6%, for the Jackson 49201 zip code and lowest, 85.9%, for students from Leslie 49251.

Female students graduating in the class of 1979 from Jackson 49202 and Pleasant Lake 49272 had the highest mean attendance rates 92.9%, of the four major zip codes. Female graduates from Jackson 49201 and Rives Junction 49277 had the lowest mean attendance rate, 92.3%.

An examination of the nine zip code areas indicated that female graduates of the class of 1979 from Jackson 49202 and Pleasant Lake 49272 had the highest mean attendance rate, 92.9%, while females from Leslie 49251 had the lowest mean attendance rate, 85.2%.

Male students graduating in the class of 1979 from Jackson 49201 had the highest mean attendance rate, 94.7%, of the four major zip codes. Male graduates from Pleasant Lake 49272 had the lowest mean attendance rate, 93.2%.

An examination of the nine zip codes indicated that male graduates in the class of 1979 from Jackson 49201 had the highest mean attendance rate, 94.7%, while the lone male from Leslie 49251 had the lowest mean attendance rate 87.9%.

The Northwest High School attendance policy was implemented in January of this graduating class' senior year. Graduates of the class

of 1979, therefore, were under its jurisdiction for one semester before graduating from high school.

Class of 1980

Of the students graduating from Northwest High School in the class of 1980, those in the Jackson 49202 zip code had the highest mean attendance rate, 95.2%, of the four major zip codes (Graph 25). The 1980 graduates from Pleasant Lake 49272 had the lowest mean attendance rate, 91.4%.

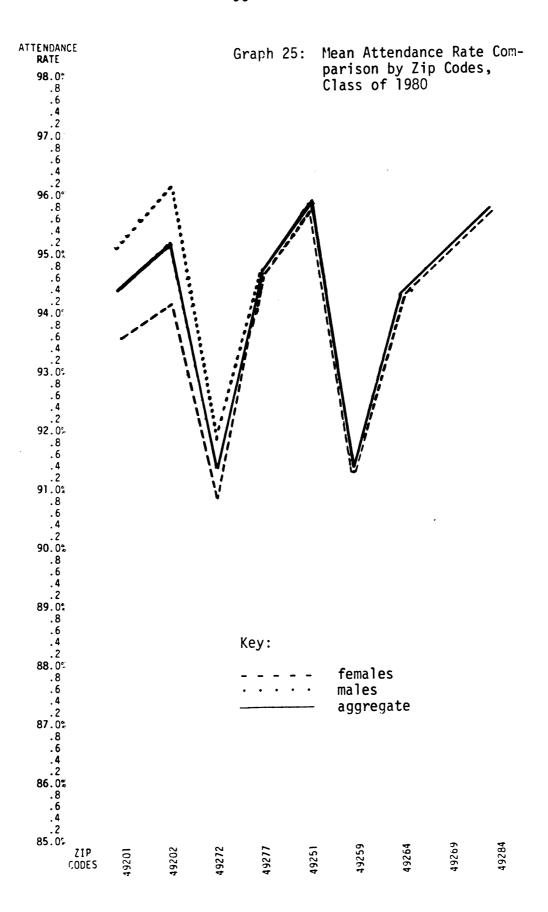
Comparing the nine zip codes showed that the mean attendance rate was highest, 95.9%, for the Leslie 49251 and the Parma 49269 zip codes and lowest, 91.4%, for the graduates from Pleasant Lake 49272.

A comparison of the female graduates in the class of 1980 residing in the four major zip codes indicated that the mean attendance rate was highest, 94.1%, for those from Jackson 49202. The mean attendance rate for females was lowest, 90.9%, for those from Pleasant Lake 49272.

When all nine zip codes were compared, the females from the Leslie 49251 and Parma 49269 zip codes attained the highest mean attendance rate, 95.9%, while females from Pleasant Lake 49272 attained the lowest mean attendance rate, 90.9%.

An examination of the males in this graduating class who resided in the four major zip codes revealed that the mean attendance rate was highest, 96.1%, for those from Jackson 49202. The mean attendance rate was lowest, 91.9%, for those male graduates from Pleasant Lake 49272.

There were no male graduates in this class of 1980 included in this research who resided in zip codes other than the major four.



The members of the class of 1980 were under the jurisdiction of the high school attendance policy, which was implemented midway through their junior year, for one and one-half years or three semesters.

Class of 1981

Graduates of the class of 1981 from the Jackson 49201 zip code had the highest mean attendance rate, 94.9%, of the four major zip codes (Graph 26). Those graduates from Pleasant Lake 49272 had the lowest mean attendance rate, 93.8%.

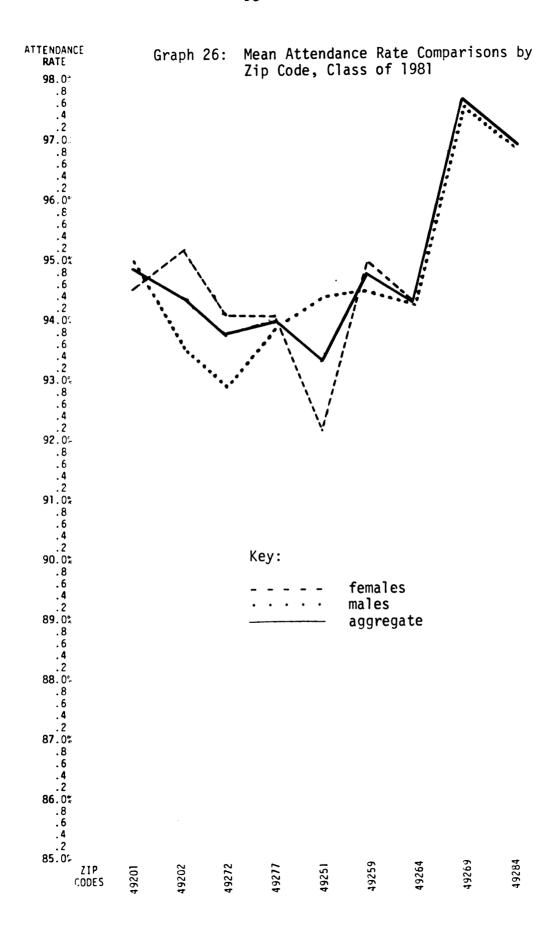
An analysis of the nine zip codes showed that the mean attendance rate was highest, 97.6%, for the Parma 49269 zip code and lowest, 93.3%, for the Leslie 49251 zip code.

Of the female students graduating from Northwest High Rchool in 1981 and living in the four major zip codes, those from Jackson 49202 had the highest mean attendance rate, 95.2%. Female graduates from Pleasant Lake 49272 and Rives Junction 49277 zip codes had the lowest mean attendance rate, 94.1%.

When the nine zip codes were compared, females from Jackson 49202 had the highest mean attendance rate, 95.2%, while females from Leslie 49251 had the lowest mean attendance rate, 92.2%.

Of the male students graduating in 1981 who lived in the four major zip codes, those from Jackson 49201 had the highest mean attendance rate, 95.0%. Male graduates from Pleasant Lake 49272 had the lowest mean attendance rate, 92.9%. This remained the same when all nine zip codes were studied.

The Northwest High School attendance policy was implemented midway through the class of 1981's sophomore year. Its members were,



therefore, accountable to its expectations for two and one-half years or five of their six semesters in high school.

Class of 1982

An analysis of students graduating from Northwest High School in 1982 and living in the four major zip codes indicated that the mean attendance rate was highest, 94.7%, for the students from the Jackson 49201 zip code (Graph 27). The mean attendance rate was lowest, 93.6%, for graduates from the Pleasant Lake 49272 zip code.

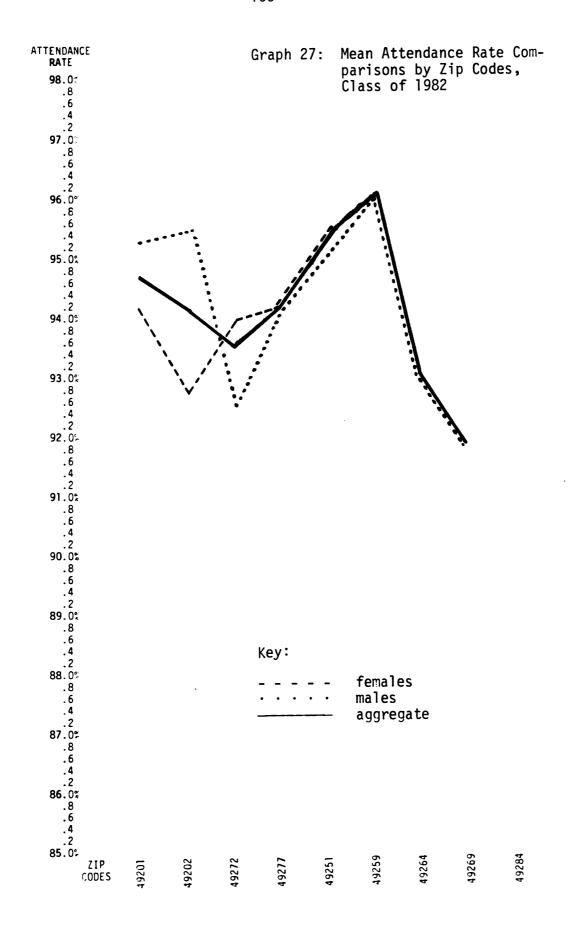
An examination of all nine zip codes revealed that 1982 graduates living in the Munith 49259 had the highest mean attendance rate, 96.2%, while those living in Parma 49269 had the lowest mean attendance rate, 92.0%.

Female students who graduated in 1982 and who resided in Jackson 49201 had the highest mean attendance rate, 94.2%, when the four major zip codes were studied. Female graduates from Jackson 49202 had the lowest mean attendance rate, 92.8%.

An analysis of all nine zip codes showed that females from Leslie 49251 attained the highest mean attendance rate, 95.5%. Females from Jackson 49202 attained the lowest mean attendance rate, 92.8%.

Male graduates of the class of 1982 residing in Jackson 49202 had the highest mean attendance rate, 95.5%, of the four major zip codes. Those males from Pleasant Lake 49272 had the lowest mean attendance rate, 92.6%.

When all nine zip codes were compared, Munith 49259 had the highest mean attendance rate, 96.2%, and Parma 49269 had the lowest mean attendance rate, 92.0%.



The class of 1982 was the first graduating class to complete all six semesters of high school under the absence restrictions imposed by the Northwest High School attendance policy.

Mean Grade Point Average Comparisons of Graduating Classes by Zip Codes

Class of 1976

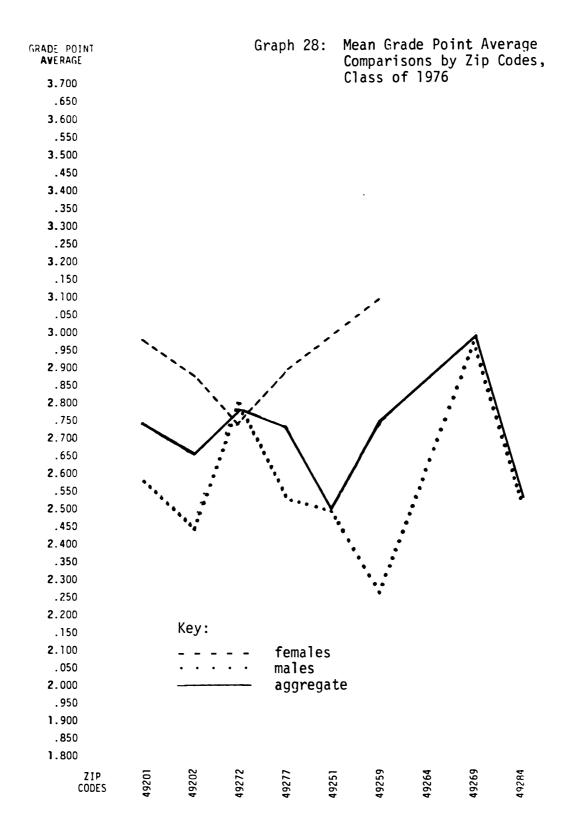
A comparison of students graduating from Northwest High School in 1976 and residing in the four major zip codes--49201, 49202, 49272, 49277--indicated that the mean grade point average was highest, 2.762, for those from Pleasant Lake 49272 (Graph 28). The mean grade point average was the lowest, 2.677, for graduates from the Jackson 49202 zip code.

A comparison of all nine zip codes indicated that the mean grade point average was highest, 3.030, for the Parma 49269 zip code and lowest, 2.492, for the Springport 49284 zip code.

A comparison of female students graduating from Northwest High School in 1976 and residing in the four major zip codes indicated that the mean grade point average was highest, 2.968, for those from Jackson 49201. The mean grade point average for females was lowest, 2.736, for those residing in the Pleasant Lake 49272 zip code.

An analysis of the nine zip codes indicated that the mean grade point average was highest, 3.091, for females from the Leslie 49259 zip code and lowest, 2.736, for those residing in Pleasant Lake 49272.

An examination of male students graduating from Northwest High School in 1976 and residing in the four major zip code areas revealed that the mean grade point average was highest, 2.798, for those



residing in Pleasant Lake 49272. The mean grade point average was the lowest, 2.450, for the males from Jackson 49202.

A comparison of all nine zip codes indicated that the mean grade point average was highest, 3.030, for males from Parma 49269 and lowest, 2.279, for males from Leslie 49259.

Class of 1977

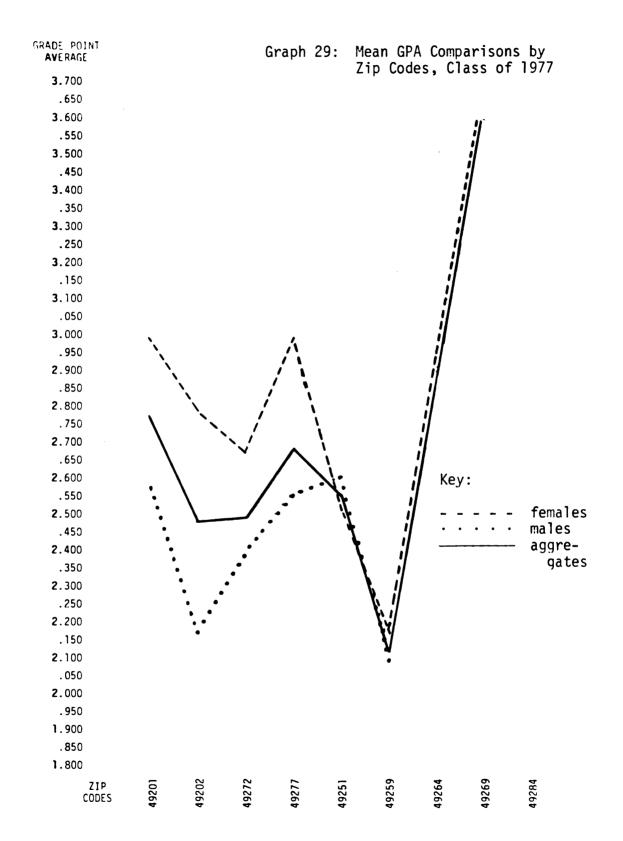
An analysis of students graduating from Northwest High School in 1977 and residing in the four major zip codes--49201, 49202, 49272, 49277--indicated that the mean grade point average was highest, 2.790, for those residing in Jackson 49201 (Graph 29). The mean grade point average was the lowest, 2.495, for graduates from the Jackson 49202 zip code.

A comparison of all nine zip codes reveals that the mean grade point average was highest, 3.636, for the Parma 49269 zip code and lowest, 2.138, for the Munith 49259 zip code.

Female students graduating from Northwest High School in 1977 and residing in Rives Junction 49277 had the highest mean grade point average, 2.995, of the four major zip codes. Female graduates from Pleasant Lake 49272 had the lowest mean grade point average, 2.686.

An analysis of the nine zip codes indicates that the mean grade point average was highest, 3.631, for females from Parma 49269 and lowest, 2.183, for females from Munith 49259.

Male students graduating in the class of 1977 and residing in Jackson 49201 had the highest mean grade point average, 2.580, of the four major zip codes. Male graduates from Jackson 49202 had the lowest mean grade point average, 2.184.



An analysis of the nine zip codes shows that the mean grade point average was highest, 2.611, for males from Leslie 49251 and Lowest, 2.104, for males from Munith 49259.

Class of 1978

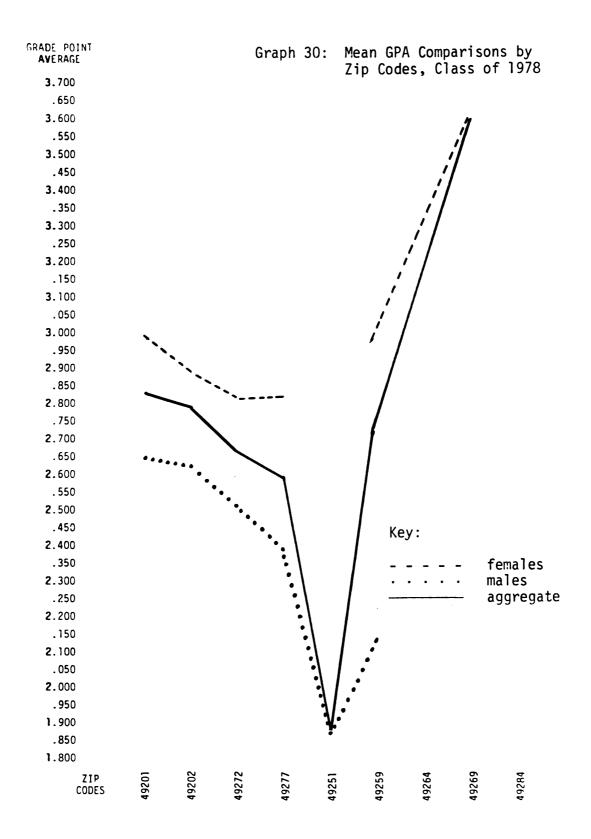
Of the students graduating from Northwest High School in the class of 1978, those in the Jackson 49201 zip code had the highest mean grade point average, 2.827, of the four major zip codes (Graph 30). The 1978 graduates from Jackson 49202 had the lowest mean grade point average at 2.495.

Comparing the nine zip codes showed that the mean grade point average was highest, 3.617, for the Parma 49264 zip code and lowest, 1.878, for the students from Leslie 49251.

A comparison of female students graduating from Northwest High School in 1978 and residing in the four major zip codes indicated that the mean grade point average was highest, 3.617, for those from Parma 49269. The mean grade point average for females was lowest, 2.838, for those from Pleasant Lake 49272. This remained the same when all nine zip codes were stidied.

A comparison of male students graduating from Northwest High School in 1978 and residing in the four major zip codes indicated that the mean grade point average was highest, 2.651, for those from Jackson 49201. The mean grade point average for males was lowest, 2.389, for those from Rives Junction 49277.

An examination of all nine zip codes revealed that the mean grade point average was highest, 2.651, for males from Jackson 49201 and lowest, 1.878, for males Leslie 49251.



Class of 1979

Graduates of the class of 1979 from the Jackson 49201 zip code had the highest mean grade point average, 2.736, of the four major zip codes (Graph 31). Those 1979 graduates from Jackson 49202 had the lowest mean grade point average, 2.480.

A comparison of the nine zip codes showed that the mean grade point average was highest, 2.862, for the Parma 49269 zip code and lowest, 2.362, for students from Leslie 49251.

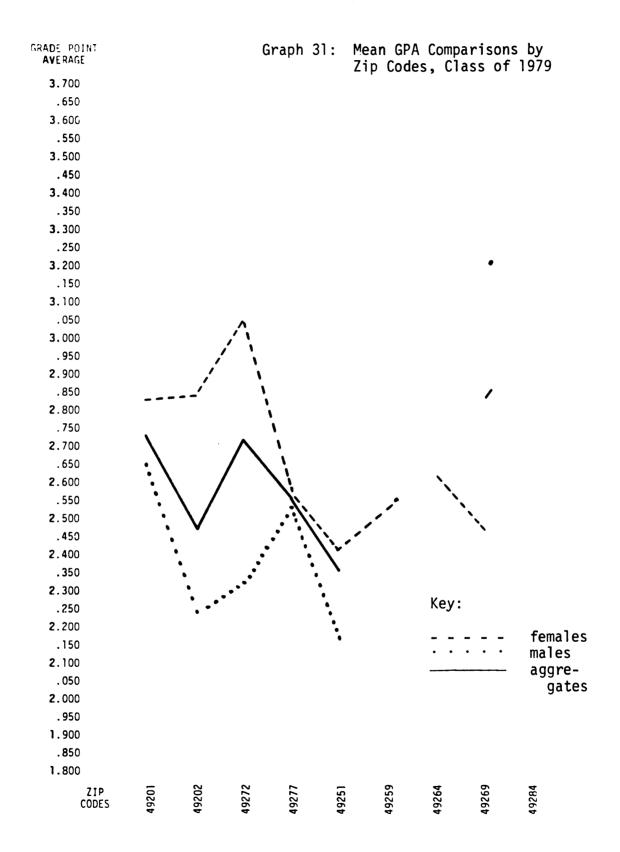
Female students graduating in the class of 1979 from Pleasant Lake 49272 had the highest mean grade point average, 3.021, of the four major zip codes. Female graduates from Rives Junction 49277, on the other hand, had the lowest mean grade point average, 2.587.

An examination of the nine zip code areas indicated that female graduates of the class of 1979 from Pleasant Lake 49272 had the highest mean grade point average, 3.021, while females from Leslie 49251 had the lowest, 2.424.

Male students graduating in the class of 1979 from Jackson 49201 had the highest mean grade point average, 2.662, of the four major zip codes. Male graduates from Jackson 49202 had the lowest mean grade point average, 2.243.

An examination of the nine zip codes indicated that male graduates in the class of 1979 from Parma 49269 had the highest mean grade point average, 3.254, while the only male from Leslie 49251 had the lowest at 2.176.

The Northwest High School attendance policy was implemented in January of this graduating class' senior year. Graduates of the class



of 1979, therefore, were under its jurisdiction for one semester before graduating from high school.

Class of 1980

Of the students graduating from Northwest High School in the class of 1980, those in the Rives Junction 49277 zip code had the highest mean grade point average, 2.820, of the four major zip codes (Graph 32). The 1980 graduates from Pleasant Lake 49272 had the lowest mean grade point average, 2.556.

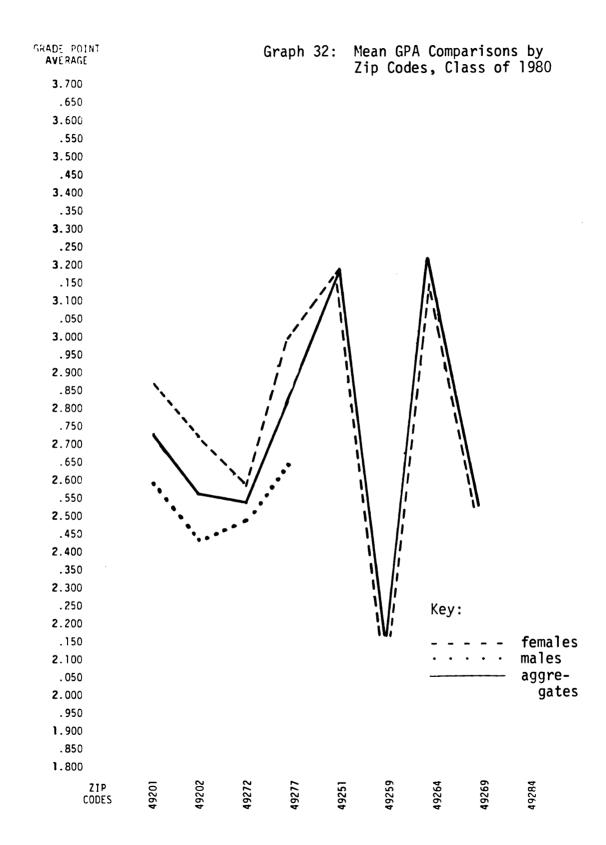
Comparing the nine zip codes showed that the mean grade point average was highest, 3.228, for the Onondaga 49264 zip code and lowest, 2.189, for the only graduate from Munith 49259.

A comparison of the female graduates in the class of 1980 residing in the four major zip codes indicated that the mean grade point average was highest, 3.017, for those from Rives Junction 49277. The mean grade point average for females was lowest, 2.601, for those from Pleasant Lake 49272.

When all nine zip codes were compared, the lone female from Onon-daga 49264 attained the highest mean grade point average, 3.228, while the lone female from Munith 49259 attained the lowest, 2.189.

An examination of the males in the graduating class who resided in the four major zip codes revealed that the mean grade point average was highest, 2.650, for those from Rives Junction 49277. The mean grade point average for males was lowest, 2.446, for those male graduates from Jackson 49202.

There were no male graduates in the class of 1980 included in this research who resided in the zip codes other than the major four.



The members of the class of 1980 were under the jurisdiction of the high school attendance policy, which was implemented midway through their junior year, for one and one-half years or three semesters.

Class of 1981

Graduates of the class of 1981 from the Jackson 49201 and Pleasant Lake 49272 zip codes had the highest mean grade point average, 2.705, of the four major zip codes (Graph 33). Those graduates from Jackson 49202 had the lowest mean grade point average, 2.418.

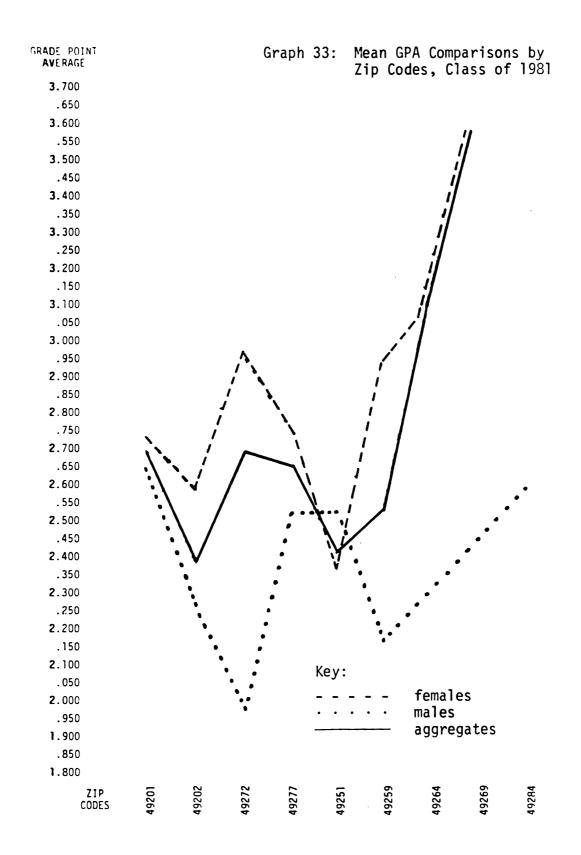
An analysis of the nine zip codes showed that the mean grade point average was highest, 3.588, for the Parma 49269 zip code and lowest, 2.418, for the Jackson 49202 zip code.

Of the female students graduating from Northwest High School in 1981 and living in the four major zip codes, those from Pleasant Lake 49272 had the highest mean grade point average, 2.968. Female graduates from Jackson 49202 had the lowest mean grade point average, 2.609.

When the nine zip codes were compared, the lone female from Parma 49269 had the highest mean grade point average, 3.588, while females from Leslie 49251 had the lowest mean grade point average, 2.371.

Of the male students graduating in 1981 who lived in the four major zip codes, those from Jackson 49201 had the highest mean grade point average, 2.651. Male graduates from Pleasant Lake 49272 had the lowest mean grade point average, 1.990. This remained the same when all nine zip codes were studied.

The Northwest High School attendance policy was implemented midway through the class of 1981's sophomore year. Its members were,



therefore, accountable to the expectations for two and one-half years or five of their six semesters in high school.

Class of 1982

An analysis of students graduating from Northwest High School in 1982 and living in the four major zip codes indicated that the mean grade point average was highest, 2.838, for the students from Rives Junction 49277 (Graph 34). The mean grade point average was lowest, 2.693, for graduates from Jackson 49202 zip code.

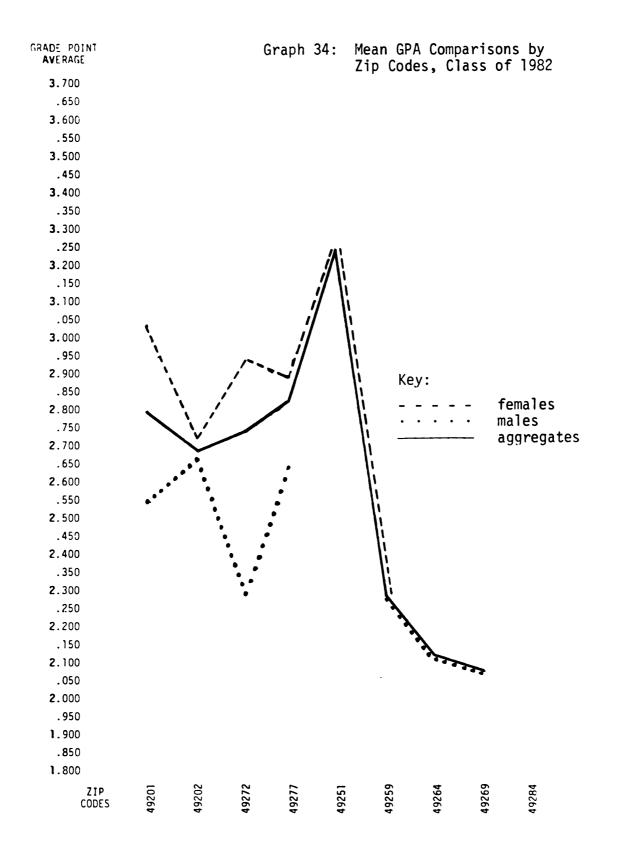
An examination of all nine zip codes revealed that 1982 graduates living in Leslie 49251 had the highest mean grade point average, 3.243, while those living in Jackson 49202 remained the lowest at 2.693.

Female students who graduated in 1982 and who resided in Jackson 49201 had the highest mean grade point average, 3.043, when the four major zip codes were studied. Female graduates from Jackson 49202 had the lowest mean grade point average, 2.740.

An analysis of all nine zip codes showed that females from Leslie 49251 attained the highest mean grade point average, 3.243. Females from Munith 49259 attained the lowest mean grade point average, 2.314.

Male graduates of the class of 1982 residing in Jackson 49202 had the highest mean grade point average, 2.659, of the four major zip codes. Those males from Pleasant Lake 49272 had the lowest mean grade point average, 2.3.3.

When all nine zip codes were compared, Jackson 49202 remained the one with the highest mean grade point average of 2.659. Parma 49269 was the lowest with a mean grade point average of 2.098.



The class of 1982 was the first graduating class to complete all six semesters of high school under the absence restrictions imposed by the Northwest High School attendance policy.

Summary

Attendance rate and achievement data collected from the permanent record cards of Northwest High School students who graduated between 1976 and 1982 were tabulated and plotted on polygraphs. For each graph the data were organized to illustrate mean attendance rates and mean grade point averages for females, males, and the aggregate group.

Socioeconomic data from U. S. Census Bureau tapes were presented to illustrate the socioeconomic differences among the nine zip code areas within the Northwest School District.

The highest and lowest mean attendance rates and mean grade point averages within zip codes and between graduating classes as well as within graduating classes and between zip codes were identified.

The conclusions of the study are presented in Chapter V along with reflections and suggestions for additional research.

CHAPTER V

CONCLUSIONS

Introduction

The positive impact of the Northwest High School's attendance policy on overall student attendance rates had been recognized and documented by school officials prior to this research (see Appendix B). Student absenteeism exceeded 10.5% before the implementation and enforcement of the attendance policy. In the four years since the policy's inception, the yearly average attendance rate has increased from 89.5% to 94.5%, representing a 52% improvement in student attendance.

Questions remained, however, whether the policy impacted specific groups of students more or less than others and whether there was an attendant impact upon student achievement. This research was conducted as an attempt to address these questions.

The specific groups of students examined were members of seven Northwest High School graduating classes from 1976 to 1982, the female and male students in each of these classes, and students in these classes, male and female, from the nine zip code areas within the Northwest School District.

For this study, the zip codes were utilized as geographic units indicative of socioeconomic status for comparative purposes.

The data obtained from the 1970 U. S. Census Bureau tapes on the mean family income and median value of owner-occupied housing (Table 1) indicated that socioeconomic differences exist among the nine zip codes contained within the Northwest School District. Research supports that socioeconomic status impacts student attendance rates and achievement levels. Cloward and Jones found a direct correlation between socioeconomic position, academic achievement, and attendance. 1

A comparison of the four major zip code areas indicated that the Jackson 49201 zip code was the wealthiest in terms of the two socioeconomic variables discussed. The Jackson 49202 zip code was the poorest in terms of these variables.

The Jackson 49201 zip code retained its highest socioeconomic position when all nine zip codes were compared. Of the nine zip codes, Onondaga 49264 was the poorest.

The attendance and achievement data, as measured by average attendance rates while in high school and the cumulate grade point averages, were obtained from student permanent record cards. These data were the tabulated by the specific groupings, identified and plotted in polygraphs.

Because this study was not experimental in nature, but, rather, a critical examination, no attempt will be made to infer cause-effect relationships. The differences in attendance rates and grade point averages that existed before and after the implementing of the Northwest High School attendance policy will be described in this chapter.

¹Cloward and Jones, 1962.

The specific questions this study sought answers to were:

- 1. Were there any changes in the mean attendance rates and mean grade point averages of Northwest High School graduates following the implementation of the attendance policy in January 1979?
- 2. Did the mean attendance rates and mean grade point averages of students from the various socioeconomic areas, as designated by zip codes, vary prior to and following the implementation of the high school attendance policy?
- 3. Did female or male students show any or more improvement in mean attendance rates and mean grade point averages since the implementation of the attendance policy?

Attendance Rate Changes for the Aggregate Graduating Classes

The lowest mean attendance rate for the Northwest High School graduating classes studied was 92.4% attained by the class of 1978. Significant improvement in mean attendance rates was demonstrated by the subsequent graduating classes. The improvement was, for the most part, cumulative. Each subsequent graduating class attained higher attendance rates, perhaps having had longer exposure to the policy's absence limits and expectations.

The mean attendance rate for the class of 1982 dropped slightly by 0.1 percentile. This could perhaps signal a leveling of the improvement as the attendance rates reach the level health officials consider

to be acceptable given a four to five percent normal absentee rate for high school students due to legitimate illness.

Grade Point Average Changes for the Aggregate Graduating Classes

While the lowest attendance rates were attained by the class of 1978, this class conversely had the highest mean grade point average of 2.787 of the classes studied. It is possible that this dichotomy contributed to the faculty's conclusion in 1978 that the low rate of attendance had lowered educational standards as classwork tended to be geared to the rate of absenteeism.

A marked decline in mean grade point averages was demonstrated by the class of 1979 (see Graph 2). A return to the higher mean grade point averages attained in 1978 was not again realized until the class of 1982.

This pattern suggests that perhaps following an initial adjustment by faculty and students, academic standards and grading practices moderated to be more compatible with the expectation and reality of improved student attendance.

Research Question One

Were there any changes in the mean attendance rates and mean grade point averages of Northwest High School graduates following the implementation of the attendance policy in January 1979?

<u>Conclusion</u>. Changes in attendance rates and grade point averages occurred following implementation of the attendance policy.

The data indicated that mean attendance rates improved for the aggregate graduating classes of Northwest High School after the class

of 1978. Following a sharp decline of the mean grade point average for the class of 1979, subsequent graduating classes demonstrated improvement in the mean grade point average. Only the class of 1982 slightly exceeded the highest mean grade point average previously attained by the class of 1978.

In summary, following 1978, the attendance rates for Northwest High School graduates exceeded attendance rates for previous graduating classes. Grade point averages, however, initially declined after 1978 only to return to previously attained mean grade point averages by 1982.

Attendance Rate Changes for Aggregate Graduating Classes from the Nine Zip Code Areas

The conclusions will be presented to first reflect comparisons between the highest socioeconomic area, Jackson 49201, and the lowest socioeconomic area, Jackson 49202, of the four major zip codes and the lowest socioeconomic area of the nine zip codes, Onondaga 49264. The conclusions for the remaining six zip code area will then be made.

The mean attendance rates for the aggregate graduating classes from Jackson 49201, Jackson 49202, and Onondaga 49264 improved after 1978. An even and constant 23.2% improvement was made by graduates of Jackson 49201 (Graph 4). Graduates of Jackson 49202 demonstrated a 16.6% improvement, from a low in 1976 to their peak in 1980, but began to taper off after that point (Graph 5). With only six Onondaga 49264 graduates between 1976 and 1982, meaningful comparisons are difficult; but a 30.6% improvement in attendance rates was evident (Graph 10).

The mean attendance rates for the aggregate graduating classes from Pleasant Lake 49272, Rives Junction 49277, Leslie 49251, Parma

49269, and Springport 49284 also improved after 1978. Only for the Munith 49259 did the attendance rates decline after 1978 (Graphs 6-12).

Grade Point Average Changes for Students from the Various Sociogeographic Areas

The graphing of the mean grade point averages for the aggregate graduating classes from Jackson 49201 and Jackson 49202 did not reflect a corresponding improvement with the improved attendance rates exhibited by both groups. There was a 1.9% improvement in the mean grade point averages of graduates from Jackson 49201 between 1976 and 1982. The mean grade point average for students from Jackson 49202, the lowest socioeconomic zip code of the four, averaging a 0.6% improvement between 1976 and 1982. The mean grade point average for Onondaga 49264 graduates improved in two of the three years since 1979.

Graduates of Pleasant Lake 49272 demonstrated a 0.4% decline in their mean grade point averages between 1976 and 1982 (Graph 15). Graduates of Rives Junction 49277 improved their mean grade point average between 1976 and 1982 by 3.7% (Graph 16).

The mean grade point averages for Leslie 49251 showed improvement over the low recorded in 1978 (Graph 17). The Munith 49259 mean grade point average declined after 1978 (Graph 18) as did Parma 49269 (Graph 20). Meaningful comparisons are impossible with only two graduates from Springport 49284, but a slight improvement in mean grade point average was reflected between the 1976 and the 1981 graduates.

Research Question Two

Did the mean attendance rates and mean grade point averages of students from the various sociogeographic areas, as designated by zip codes, vary prior to and following the implementation of the high school attendance policy?

<u>Conclusion</u>. Variances did exist among the sociogeographic areas. The data indicated that of the four major zip code areas, graduates from the wealthiest socioeconomic zip code, Jackson 49201, ranked the highest in mean attendance rates in four of the seven years studied and in three of the four years since the implementation of the Northwest High School attendance policy.

These graduates from Jackson 49201 also ranked the highest in mean grade point averages in four of the seven years studied even though their grade point averages did not fluctuate much during these years. Two of the four years that students from Jackson 49201 ranked highest in terms of mean grade point average were after the implementation of the attendance policy. In 1980 and 1982 graduates from Rives Junction 49277 had the highest mean grade point averages of the four major zip codes, a distinction not previously attained by this group.

The data indicated that no significant changes occurred among the ranking of those groups registering the lowest mean attendance rates and mean grade point averages. In other words, groups with the lowest attendance rates or grade point averages before implementation of the Northwest High School attendance policy continued to register the lowest attendance rates or grade point averages after implementation of the policy.

In six of the seven years studied, graduates from Pleasant Lake
49272 had the lowest mean attendance rate of the four major zip codes.
In six of the seven years, graduates from the poorest socioeconomic zip

code, Jackson 49202, had the lowest mean grade point average of the four groups.

With respect to Pleasant Lake 49272 graduates, it is interesting to note that while their attendance rates remained the lowest of the four major zip codes, improvement in their attendance rates did occur, as well as in their grade point averages.

It is also interesting to note that graduates from Rives Junction 49277, Leslie 49251, and Springport 49284 improved both their attendance rates and grade point averages following implementation of the high school attendance policy.

Graduates from Jackson 49202 and Parma 49269 improved their attendance rates, but their grade point averages declined. Only for Munith 49259 graduates did both their attendance rates and grade point averages decline after 1978 and the implementation of the attendance policy.

In summary, graduates from eight of the nine zip codes improved their mean attendance rates following the implementation of the attendance policy. Graduates from five of these eight zip codes also improved their mean grade point averages. In only one zip code was there a decline in both attendance rates and grade point averages after implementation of the Northwest High School attendance policy.

Attendance Rate Changes for Female Graduates from the Nine Zip Code Areas

The conclusion will be presented to first reflect comparisons between female graduates from the highest socioeconomic area, Jackson 49201, and from the lowest socioeconomic areas, Jackson 49202 (of the four major zip codes) and Onondaga 49264 (of all nine zip codes). The

conclusion from the data in the female graduates from the remaining zip code areas will then be made.

The mean attendance rate for female graduates from Jackson 49201 fell 1.0 percentile between 1976 and 1978, then improved 2.3 percentiles by 1981, tapering off slightly in 1982 (Graph 4). The mean attendance rate for female graduates from Jackson 49202 rose by 3.5 percentiles between 1976 and 1981, dropping off 2.4 percentiles in 1982 (Graph 5). The mean attendance rate for females from Onondaga 49264 improved five percentiles between 1979 and 1980 (Graph 10).

The mean attendance rate for female graduates from Pleasant Lake 49272 improved 5.5 percentiles between 1976 and 1982. Females from Rives Junction 49277, Leslie 49251, Parma 49269 also improved their attendance rates between 1979 and 1982. The mean attendance rate for females from Munith 49259 declined between 1976 and 1981 (Graphs 6-9, 11).

Attendance Rate Changes for Male Graduates from the Nine Zip Code Areas

The mean attendance rate for male graduates from Jackson 49201 improved 2.1 percentiles between 1978 and 1982 (Graph 4). The mean attendance rate for male graduates from Jackson 49202 improved 2.8 percentiles between 1976 and 1982 (Graph 5). Only one male from Onondaga 49264 graduated between 1976 and 1982, so no comparison is possible (Graph 10).

Male graduates from Pleasant Lake 49272, Rives Junction 49277, Leslie 49251, Munith 49259, and Springport 49284 also improved their attendance rates. Males from Leslie improved their mean attendance

rates by 7.5 percentiles, while males from Munith improved theirs by four percentiles (Graphs 6-9, 12).

Grade Point Average Changes for Female Graduates from the Nine Zip Code Areas

The mean grade point averages for female graduates from the Jackson 49201 zip code fell 0.226 points from 1978 to 1981, rising to 3.043 in 1982 (Graph 13). Similarly, the mean grade point average for females from the Jackson 49202 zip code dropped .283 points between 1978 and 1981, rising slightly to 2.740 in 1982 (Graph 14). Females from Onondaga also improved upon their mean grade point averages between 1979 and 1981 (Graph 19).

A 0.471 drop in mean grade point average occurred between 1979 and 1980 for female graduates from Pleasant Lake 49272, rising somewhat to 2.955 by 1982 (Graph 15). The mean grade point averages for female graduates from Rives Junction 49277, Leslie 49251, Munith 49259, and Parma 49269 have shown improvement since 1979 (Graphs 16-18, 20)

Grade Point Average Changes for Male Graduates from the Nine Zip Code Areas

The mean grade point average for male graduates from the Jackson 49201 zip code remained relatively stable between 1978 and 1981, dropping .103 points in 1982 (Graph 13). The mean grade point average for males from Jackson 49201 improved 0.416 points between 1979 and 1982 (Graph 14). With only one male graduate from Onondaga 49264, a comparison was not possible (Graph 19).

A 0.532 drop in mean grade point average occurred between 1978 and 1981 for male graduates from Pleasant Lake 49272, rising somewhat to 0.233 in 1982 (Graph 15). Male graduates from Rives Junction, on the

other hand, improved their mean grade point averages .256 points be tween 1978 and 1982 (Graph 16).

Males from Leslie 49251, Munith 49259, and Springport 49284 have also shown improvement in mean grade point averages since 1979. Only for male graduates from Parma 49269 did the mean grade point average decline since 1979 (Graphs 17-18, 20-21).

Research Question Three

Did female or male students show any or more improvement in mean attendance rates and mean grade point averages since the implementation of the attendance policy?

<u>Conclusion</u>. Both females and males demonstrated comparable improvement (two percentiles) in their mean attendance rates since 1978.

The mean grade point averages for both sexes declined following 1978. In the subsequent four years, however, the mean grade point averages of female graduates recovered from the decline, with the class of 1982's registering the highest mean grade point average in seven years. The mean grade point averages for male graduates did not demonstrate a comparable recovery with levels remaining below the high achieved in 1978.

It can be concluded from the data that during the years studied, 1976-1982, female graduates of Northwest High School had consistently lower mean attendance rates and consistently higher grade point averages than their male counterparts. The reasons for this pattern are not clear. One could speculate that differing societal and cultural expectations for males and females may have influenced this disparity.

The data indicated that of the four major zip code areas, female graduates from the poorest socioeconomic zip code, Jackson 49202, in three of the four years since the implementation of the attendance policy, ranked highest among female graduates in mean attendance rates. In the three years prior to the attendance policy and in two years since its implementation, female graduates from Pleasant Lake 49272 have ranked thelowest among female graduates in terms of mean attendance rates.

During the seven years studied, the highest mean grade point average ranking of the four major zip codes vacillated between Pleasant Lake 49272, Rives Junction 49277, and Jackson 49201, with no clear pattern established.

In the three years preceding the implementation of the high school attendance policy, female graduates from Pleasant Lake 49272 ranked the lowest among female graduates in terms of mean grade point averages. Since the attendance policy, they have only ranked lowest once, with female graduates from Jackson 49202 ranking lowest in 1981 and 1982 and Rives Junction 49277 female graduates ranking lowest in 1977.

The data indicated that in four of the seven years studied, male graduates from the poorest socioeconomic zip code, Jackson 49202, ranked highest among male graduates in terms of mean attendance rates among the four major zip codes. Three of the four years occurred since the implementation of the attendance policy. Male graduates from Pleasant Lake 49272 ranked lowest among male graduates in mean attendance rate in five of the seven years, four of these years being since the implementation of the attendance policy.

Male graduates from Jackson 49201 ranked higher and among male graduates in terms of mean grade point average in four of the seven years, with two of these years since the implementation of the attendance policy.

In four of the past seven years, male graduates from Jackson 49202 have ranked lowest among male graduates in mean grade point averages.

Two of these years were prior to the attendance policy, the other two after the attendance policy.

In summary, prior to and following the high school attendance policy, female graduates of Northwest High School had lower mean attendance rates, but higher mean grade point averages than their male counterparts.

During three of the four years since the implementation of the attendance policy, male and female graduates of Jackson 49202 have ranked highest in mean attendance rates; but, conversely, in two of the four years, each also ranked lowest in terms of mean grade point average.

In five of the seven years examined, male and female graduates of Pleasant Lake 49272 ranked lowest in mean attendance rates. Females from Pleasant Lake 49272 improved their mean grade point average ratings since the attendance policy.

Suggestions for Additional Research

The review of literature on high school attendance policies revealed that few studies address the impact these policies have on specific groups of students. Little is known about whether some high

school students fare better or worse than others under administrative policies that mandate good attendance.

In this study broad groupings of students by graduating class, sex, and residency were employed. For the residency groupings, zip codes were utilized as geographic units indicative of socioeconomic status. The mean attendance rates and mean grade point averages of students in these various groups were examined to note changes in attendance and achievement prior to and following the implementation of an attendance policy at Northwest High School in Jackson, Michigan.

A replication of this research designed with a narrower focus would be of interest and importance. More specific groupings of students, such as by IQ scores, achievement test scores, or by grades earned would expand upon this and previous research efforts.

Of further merit would be research that addressed the impact such policies have had on teacher behaviors. When good attendance is mandated and students, as a result, attend class more, what adjustments in course content, instructional methods, academic standards, and grading practices are made by teachers; and are these adjustments educationally sound? A related research question would be, does student achievement improve or decline, as the case may be, because students attend school more; or if student achievement changes, is it because instruction is geared to good attendance?

This and other research that has been conducted on high school attendance policies and student attendance have examined the impact of the policy on the students while in school. A frequently given rationale for having attendance policies in high schools is to instill good work habits in students that will carry over into future gainful

employment. It is suggested that additional research be conducted to determine whether graduates from high schools with attendance policies have better attendance as employees than do graduates from schools without attendance policies.

Reflections

In the four years since its implementation, the Northwest High School attendance policy has accomplished its purpose of reducing student absenteeism. While the degree of its impact has varied somewhat among graduating classes, sexes, and students from the various sociogeographic areas in the school district, overall student attendance has improved significantly.

There is no single solution to the problem of student absenteeism and the Northwest High School attendance policy has not functioned in a vacuum during the past four years. The people and the curriculum as well as the policies of a school district impact student attendance.

Not all people value education; and of those who do, varying degrees of value exist. Social, economic, and cultural factors have a bearing on our valuing process. Even among people who place a high priority on education, one can find a diversity of opinions as to how important regular, punctual attendance in a classroom is to the act of learning.

A school's curriculum, in the broadest sense, is the school's vehicle for the learning process. A debate exists with regard to curriculum and attendance. Some say if a school has a good, relevant and exciting curriculum, students will want to be in school and attendance problems will be minimal. Others argue that unless one can get

the students into school, the curriculum will not have a chance to make an impact.

There may be schools with good curricula that have serious attendance dance problems, and there may be schools with poor curricula that have minimal attendance problems. The conclusions of this research with regard to student achievement suggest that perhaps the perspective and the question need to be changed from "to what degree does the curriculum affect student attendance?" to "to what degree does student attendance affect the curriculum?"

The policies of a school are a reflection of the school's philosophy. While a policy may be viewed as an administrative tool for control, it can also be viewed as a standard of the school's expectations for its students. Research has shown that teachers with high expectations for their students tend to have students who perform better than teachers who have low expectations for their students.

One could extend this rationale to schools with high expectations for student attendance. The high expectations of the Northwest School District for its high school students have paid high dividends in terms of the attendance of its students.

The expectations set forth in the attendance policy reaped additional benefits for the school and the students as well. Suspensions from school for disciplinary infractions took on graver consequences as days missed for suspensions were subtracted from the ten-day absence maximum. As a result, disciplinary problems and student suspensions from school have been greatly reduced. In addition, the improved attendance records of Northwest graduates may give them the competitive edge as they seek employment in a tight job market.

In a democratic institution, policies need to be fairly applied and programs equitably accessible. Even when both are done, however, differences among groups and individuals will surface.

It should be noted that while most groups of students in the study improved both their mean attendance rates and mean grade point averages over the years examined, some groups did not. The reasons for these differences can only be speculative at this point, but the following possible explanations are offered.

Generally speaking, society has differing expectations for males and females. These societal expectations impact individuals' self-concepts and goals. Schools, as an extension of society, often transmit and reinforce the polarized expectations. It is suggested here that this is evidenced in the disparity in the relationship between the aggregate male and female attendance rates and grade point averages identified in this study.

While the students from the four major zip codes experienced improvement in their attendance roles and grade point averages in the years following the implementation of the attendance policy, the rank order of the groups with regard to attendance rates and grade point averages remained virtually unchanged. In other words, graduates from the highest socioeconomic zip code, Jackson 49201, continued to have the best attendance and achievement rates of the four groups. Graduates from the lowest socioeconomic zip code, Jackson 49202, remained the lowest in terms of mean grade point average, and graduates from Pleasant Lake 49272 remained the lowest in terms of mean attendance rates.

This phenomenon could have an obvious socioeconomic explanation, but another related variable may be having an impact.

One measure of support for the schools is voter support in millage elections. The Northwest School District has four precincts for school elections. It is of interest to note that precinct four voters live in the Jackson 49201 zip code; this precinct has consistently passed requests for additional millage. Precinct two voters live in the Rives Junction 49277 zip code, and precinct three voters live in the Pleasant Lake 49272 zip code; both consistently reject requests for additional millage.

Perhaps, in addition to socioeconomic influences on attendance and achievement, parental support of the schools or the lack of it may be having an influence.

These speculations only serve to underscore the need for additional research into the areas of student attendance and achievement.

Only when more is known about what specifically affects student attendance and achievement and what impact attendance policies are having on the performance of the nation's high school students will the needs of these students be better understood and addressed.

APPENDIX A

NORTHWEST HIGH SCHOOL
ATTENDANCE POLICY

ATTENDANCE

There is a positive relationship between attendance and success in school. Therefore, Northwest High School feels a responsibility to encourage regular and punctual attendance. In order to prepare students for what lies beyond high school, the school has an obligation to formulate good attendance patterns and appropriate work attitudes.

Attendance Policy

- I. The following attendance policy is based on a ten (10) day per semester absentee rate. The ten days described in the policy are to take care of:
 - A. Personal illness
 - B. Professional appointments that could not be scheduled outside of the regular school day
 - C. Serious personal or family problems
 - D. Family vacations that are pre-arranged through the high school office as many days prior to leaving as the length of the vacation
- II. The following procedures will be used in the regulation of this policy. It is the responsibility of every student to read and follow these procedures. Failure to comply with the policy could result in the loss of course credit.
 - A. Notices to parents or guardians

Upon a students fifth and ninth absence from any given class, notices will be sent to the parents or guardians. The fifth is to be sent with the student, and the ninth is to be mailed home.

B. Excused absences

An excused absence slip will be issued by the first hour teacher with a note from the parent, signed, dated, and giving the reason for absences. It is the responsibility of the student to get assignments and make up work missed.

Excused absences include absences due to:

- 1. Personal illness
- 2. Professional appointment that could not be scheduled outside the regular school day
- 3. Serious personal or family problems
- 4. Family vacations that are pre-arranged through the high school office as many days prior to leaving as the length of the vacation

C. Unexcused absences

Unexcused absences will be issued in the office. The student receiving an unexcused absence is encouraged to familiarize him/herself with the work missed but will not be allowed to make up for credit.

Unexcused absences include absences due to:

- 1. Skipping school
- 2. Suspension
- 3. Missing the bus
- 4. Oversleeping
- 5. Car trouble
- 6. Work
- 7. Babysitting
- 8. Hair cuts beauty parlor
- 9. Shopping

If a student forgets his/her note for being absent, s/he must come to the office prior to the start of school. An unexcused admit slip will be issued by office personnel. When the students presents his/her note the next day, an excused admit slip will be written.

D. Upon exceeding ten days of absence

The student is in a position of losing credit for the course after ten days of absence. The student, upon the next day that s/he attends class, -ill be given a form which s/he will have to fill out, have signed by the parent and return within twenty-four (24) hours of the high school office. The form will provide the opportunity for one of three choices:

- Take a "W" (withdrawal) in the class, continue to attend on a regular basis and do class work. The student does not receive credit, but the GPA is not affected. "W" must be earned; otherwise the teacher will issue an "E."
- 2. Drop the class and take an "E." The student is then assigned to a study hall.
- 3. Appeal for an extension.

If number 3 is selected, the appeal will be heard by the assistant principal. The student is to continue attending the class/classes for which s/he is appealing until a decision on the appeal is rendered. Once a decision has been reached, the student and parents will be notified of the decision in writing.

If there is dissatisfaction with the decision made by the assistant principal, the appeal may be taken to the Faculty Attendance Committee. This committee shall be comprised of three teachers and the student's counselor.

A letter explaining why it is felt the decision was unjust must be submitted to the assistant principal's office within 24 hours of notification of the denial of the appeal. The hearing with the Faculty Attendance Committee will be scheduled upon receipt of this letter of appeal. The student with a parent or guardian must attend the appeal hearing(s).

Failure to submit a letter of appeal to the Faculty Attendance Committee or failure to attend the hearing will result in a termination of the appeal and will result in the loss of further appeal rights.

If justified, additional appeals can be made to the building principal, superintendent, and board of education.

E. School activities

School sponsored or sanctioned activities are exampted from and will not count toward the total of ten absences.

F. Arriving late or leaving early

Any student who arrives at school after his/her school day has started must sign in at the office. Any student having to leave school for any reason after arriving must sign out through the office. Failure to do so will result in an unexcused absence and will be considered a skip.

To sign out the student must have parental permission, either written or via telephone. This permission must be given to authorized office personnel and a sign out form must be completed.

G. Tardiness to class (unexcused)

Tardiness to class exceeding 15 minutes will be considered an absence.

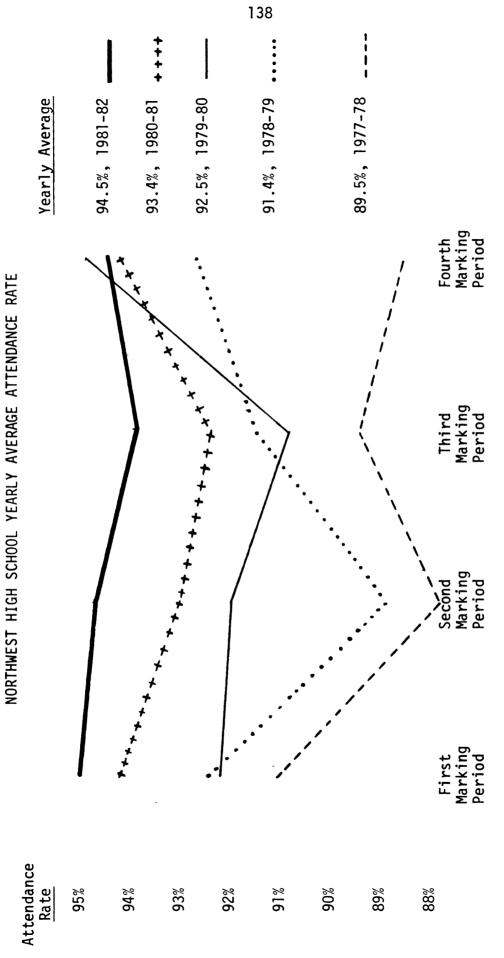
H. Suspensions

A student who is suspended from classes for disciplinary reasons for any number of days will have that number of days charged to his/her total of ten absences. However, if a suspension causes the student to go over his/her ten day limit, s/he may be given an extension by the building administrator depending upon circumstances surrounding the suspension.

- I. Any student who has already been granted Ws due to an attendance decision and then proceeds to drop from NWHS enrollment completely will automatically have those Ws changed to Es.
- J. Any student who has received an eleven-day decision sheet, but does not follow through with its return and simply stops coming to NWHS will be automatically given Es in all classes.
- K. Any student who stops attendance by NWHS for any reason and does not immediately re-enroll in another school system and who has not exceeded the ten day attendance policy will automatically receive Ws in those classes s/he was passing at the time of leaving and Es in any classes s/he was failing at the time of leaving.

APPENDIX B

NORTHWEST HIGH SCHOOL
YEARLY AVERAGE ATTENDANCE RATE



APPENDIX C

ATTENDANCE AND ACHIEVEMENT DATA
BY GRADUATING CLASS

Table C.1 CLASS OF 1976

Females: 140		Males:	148	Total:	288
Mean GPA: 2.91	9	Mean GPA:	2.573	Mean GPA:	2.937
Mean AR: 92.2	%	Mean AR:	93.3%	Mean AR:	92.7%
Zip Code: 4920	<u>1</u>				
# Students	: 170	Mean GPA:	2.759	Mean AR:	93.1%
# Females:	78	Mean GPA:	2.968	Mean AR:	93.0%
<pre># Males:</pre>	92	Mean GPA:	2.581	Mean AR:	93.3%
Zip Code: 4920	2				
# Students		Mean GPA:	2.677	Mean AR:	02 1%
					92.1%
# Females:		Mean GPA:	2.859	Mean AR:	91.6%
# Males:	16	Mean GPA:	2.450	Mean AR:	92.7%
Zip Code: 4927	<u>2</u>				
# Students	: 21	Mean GPA:	2.762	Mean AR:	90.5%
<pre># Females:</pre>	12	Mean GPA:	2.736	Mean AR:	88.6%
# Males:	9	Mean GPA:	2.798	Mean AR:	93.0%
Zip Code: 4927	7				
# Students		Mean GPA:	2.732	Mean AR:	92.8%
# Females:		Mean GPA:	2.886	Mean AR:	91.7%
		Mean GPA:			
# Males:	24	Mean GPA:	2.559	Mean AR:	93.9%
Zip Code: 4925	1				
# Students	: 3	Mean GPA:	2.500	Mean AR:	92.0%
# Females:	0	Mean GPA:	0.000	Mean AR:	00.0%
# Males:	3	Mean GPA:	2.500	Mean AR:	92.0%
Zip Code: 4926	<u>9</u>				
# Students	: 1	Mean GPA:	3.030	Mean AR:	98.0%
# Females:		Mean GPA:	0.000	Mean AR:	00.0%
# Males:	1	Mean GPA:	3.030	Mean AR:	98.0%
יות ופס.	ı	rican Gra:	3.030	mean AR.	30.US

Zip Code: 49259					
# Students:	5	Mean GPA:	2.767	Mean AR:	92.2%
<pre># Females:</pre>	3	Mean GPA:	3.091	Mean AR:	93.7%
# Males:	2	Mean GPA:	2.279	Mean AR:	90.1%
Zip Code: 49284					
<pre># Students:</pre>	1	Mean GPA:	2.492	Mean AR:	95.4%
<pre># Females:</pre>	0	Mean GPA:	0.000	Mean AR:	00.0%
# Males:	1	Mean GPA:	2.492	Mean AR:	95.4%
		Table C.	. 2		
		CLASS OF 1	977		
Females: 127		Males:	140	Total:	267
Mean GPA: 2.919		Mean GPA:	2.490	Mean GPA:	2.693
Mean AR: 92.6%		Mean AR:	92.7%	Mean AR:	92.7%
7:n Codo: 40201					
Zip Code: 49201					
# Students:	151	Mean GPA:	2.790	Mean AR:	92.9%
<pre># Females:</pre>	81	Mean GPΛ:	2.987	Mean AR:	92.6%
# Males:	76	Mean GPA:	2.580	Mean AR:	93.1%
Zip Code: 49202					
# Students:	36	Mean GPA:	2 495	Mean AR:	92.8%
# Females:	18	Mean GPA:		Mean AR:	92.6%
# Males:	18	Mean GPA:		Mean AR:	93.0%
π Maies.	10	nean ark.	2.104	ricali An.	30.0%
Zip Code: 49272					
<pre># Students:</pre>	23	Mean GPA:	2.500	Mean AR:	91.0%
<pre># Females:</pre>	8	Mean GPA:	2.686	Mean AR:	91.2%
# Males:	15	Mean GPA:	2.400	Mean AR:	90.9%

Zip Code:	49277							
# Stu	dents: 3	88 N	1ean	GPA:	2.695	Mean	AR:	93.5%
# Fem	ales: 1	3 N	1ean	GPA:	2.995	Mean	AR:	93.7%
# Mal	es: 2	25 N	1ean	GPA:	2.540	Mean	AR:	93.4%
Zip Code:	49259							
# Stu	dents:	7 N	1ean	GPA:	2.138	Mean	AR:	91.5%
# Fem	ales:	3 N	1ean	GPA:	2.183	Mean	AR:	93.5%
# Mal	es:	4 N	1ean	GPA:	2.104	Mean	AR:	90.0%
Zip Code:	49251							
# Stu	dents:	5 N	1ean	GPA:	2.557	Mean	AR:	90.6%
# Fem	ales:	3 N	1ean	GPA:	2.521	Mean	AR:	91.6%
# Mal	es:	2 N	1ean	GPA:	2.611	Mean	AR:	89.1%
Zip Code:	49269							
# Stu	dents:	1 1	1ean	GPA:	3.636	Mean	AR:	93.9%
# Fem	ales	1 1	1ean	GPA:	3.636	Mean	AR:	93.9%
# Mal	es:	0 1	1ean	GPA:	0.000	Mean	AR:	00.0%
		(le C.3 OF 19				
Females:	121	N	1a 1 es	:	112	Total	l:	233
Mean GPA:	2.953	Ŋ	1ean	GPA:	2.640	Mean	GPA:	2.787
Mean AR:	92.0%	N	1ean	AR:	92.9%	Mean	AR:	92.4%
Zip Code:	49201							
# Stu	dents: 14	.4 N	1ean	GPA:	2.827	Mean	AR:	92.6%
# Fem	ales: 7	'3 N	1ean	GPA:	2.997	Mean	AR:	92.0%
# Mal	es: 7	'1 M	1ean	GPA:	2.651	Mean	AR:	93.2%

Zip Code: 49202					
<pre># Students:</pre>	30	Mean GPA:	2.809	Mean AR:	92.8%
<pre># Females:</pre>	20	Mean GPA:	2.892	Mean AR:	92.5%
# Males:	10	Mean GPA:	2.643	Mean AR:	93.5%
Zip Code: 49272					
<pre># Students:</pre>	24	Mean GPA:	2.666	Mean AR:	91.1%
<pre># Females:</pre>	11	Mean GPA:	2.838	Mean AR:	89.8%
# Males:	13	Mean GPA:	2.522	Mean AR:	92.2%
Zip Code: 49277					
<pre># Students:</pre>	29	Mean GPA:	2.607	Mean AR:	92.2%
<pre># Females:</pre>	14	Mean GPA:	2.841	Mean AR:	92.7%
# Males:	15	Mean GPA:	2.389	Mean AR:	91.7%
Zip Code: 49251					
<pre># Students:</pre>	2	Mean GPA:	1.878	Mean AR:	90.6%
<pre># Females:</pre>	0	Mean GPA:	0.000	Mean AR:	00.0%
# Males:	2	Mean GPA:	1.878	Mean AR:	90.6%
Zip Code: 49259					
<pre># Students:</pre>	3	Mean GPA:	2.725	Mean AR:	93.8%
<pre># Females:</pre>	2	Mean GPA:	3.016	Mean AR:	92.1%
# Males:	1	Mean GPA:	2.142	Mean AR:	97.2%
Zip Code: 49269					
<pre># Students:</pre>	1	Mean GPA:	3.617	Mean AR:	92.2%
<pre># Females:</pre>	1	Mean GPA:	3.617	Mean AR:	92.2%
# Males:	0	Mean GPA:	0.000	Mean AR:	00.0%

Table C.4 CLASS OF 1979

Females:	115		Males	:	138	Total	l:	253
Mean GPA:	2.806		Mean	GPA:	2.539	Mean	GPA:	2.607
Mean AR:	92.2%		Mean	AR:	94.1%	Mean	AR:	93.2%
Zip Code:	49201							
# Stu	dents:	141	Mean	GPA:	2.736	Mean	AR:	93.6%
# Fema	ales:	65	Mean	GPA:	2.821	Mean	AR:	92.3%
# Male	es:	76	Mean	GPA:	2.662	Mean	AR:	94.7%
Zip Code:	49202							
# Stu	dents:	33	Mean	GPA:	2.480	Mean	AR:	93.4%
# Fema	ales:	13	Mean	GPA:	2.846	Mean	AR:	92.9%
# Male	es:	20	Mean	GPA:	2.243	Mean	AR:	93.7%
Zip Code:	49272							
# Stu	dents:	27	Mean	GPA:	2.729	Mean	AR:	93.1%
# Fema	ales:	14	Mean	GPA:	3.072	Mean	AR:	92.9%
# Malo	es:	13	Mean	GPA:	2.335	Mean	AR:	93.2%
Zip Code:	49277							
# Stu	dents:	37	Mean	GPA:	2.576	Mean	AR:	92.9%
# Fema	ales:	15	Mean	GPA:	2.587	Mean	AR:	92.3%
# Male	es:	22	Mean	GPA:	2.568	Mean	AR:	93.3%
Zip Code:	49251							
# Stu	dents:	4	Mean	GPA:	2.362	Mean	AR:	85.9%
# Fema	ales:	3	Mean	GPA:	2.424	Mean	AR:	85.2%
# Male	es:	1	Mean	GPA:	2.176	Mean	AR:	87.9%
Zip Code:	49264							
# Stu	dents:	3	Mean	GPA:	2.651	Mean	AR:	90.2%
# Fema	ales:	3	Mean	GPA:	2.651	Mean	AR:	90.2%
# Male	es	0	Mean	GPA:	0.000	Mean	AR:	00.0%

Zip Code: 49269					
# Students:	4	Mean GPA:	2.862	Mean AR:	92.9%
<pre># Females:</pre>	2	Mean GPA:	2.470	Mean AR:	91.4%
# Males:	2	Mean GPA:	3.254	Mean AR:	94.4%
Zip Code: 49259					
<pre># Students:</pre>	3	Mean GPA:	2.558	Mean AR:	92.0%
<pre># Females:</pre>	0	Mean GPA:	0.000	Mean AR:	00.0%
# Males:	3	Mean GPA:	2.558	Mean AR:	92.0%
		Table C.			
		CLASS OF 1	980		
Females: 116		Males:	122	Total:	238
Mean GPA: 2.836		Mean GPA:	2.584	Mean GPA:	2.707
Mean AR: 93.6%		Mean AR:	94.7%	Mean AR:	94.2%
Zip Code: 49201					
<pre># Students:</pre>	130	Mean GPA:	2.734	Mean AR:	94.4%
<pre># Females:</pre>	62	Mean GPA:	2.866	Mean AR:	93.6%
# Males:	68	Mean GPA:	2.613	Mean AR:	95.1%
Zip Code: 49202					
<pre># Students:</pre>	29	Mean GPA:	2.571	Mean AR:	95.2%
<pre># Females:</pre>	13	Mean GPA:	2.724	Mean AR:	94.1%
# Males:	16	Mean GPA:	2.446	Mean AR:	96.1%
Zip Code: 49272					
<pre># Students:</pre>	32	Mean GPA:	2.556	Mean AR:	91.4%
<pre># Females:</pre>	16	Mean GPA:	2.601	Mean AR:	90.9%
# Males:	16	Mean GPA:	2.511	Mean AR:	91.9%

Zip Code: 492	<u>77</u>				
# Student	s: 41	Mean GPA:	2.820	Mean AR:	94.8%
# Females	: 19	Mean GPA:	3.017	Mean AR:	94.9%
# Males:	22	Mean GPA:	2.650	Mean AR:	94.8%
Zip Code: 492	<u>69</u>				
# Student	s: 2	Mean GPA:	2.551	Mean AR:	95.9%
# Females	: 2	Mean GPA:	2.551	Mean AR:	95.9%
# Males:	0	Mean GPA:	0.000	Mean AR:	00.0%
Zip Code: 492	<u>51</u>				
# Student	s: 2	Mean GPA:	3.216	Mean AR:	95.9%
# Females	: 2	Mean GPA:	3.216	Mean AR:	95.9%
# Males:	0	Mean GPA:	0.000	Mean AR:	00.0%
Zip Code: 492	64				
# Student	s: 1	Mean GPA:	3.228	Mean AR:	95.4%
# Females	: 1	Mean GPA:	3.228	Mean AR:	95.4%
# Males:	0	Mean GPA:	0.000	Mean AR:	00.0
Zip Code: 492	<u>59</u>				
# Student	s: 1	Mean GPA:	2.189	Mean AR:	91.4%
# Females	: 1	Mean GPA:	2.189	Mean AR:	91.4%
# Males:	0	Mean GPA:	0.000	Mean AR:	00.0%
		Table C. CLASS OF 1			
Females: 155		Males:	103	Total:	258
Mean GPA: 2.7	65	Mean GPA:	2.670	Mean GPA:	2.500
Mean AR: 94.	5%	Mean AR:	2.670	Mean AR:	94.5%
Zip Code: 492	01				
# Student	s: 159	Mean GPA:	2.705	Mean AR:	94.9%
# Females	: 95	Mean GPA:	2.742	Mean AR:	94.5%
# Males:	64	Mean GPA:	2.651	Mean AR:	95.0%

Zip Code: 49202					
<pre># Students:</pre>	28	Mean GPA:	2.418	Mean AR:	94.4%
<pre># Females:</pre>	13	Mean GPA:	2.609	Mean AR:	95.2%
# Males:	15	Mean GPA:	2.254	Mean AR:	93.6%
Zip Code: 49272					
<pre># Students:</pre>	26	Mean GPA:	2.705	Mean AR:	93.8%
<pre># Females:</pre>	19	Mean GPA:	2.968	Mean AR:	94.1%
# Males:	7	Mean GPA:	1.990	Mean AR:	92.9%
Zip Code: 49277					
<pre># Students:</pre>	36	Mean GPA:	2.679	Mean AR:	94.0%
<pre># Females:</pre>	23	Mean GPA:	2.759	Mean AR:	94.1%
# Males:	13	Mean GPA:	2.537	Mean AR:	93.9%
<u>Zip Code: 49259</u>					
<pre># Students:</pre>	2	Mean GPA:	2.544	Mean AR:	94.8%
<pre># Females:</pre>	1	Mean GPA:	2.921	Mean AR:	95.0%
# Males:	1	Mean GPA:	2.167	Mean AR:	94.5%
Zip Code: 49251					
<pre># Students:</pre>	4	Mean GPA:	2.442	Mean AR:	93.3%
<pre># Females:</pre>	2	Mean GPA:	2.371	Mean AR:	92.2%
# Males:	2	Mean GPA:	2.514	Mean AR:	94.4%
Zip Code: 49269					
<pre># Students:</pre>	1	Mean GPA:	3.588	Mean AR:	97.6%
<pre># Females:</pre>	1	Mean GPA:	3.588	Mean AR:	97.6%
# Males:	0	Mean GPA:	0.000	Mean AR:	00.0%
Zip Code: 49264					
<pre># Students:</pre>	1	Mean GPA:	3.103	Mean AR:	94.3%
<pre># Females:</pre>	1	Mean GPA:	3.103	Mean AR:	94.3%
# Males:	0	Mean GPA:	0.000	Mean AR:	00.0%

Zip Code: 49284					
# Students:	1	Mean GPA:	2.608	Mean AR:	96.9%
<pre># Females:</pre>	0	Mean GPA:	0.000	Mean AR:	00.0%
# Males:	1	Mean GPA:	2.608	Mean AR:	96.9%
		Table C. CLASS OF 1	=		
		CEASS OF T	J02		
Females: 131		Males:	109	Total:	240
Mean GPA: 2.984		Mean GPA:	2.542	Mean GPA:	2.787
Mean AR: 94.0%		Mean AR:	94.9%	Mean AR:	94.4%
Zip Code: 49201					
<pre># Students:</pre>	144	Mean GPA:	2.812	Mean AR:	94.7%
<pre># Females:</pre>	77	Mean GPA:	3.043	Mean AR;	94.2%
# Males:	67	Mean GPA:	2.548	Mean AR:	95.3%
Zip Code: 49202					
# Students:	26	Mean GPA:	2.693	Mean AR:	94.2%
<pre># Females:</pre>	12	Mean GPA:	2.740	Mean AR:	92.8%
# Males:	14	Mean GPA:	2.659	Mean AR:	95.5%
Zip Code: 49272					
# Students:	25	Mean GPA:	2.750	Mean AR:	93.6%
# Females:	17	Mean GPA:	2.955	Mean AR:	94.0%
# Males:	8	Mean GPA:	2.313	Mean AR:	92.6%
Zip Code: 49277					
<pre># Students:</pre>	38	Mean GPA:	2.838	Mean AR:	94.1%
<pre># Females:</pre>	23	Mean GPA:	2.915	Mean AR:	94.1%
# Males:	15	Mean GPA:	2.645	Mean AR:	94.2%

2	Mean GPA:	2.314	Mean AR:	96.2%
0	Mean GPA:	0.000	Mean AR:	00.0%
2	Mean GPA:	2.314	Mean AR:	96.2%
2	Mean GPA:	2.098	Mean AR:	92.0%
0	Mean GPA:	0.000	Mean AR:	00.0%
2	Mean GPA:	2.098	Mean AR:	92.0%
2	Mean GPA:	3.243	Mean AR:	95.5%
2	Mean GPA:	3.243	Mean AR:	95.5%
0	Mean GPA:	0.000	Mean AR:	00.0%
1	Mean GPA:	2.128	Mean AR:	93.2%
0	Mean GPA:	0.000	Mean AR:	00.0%
1	Mean GPA:	2.128	Mean AR:	93.2%
	0 2 2 0 2 2 0	 Mean GPA: 	 Mean GPA: 0.000 Mean GPA: 2.314 Mean GPA: 2.098 Mean GPA: 0.000 Mean GPA: 2.098 Mean GPA: 2.098 Mean GPA: 3.243 Mean GPA: 3.243 Mean GPA: 0.000 Mean GPA: 0.000 Mean GPA: 0.000 	0 Mean GPA: 0.000 Mean AR: 2 Mean GPA: 2.314 Mean AR: 2 Mean GPA: 2.098 Mean AR: 0 Mean GPA: 0.000 Mean AR: 2 Mean GPA: 2.098 Mean AR: 2 Mean GPA: 3.243 Mean AR: 0 Mean GPA: 0.000 Mean AR: 1 Mean GPA: 0.000 Mean AR: 0 Mean GPA: 0.000 Mean AR:

APPENDIX D

ATTENDANCE AND ACHIEVEMENT DATA

BY ZIP CODE

Table D.1 JACKSON 49201

Class of 197	<u>Mean GPA</u>	Mean Atten- dance Rate
170 students	2.759	93.1%
78 females	2.968	93.0%
92 males	2.581	93.3%
Class of 197	27	
157 students	2.790	92.9%
81 females	2.987	92.6%
76 males	2.580	93.1%
Class of 197	<u>'8</u>	
144 students	2.827	92.6%
73 females	2.997	92.0%
71 males	2.651	93.2%
Class of 197	'9	
141 students	2.827	92.6%
65 females	2.821	92.3%
76 males	2.662	94.7%
Class of 198	30	
130 students	2.736	94.4%
62 females	2.866	93.6%
68 males	2.613	95.1%
Class of 198	81	
159 students		94.9%
95 females	2.742	94.5%
64 males	2.651	95.0%
Class of 198	32	
144 students		94.7%
77 females	3.043	94.2%
67 males	2.548	95.3%

Table D.2 JACKSON 49202

Class of 1976	Mean GPA	Mean Atten- dance Rate
36 students	2.677	92.1%
20 females	2.859	91.6%
16 males	2.450	92.7%
Class of 1977		
36 students	2.495	92.8%
18 females	2.086	92.6%
18 males	2.184	93.0%
Class of 1978		
30 students	2.8-9	92.8%
20 females	2.892	92.5%
10 males	2.643	93.5%
Class of 1979		
33 students	2.480	93.4%
13 females	2.846	92.9%
20 males	2.243	93.7%
Class of 1980		
29 students	2.571	95.2%
13 females	2.724	94.1%
16 males	2.446	96.1%
Class of 1981		
28 students	2.418	94.4%
13 females	2.609	95.2%
15 males	2.254	93.6%
Class of 1982		
26 students	2.693	94.2%
12 females	2.740	92.8%
14 males	2.659	95.5%

Table D.3
PLEASANT LAKE 49272

Class of 1976	Mean GPA	Mean Atten- dance Rate
21 students	2.762	90.5%
12 females	2.736	88.6%
9 males	2.798	39.0%
Class of 1977		
23 students	2.500	91.0%
8 females	2.686	91.2%
15 males	2.400	90.9%
Class of 1978		
24 students	2.666	91.1%
ll females	2.838	89.8%
13 males	2.522	92.2%
Class of 1979		
27 students	2.729	93.1%
14 females	3.072	92.9%
13 males	2.335	93.2%
Class of 1980		
32 students	2.556	91.4%
16 females	2.601	90.9%
16 males	2.511	91.9%
Class of 1981		
26 students	2.705	93.8%
19 females	2.968	94.1%
7 males	1.990	92.9%
Class of 1982		
25 students	2.750	93.6%
17 females	2.955	94.0%
8 males	2.313	92.6%

Table D.4
RIVES JUNCTION 49277

		Maan Attan
Class of 1976	Mean GPA	Mean Atten- <u>dance Rate</u>
51 students	2.732	92.8%
27 females	2.886	91.7%
24 males	2.559	93.9%
Class of 1977		
38 students	2.695	93.5%
13 females	2.995	93.7%
25 males	2.540	93.4%
Class of 1978		
29 students	2.607	92.2%
14 females	2.841	92.7%
15 males	2.389	91.7%
Class of 1979		
37 students	2.576	92.9%
15 females	2.587	92.3%
22 males	2.568	93.3%
Class of 1980		
41 students	2.820	94.8%
19 females	3.017	94.9%
22 males	2.650	94.8%
Class of 1981		
36 students	2.679	94.0%
23 females	2.759	94.1%
13 males	2.537	93.9%
Class of 1982		
38 students	2.838	94.1%
23 females	2.915	94.1%
15 males	2.645	94.2%

Table D.5 LESLIE 49251

		Maan Attan
Class of 1976	Mean GPA	Mean Atten- dance Rate
3 students	2.500	92.0%
O females	0.000	00.0%
3 males	2.500	92.0%
Class of 1977		
5 students	2.557	90.6%
3 females	2.521	91.6%
2 males	2.611	89.1%
Class of 1978		
2 students	1.878	90.6%
O females	0.000	00.0%
2 males	1.878	90.6%
Class of 1979		
4 students	2.362	86.5%
3 females	2.424	85.2%
l male	2.176	87.9%
Class of 1980		
2 students	3.216	95.9%
2 females	3.216	95.9%
O males	0.000	00.0%
Class of 1981		
4 students	2.442	93.3%
2 females	2.371	92.2%
2 males	2.514	94.4%
Class of 1982		
2 students	3.243	95.5%
2 females	3.243	95.5%
O males	0.000	00.0%

Table D.6 MUNITH 49259

Class of 1976	Mean GPA	Mean Atten- dance Rate
5 students	2.767	92.2%
3 females	3.091	93.7%
2 males	2.279	90.1%
Class of 1977		
7 students	2.138	91.5%
3 females	2.183	93.5%
4 males	2.104	90.0%
Class of 1978		
3 students	2.725	93.8%
2 females	3.016	92.1%
l male	2.142	97.2%
Class of 1979		
3 students	2.558	92.0%
O females	0.000	00.0%
3 males	2.558	92.0%
Class of 1980		
l student	2.189	91.4%
l female	2.189	91.4%
O males	0.000	00.0%
Class of 1981		
2 students	2.544	94.8%
l female	2.921	95.0%
l male	2.167	94.5%
Class of 1982		
2 students	2.314	96.2%
O females	0.000	00.0%
2 males	2.314	96.2%

Table D.7 ONONDAGA 49264

Class of 1976	Mean GPA	Mean Atten- dance Rate
O students	0.000	00.0%
O females	0.000	00.0%
O males	0.000	00.0%
Class of 1977		
O students	0.000	00.0%
O females	0.000	00.0%
O males	0.000	00.0%
Class of 1978		
O students	0.000	00.0%
O females	0.000	00.0%
O males	0.000	00.0%
Class of 1979		
3 students	2.651	90.2%
3 females	2.651	90.2%
O males	0.000	00.0%
Class of 1980		
l student	3.228	95.4%
l female	3.228	95.4%
O males	0.000	00.0%
Class of 1981		
l student	3.103	94.3%
l female	3.103	94.3%
O males	0.000	00.0%
Class of 1982		
1 student	2.128	93.2%
O females	0.000	00.0%
1 male	2.128	93.2%

Table D.8 PARMA 49269

Class of 1976	<u>Mean GPA</u>	Mean Atten- <u>dance Rate</u>
l student	3.030	98.0%
O females	0.000	00.0%
1 male	3.030	98.0%
Class of 1977		
l student	3.636	93.9%
l female	3.636	93.9%
O males	0.000	00.0%
Class of 1978		
l student	3.617	92.2%
l female	3.617	92.2%
O males	0.000	00.0%
Class of 1979		
4 students	2.862	92.9%
2 females	2.470	91.4%
2 males	3.254	94.4%
Class of 1980		
2 students	2.551	95.9%
2 females	2.551	95.9%
O males	0.000	00.0%
Class of 1981		
l student	3.588	97.6%
l female	3.588	97.6%
O males	0.000	00.0%
Class of 1982		
2 students	2.098	92.0%
O females	0.000	00.0%
2 males	2.098	92.0%

Table D.9 SPRINGPORT 49284

Class of 1976	Mean GPA	Mean Atten- dance Rate
l student	2.492	95.4%
O females	0.000	00.0%
l male	2.492	95.4%
Class of 1977		
O students	0.000	00.0%
O females	0.000	00.0%
O males	0.000	00.0%
Class of 1070		
Class of 1978 O students	0.000	00 0%
O females	0.000	00.0%
O males		00.0%
U mares	0.000	00.0%
Class of 1979		
O students	0.000	00.0%
O females	0.000	00.0%
O males	0.000	00.0%
Class of 1980		
0 students	0.000	00.0%
O females	0.000	00.0%
O males	0.000	00.0%
o mares	0.000	00.0%
Class of 1981		
l student	2.608	96.9%
O females	0.000	00.0%
l male	2.608	96.9%
Class of 1002		
Class of 1982	0.000	00.0%
0 students	0.000	00.0%
O females	0.000	00.0%
O males	0.000	00.0/5

APPENDIX E

SUMMARY DATA

BY ZIP CODE

Table	E.1
JACKSON	49201

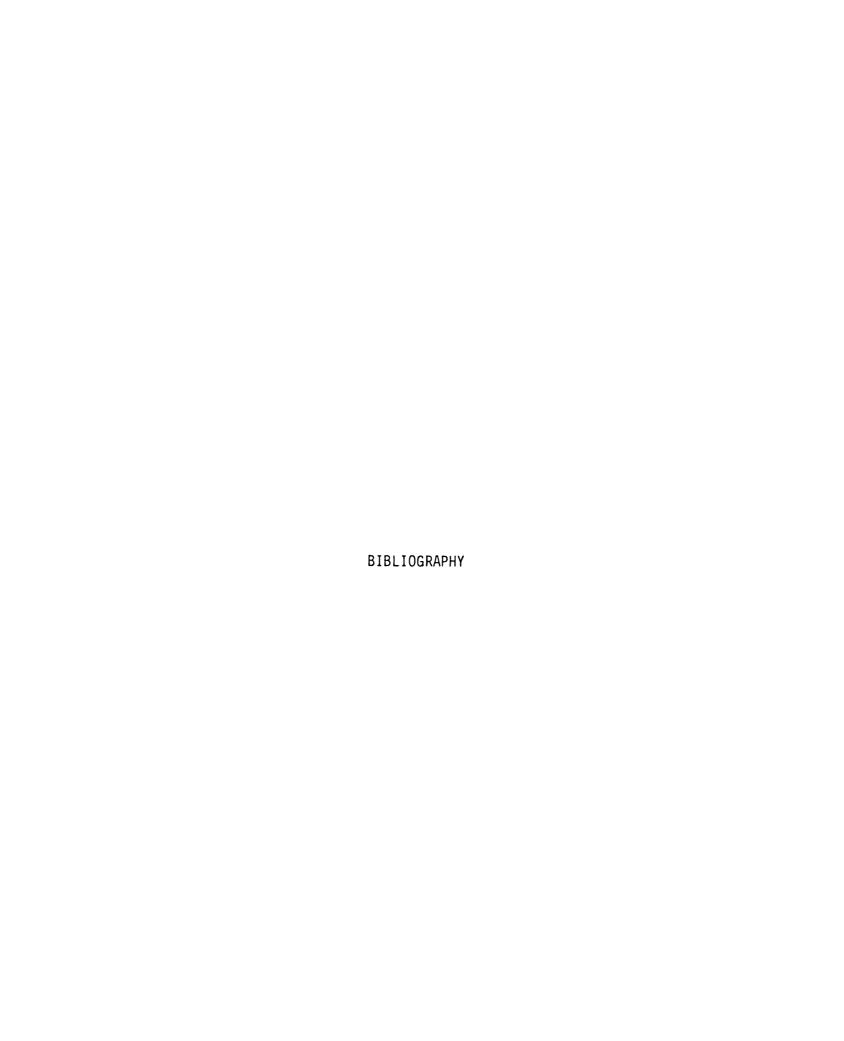
1976-1982	Mean GPA	Mean Atten- dance Rate
Aggregate	1.9% increase	23.2% increase
Females	1.9% increase	17.2% increase
Males	1.3% decrease	29.9% increase
<u> 1979-1982</u>		
Aggregate	2.7% increase	17.2% increase
Females	7.3% increase	24.7% increase
Males	4.3% decrease	11.3% increase
	Table E.2	
1076 1000	JACKSON 49202	
1976-1982		
Aggregate	.6% increase	16.6% increase
Females	4.2% decrease	14.3% increase
Males	7.9% increase	38.4% increase
1979-1982		
Aggregate	7.9% increase	12.1% increase
Females	3.7% increase	1.4% decrease
Males	15.4% increase	28.6% increase
	Table E.3	
	PLEASANT LAKE 49272	
1976-1982		
Aggregate	.4% decrease	32.6% increase
Females	7.4% increase	47.4% increase
Males	7.3% decrease	5.4% decrease
1979-1982		
Aggregate	.8% increase	7.2% increase
Females	3.8% decrease	15.5% increase
Males	.9% decrease	8.0% decrease
ויום ו כ ט	. 3% decrease	o.u. decrease

Table E.4 RIVES JUNCTION 49277

1976-1982	Mean GPA	Mean Atten- <u>dance Rate</u>
Aggregate	3.7% increase	18.1% increase
Females	1.9% increase	38.9% increase
Males	3.3% increase	4.9% increase
1979-1982		
Aggregate	9.2% increase	16.9% increase
Females	11.3% increase	23.4% increase
Males	2.9% increase	13.4% increase
	Table E.5	
	LESLIE 49251	
1976-1982		
Aggregate	22.9% increase	43.7% increase
Females	11.1% increase	56.4% increase
Males	16% increase	70.0% increase
1979-1982		
Aggregate	17.2% increase	68.1% increase
Females	25.3% increase	69.6% increase
Males	13.5% increase	53.8% increase
	Table E.6	
	MUNITH 49259	
1976-1982		
Aggregate	26.4% decrease	51.3% increase
Females	5.5% decrease	20.6% increase
Males	1.5% increase	61.6% increase
1979-1982		
Aggregate	9.5% decrease	52.5% increase
Females	0.0%	00.0%
Males	9.5% decrease	52.5% increase

Table E.7 ONONDAGA 49264

1976-1982	Mean GPA	Mean Atten- dance Rate
Aggregate	00.0%	00.0%
Females	00.0%	00.0%
Males	00.0%	00.0%
1979-1982		
Aggregate	19.7% increase	30.6% increase
Females	13.6% increase	41.8% increase
Males	00.0%	00.0%
	T.1.1. 5.0	
	Table E.8 PARMA 49269	
1976-1982		
Aggregate	30.8% decrease	75.0% decrease
Females	1.3% decrease	60.7% decrease
Males	30.8% decrease	75.0% decrease
1979-1982		
Aggregate	26.7% decrease	11.2% decrease
Females	31.2% increase	72.1% increase
Males	55.5% decrease	30.0% decrease
	Table E.9	
	SPRINGPORT 49284	
1976-1981		
Aggregate	4.5% increase	30.6% increase
Females	00.0%	00.0%
Males	4.5% increase	30.6% increase



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