An assessment of a team governance-team teaching project in the junior high school, Rockland, Massachusetts.

John W. Rogers
University of Massachusetts Amherst

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AN ASSESSMENT OF A
TEAM GOVERNANCE-TEAM TEACHING
PROJECT IN THE JUNIOR HIGH SCHOOL
ROCKLAND, MASSACHUSETTS

By

JOHN W. ROGERS

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

DOCTOR OF EDUCATION

School of Education
Amherst, Massachusetts

November, 1972
AN ASSESSMENT OF A TEAM GOVERNANCE-TEAM TEACHING PROJECT IN THE JUNIOR HIGH SCHOOL ROCKLAND, MASSACHUSETTS

A Dissertation

By

JOHN W. ROGERS

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An Assessment of a Team Governance - Team Teaching Project in the Junior High School Rockland, Massachusetts

John W. Rogers November 1972
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In this study, the investigator provided historical description of the significant events leading to the development and operation of the Rockland Junior High Project. Through analysis of these incidents and an assessment of the project's effectiveness in meeting the five stated objectives, recommendations were made concerning this style of governance and staffing organizational pattern in the improvement of education.

The five objectives which were selected are stated below:

1. To increase individual student academic achievement and skills in reading, math and work-study habits.

2. To create a unique educational environment conducive to achieving maximum positive student attitudes about education.
3. To increase positive community attitudes and support for the school and junior high education.

4. To create a professional environment in which maximum teacher time may be spent on high level professional tasks.

5. To provide an educational climate for teachers which will insure a high degree of job satisfaction and enhance the opportunity for increased goal accomplishment.

The Iowa Test of Basic Skills in reading comprehension, math computation and workstudy skills were used to assess objective one. A Student Morale Inventory instrument was used for objective two and a Telephone Survey for objective three. Objective four was assessed by the use of a School Personnel Weekly Task Log. The Purdue Teacher Opinionnaire and the Peck Sese of Power Scale was used to determine the effectiveness of objective five. A school similar in geographic location and in the socio-economic make-up of its students was used as a control school in assessing the effectiveness of objective one, two and five.

Summary of Conclusions

1. The findings seem to indicate that even though Rockland and School "X" are doing equally as well on Reading and Mathematics, that Rockland with its team-teaching program is doing better in preparing their students to work more independently.
2. Evidence in this study points to the overall high morale of both the students and teachers at the Rockland Junior High.

3. That eighty-seven percent of the students at Rockland Junior High look forward to coming to school indicates a good reflection on the staff and the program.

4. On the open-ended questions the vast majority of the responses were favorable to the program, especially in the areas of relations with other students and teacher-student relations.

5. Based on the responses of the telephone surveys as well as letters received from teachers and parents in praise of the Junior High Program, there appears to be a positive increase in community attitudes and support for the Rockland Junior High. This attitude was also reflected in an approximately 50% increase in the Junior High School budget approved by the School Committee.

6. One of the outstanding side-effects of the use of the internes and aides (flexible staffing) turned out to be the task performance of the various team leaders. The administration was able to view these teachers carrying out tasks that were not possible under the traditional program. Consequently, two of the team leaders have since received promotions within the school system.

7. The Peck Power Scale indicated that the teachers in Rockland believed they had a stronger sense of power than did the teachers of School "X".
8. On the first administration of the Purdue Teacher Opinionnaire the data showed that the Rockland teachers had extremely high morale.

9. On the second administration the teacher morale in Rockland tended to drop in most areas. In general discussions with staff, the investigator determined that in spite of the dip in morale, teachers were still noticeably pleased with the project.
Dedicated to

my wife Theresa and

children John Jr., Michael and Nancy

for tolerating an often absent

husband and father

and for their understanding

support and encouragement
Acknowledgements

I would like to express my sincere gratitude to all those individuals who participated and assisted me in collecting, analyzing and preparing the data for this study; in particular Dr. Robert Levine, Mrs. Dorothy Folsom, Mr. Horace Bamford and Mrs. Ann Burrill.

I am extremely grateful to Dr. Roger Peck for his role, not only as Chairman of my Dissertation Committee, but for his constant encouragement, guidance, suggestions and consultations as well. I also wish to thank Dr. William Griffiths and Dr. Arthur Eve for their valuable assistance throughout my Doctoral Program. My appreciation is extended to Dr. Ash Hartwell for his assistance in the statistical computations of the collected data.

Last but certainly by no means least, I am very thankful and appreciative to my wife, Theresa, for her understanding, support, and encouragement throughout this study and to my three children, John Jr., Michael and Nancy for their concern and love.
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CHAPTER I

DESCRIPTION AND BACKGROUND
OF THE PROBLEM

In the January, 1970 issue of Educational Leadership is an article entitled "Interaction Processes and Change," written by Gordon J. Klopf, Dean of the Faculties, Bank Street College of Education, New York. The first paragraph of this article states:

Schools appear to have inertial properties which make them resistant to change. Veblen has said that any generic bureaucracy results in a trained resistance to work, and change requires work. The work necessary to bring about change in a school must be done by all the individuals involved. Since the processes of teaching are almost more ritualized and rigid than even folk or religious customs, those individuals responsible for initiating change also have a complex and arduous work assignment.¹

In recent years, many people have come to believe that public schools must reconstitute themselves in order to meet the changing needs of a society facing many great challenges. Certain educators have come to the realization that reconstitution of the public schools will require concepts of teaching, staffing, and governance far more flexible than those which presently exist throughout most of the nation.

The Junior High School as constituted was not, in the opinion of the investigator, the success that it was originally intended. In the Rockland Junior High School, as well as in most school districts throughout most of the United States - the staffing pattern, the curriculum, the philosophy, the scheduling, the regulations and the programs were not producing the type of education needed by boys and girls of this age.

According to Jerome R. Shapiro:

Many facets of our society have found that differentiated functional roles and operating styles are not only beneficial, but essential. Because teachers obviously differ also in interest, knowledge, and competencies, educators have begun to experience a need to devise new ways for the educational system to accommodate positions that vary in responsibility, authority, and function. By organizing the schools to capitalize upon the specialized talents of individual teachers, educators expect that the educational process will be improved not only for teachers, but for the students and community as well.²

The junior high was formed to meet the educational, physical, and emotional needs of boys and girls at the intermediate level. Under the organizational pattern used by most school districts, and still in use by some, boys and girls of this age (12-14) were housed in the same building as elementary age children (5-11). Teachers were unable to cope

with the physical, emotional, and attitudinal changes experienced by these students as they reached early adolescence. In addition, when these children left the confines of the elementary school, which usually consisted of grades K-8, and entered high school, the sudden change from an environment where they were well known, understood, protected, and loved, to a much larger school, they were overwhelmed and in awe of their new surroundings.

It was hoped that the establishment of the junior high; that is the separation of grades 7 and 8, which was formulated around 1910, would help to alleviate this situation. This plan, however, was little more than a microcosm of a high school with the same rigid scheduling, little flexibility and the tendency to be subject-orientated rather than pupil-centered.

Charles Silberman in *Crisis in the Classroom* called the Junior High School the "cesspool of American education".\(^3\) The investigator concurred wholeheartedly with this statement. It is imperative for the future of American education that changes be instituted in the present administrative, staff and curriculum structure of the Junior High School. That this change will not come easily and will be beset by resistance, as well as many legal problems, is without question - but the welfare and dignity of these boys and girls demand this change and demand it now.

The School Committee and Administration of the Rockland Public Schools, as well as the Principal and professional staff of the Rockland Junior High School, recognized this need for change and in the fall of 1970 accepted the challenge to effect changes in the staff, curriculum, and organization of the Rockland Junior High. A representative steering committee was selected to gather and study preliminary data. A formalized design was to be completed by March 1, 1971. The steering committee analyzed the Rockland Junior High's philosophies and the students' educational needs in terms of how these could be met through a complete restructuring of the staff and governance procedures. This resulted in the selection of five objectives to be used as a focal point for the first year of the project.

The five objectives selected are stated below:

1. To increase individual student academic achievement and skills in reading, math and work-study habits.

2. To create a unique educational environment conducive to achieving maximum positive student attitudes about education.

3. To increase positive community attitudes and support for the school and junior high education.

4. To create a professional environment in which maximum teacher time may be spent on high level professional tasks.
5. To provide an educational climate for teachers which will insure a high degree of job satisfaction and enhance the opportunity for increased goal accomplishment.

With these objectives as the focus of attention the Rockland Junior High Project began in July, 1971, with a summer workshop for key members of the professional teaching staff. The first year of the project was terminated at the end of the school year in June, 1972.

In the present study, the investigator provided a historical description of the significant events leading to the development and operation of the Rockland Junior High Project. Through analysis of these incidents and an assessment of the project's effectiveness in meeting the five stated objectives, recommendations were made concerning this style of governance and staffing organizational pattern in the improvement of education.

Statement of the Problem

The major objectives of this study were (1) to identify the legal ramifications, as well as the principal actors and incidents influencing the inception, organization, and implementation of the Rockland Junior High Project, and (2) to determine the relative effectiveness of the program in meeting five selected objectives of the Rockland Junior High Project, as stated by the Junior High staff prior to the initiation of the operational-instructional phase of the program.

The specific purposes of the study were:

1. Through a study of documents from the Massa-
chusetts General Laws Relating to Education, the Massachusetts State Department of Education, the Rockland, Massachusetts, School District and local documents from the Rockland Junior High School, to identify the major actors, incidents, and legal problems crucial to the inception, organization, and implementation of the Rockland Junior High Project.

2. Through a study of documents from the Massachusetts General Laws Relating to Education, the Massachusetts State Department of Education, the Rockland, Massachusetts, School District and local documents from the Rockland Junior High School, to determine those aspects of this program unique to the Rockland Junior High School.

3. Through the use of the pretest-posttest equivalent control group experimental design, to ascertain the cognitive changes which took place in the Rockland Junior High students as a result of participating in the Rockland Junior High Program. These cognitive changes relate speci-
fically to the students' achievement in reading, math, and work-study skills.

4. Through the use of a control group quasi-experimental design, to determine the attitudinal changes which took place in the Rockland Junior High students as a result of participating in the Rockland Junior High Program. These attitudinal changes relate specifically to the positive or negative student attitudes toward school.

5. Through the use of closed and open-ended questions in two structured telephone surveys to indicate the parents' attitudes toward the Rockland Junior High Program.

6. Through the development and implementation of the "Personnel Weekly Task Log Procedure," to designate the professional level of the tasks being performed by the teachers, interns, and teacher aides in the Rockland Junior High Project.

7. Through the use of the pretest-posttest quasi-experimental design to resolve the attitudinal changes which took place in the teachers on
the Rockland Junior High staff as a result of participating in the Rockland Junior High Project. These attitudinal changes specifically relate to the professional staff's perception of job satisfaction, feeling of goal accomplishment, and sense of alienation.

8. Through on the site observations made by the investigator, and through various unobtrusive measures, such as informal discussions with the teaching staff and interns, statements made by consultants and other visitors, correspondence materials, and attendance reports to denote the relative degree to which the five objectives have been accomplished.

9. Through an analysis and synthesis of the findings generated from the procedures described above (Items 3 through 8), to develop conclusions focusing on the relative degree to which the five objectives of the Rockland Junior High Project have been reached. These conclusions were based on emergent patterns rather than on specific or isolated instances.
10. From the conclusions developed from the study, to indicate recommendations relating to: (a) changes which should be made for the second year of the program; (b) procedures to be used in the assessment of the program for the second year, (c) the components of the Rockland Junior High Project, and the assessment program which could be adapted by other schools.
Definition of Terms

School District refers to an autonomous governmental unit that administers its own schools. Massachusetts has 351 cities and towns, each having its own school district, 51 regular Regionals, 5 Industrial Vocational, 20 Vocational-Technical, and 3 County Agricultural, for a total of 430.4

School Committee refers to "School boards that are legal bodies, organized to govern the school districts and to enforce the laws relating to public schools".5

Superintendent of Schools refers to "the executive officer of the school committee, and under its general direction, shall have the care and supervision of the public schools, shall assist it in keeping its records and accounts and in making such reports as are required by law, and shall recommend to the committee teachers, textbooks, and courses of study".6

Junior High School refers to a school pattern consisting of children in grades seven and eight.

---


Principal refers to the administrator who is responsible for the administration of the Rockland Junior High School. "The principal is the key person of the school team."\(^7\)

Team Leader refers to the member of the professional teaching staff responsible for the leadership of a team of three teachers, an intern and teacher aide.

Governance refers to the administration of the junior high school.

Assessment refers to the evaluation of the outcome of the stated objectives of the faculty and administration.

Operational-instructional phase refers to that time period which begins on July 1, 1971, and includes the teacher workshop, as well as the actual operation of the school for the purpose of educating students.

**Assumptions in the Study**

1. Respondents were candid and honest to questions concerning the strengths, weaknesses and values of the various aspects of the Rockland Junior High Project.

2. Respondents reacted to attitudinal instruments in terms of their own attitudes at the time of responding to the items.

\(^7\) Gauerke, *loc. cit.*, p. 131.
Limitations of the Study

1. The present study was concerned with only the information available for investigation and judged to be important to the stated objectives of this investigation.

2. The present study, as a whole, was limited to the period from September, 1970, to July 1, 1972. The assessment of the effectiveness of the operational-instructional phase was limited to the period from July 1, 1971 to July 1, 1972. Therefore, generalities deduced from this limited time period were, likewise, limited in scope.

3. The nature of the objectives assessed, as were stated prior to the operational-instructional phase by the Rockland Junior High School staff, influenced the types of measurement criteria which could be utilized. Since certain portions of these objectives contain subjective elements, the instruments used to measure these objectives may have lacked precision.

4. Because some of the research data cited within this investigation was gathered from internally conducted surveys, there is a possibility of bias.

5. The investigator, Superintendent of the Rockland Public Schools, perhaps lead him to seek out information
favorable to the project.

**Design of the Study**

The study incorporated two types of designs: (1) a case study method (2) a multifaceted assessment design. These methods as they were used in the proposed study are described in the following sections.

**The Use of the Case Study Method**

Data from varying unobtrusive sources was analyzed in order to describe the inception, planning, organizational, and operational phases of the Rockland Junior High Project; and to identify the major actors and incidents relative to these phases.

As stated previously in this proposal, objective number one of the study was to describe the inception, organization, and implementation of the Rockland Junior High Project in order to identify major actors, incidents and legal problems. To accomplish this objective, data from such sources as the following was analyzed: (1) Massachusetts General Laws Relating to Education, (2) minutes from steering committee meetings held in Rockland, (3) reports from the Boxford Junior High School, Boxford, Massachusetts, (4) dissemination bulletins from the principal and steering committee, (5) minutes from meetings held by the Rockland School Committee in the State of Massachusetts, (6) interviews with local and state officials.

One part of objective number one of this study, as stated previously in the proposal, was to determine those aspects of the Rockland Junior
High Project unique to the Rockland Junior High School. To accomplish this purpose, data from sources such as the following was analyzed:

(1) memos and other correspondence material from the Superintendent to Rockland Junior High School, (2) correspondence from the Boxford Junior High, Boxford, Massachusetts, (3) memos and other correspondence material generated by the Rockland Junior High staff, (4) minutes from the meetings of the steering committee, (5) reports from the Eastern Nazarene College, Quincy, Massachusetts, (6) correspondence materials to and from the Massachusetts State Department of Education, (7) observations and reports of planning workshops conducted with the Rockland Junior High staff, (8) minutes from the Rockland School Committee meetings, (9) interviews with local and area school officials, (10) the prospectus entitled "Proposed Changes in Junior High Structure and Curriculum".

The data obtained from these sources was analyzed and synthesized; and were presented in narrative form. The resulting narration provided a background for the second phase of the proposed study which is the assessment of the degree of accomplishment of the five selected objectives for the Rockland Junior High Project.

The Use of the Assessment Design

The second objective of the study incorporated a multifaceted assessment design. These assessment approaches were used to determine the effectiveness of the Rockland Junior High Project in meeting the five
selected objectives. Following is a list of these objectives and the means by which they were assessed in the proposed study.

Objective One - To increase individual student academic achievement and skills in reading, math and work-study habits.

Assessment procedures used: To assess this objective, the Iowa Tests of Basic Skills in Reading Comprehension, Math Computation and Work-Study Skills were administered to a random sample of over one hundred students at the Rockland Junior High School in May, 1971. The Iowa Tests of Basic Skills were also administered to a matched group of over one hundred students from a school similar in geographic location and in the socio-economic make-up of its students. The individual student scores on the Iowa Tests from both schools were compared at each grade level and the control and experimental groups were selected from the initial group of students according to the following procedures:

1. For each grade level tested, students from Rockland and School "X" were matched according to sex and national stanine in Reading, yielding at least 80 matched pairs.

2. For each grade level tested, students from Rockland and School "X" were matched according to sex and national stanine in Mathematics computation, yielding at least 80 matched pairs.

3. For each grade level tested, students from Rockland and School "X" were matched according to sex and national stanine in Work-Study Skills, yielding at least 80 matched pairs.

In April, 1972, all the students in the experimental and control
groups were retested on the Iowa Tests of Basic Skills. The grade equivalent scores for each grade level at Rockland Junior High School were compared with the grade equivalent scores for each grade level at School "X". To determine whether the differences in mean scores for the two schools are significant, the data was subjected to an analysis of variance.

Objective Two - To create a unique educational environment conducive to achieving maximum positive student attitudes about education.

Assessment procedures used: To assess this objective, the Student Morale Inventory (SMI) was used as the primary instrument. The SMI was administered to fifty students at Rockland Junior High and fifty students at School "X". These students were chosen by a random selection process from the students selected to participate in the administration of the Iowa Tests of Basic Skills.

The SMI was administered to these students in January, 1972. The mean scores for the two groups were compared for each of the seven categories represented by the subscaler of the SMI. The data was subjected to an analysis of variance to determine the statistical level of significance of the differences in mean scores.

In addition to the above procedure, a total of seven questions were selected from the SMI. Each question represented one of the subscales on the SMI. These questions were asked of the parents, changing the wording only to the extent necessary to the parental situation. A full
description of the structured telephone survey is presented in the following section.

Objective Three - To increase positive community attitudes and support for the school and junior high education.

Assessment procedures used: To assess progress in meeting this objective, Rockland's community attitudes were surveyed by means of two structured telephone surveys. These were conducted as follows:

1. In January, 1972, fifty parents were called, thirty of whom were selected at random from the group of parents whose children took the Student Morale Inventory. The remaining parents were selected randomly from the attendance roles. Each parent was asked the same questions in the same manner.

2. In March, 1972, the second telephone survey was conducted. This survey included fifty randomly selected parents.

The same questions were asked in the same manner for both surveys.

The basic form of this survey was adapted from an instrument devised to measure community attitudes by the Project Lighthouse (Title III-ESEA Project No. OEG 3-7-703873574) staff.

The data from the survey was processed and presented in table form. An analysis of variance was used to determine the statistical level of significance of the differences which appeared between the two surveys.

Objective Four - To create a professional environment in which maximum teacher time may be spent on high level professional tasks.
Assessment procedures used: In order to assess accomplishment of this objective, an instrument called the School Personnel Weekly Task Log was used. The Task Log was developed in the following manner:

While formulating the plans for their program, one of the activities the Rockland Junior High staff participated was an analysis of the teaching act. The teachers brainstormed in order to analyze the various components comprising teaching. The tasks were then categorized according to complexity: most complex (highly professional), less complex (less professional), and least complex (para-professional and clerical). The resulting lists were refined until a total of sixty tasks emerged. These consisted of 20 Level 1 tasks (most professional), 22 Level 2 tasks (less professional), and 18 Level 3 tasks (least professional). The items were scrambled and reassembled in the form of a log.

In the proposed study, each teacher, intern, and teacher aide self-administered the Task Log each week. These responses were weighted according to the level and number of times the task had been performed. This information was then totaled.

The data from these responses was presented in table form, and the findings were analyzed. This analysis consisted of attempting to determine trends from week to week, and to determine if the level of tasks which the teachers, interns, and teacher aides performed were substantially different.

Objective Five - To provide an educational climate for teachers which will insure a high degree of job satisfaction and enhance the opportunity for increased goal accomplishment.
Assessment procedure used: In order to assess the accomplishment of this objective, the Purdue Teacher Opinionaire (PTO) was utilized as a primary tool.

The PTO was administered to the Rockland Junior High School and School "X" staff in January, 1972, and again in March, 1972, to the Rockland staff to obtain the needed information.

1. The results of the Rockland Junior High staff were compared with School "X". This comparison was made for each of the ten subcategories comprising the PTO.

2. A comparison of the results of the two PTO administrations conducted at Rockland were made. This comparison was made for each of the ten subcategories comprising the PTO.

The raw data from the PTO was processed at the Measurement and Research Center at Purdue University, Lafayette, Indiana. The analyses of the processed data for determining statistical levels of significance in the comparisons was made by subjecting the processed data to an analysis.

In addition to the PTO, the Peck Sense of Power Scale was also used to assess the accomplishment of Objective Five. The Peck Sense of Power Scale was administered to the Rockland Junior High and School "X" teaching staff in January, 1972. A comparison of the results of the two administrations was made, and the differences were subjected to an analysis of variance.
Unobtrusive measures to be used

Various unobtrusive measures were used in the proposed study for the purpose of supplementing the data obtained from the assessment procedures described above. These unobtrusive measures included: (1) on the site informal observations by the investigator, (2) comments from consultants and other visitors, (3) unsolicited comments and letters from teachers and parents, (4) attendance reports. Data from all the above sources was analyzed and synthesized, and conclusions drawn on the basis of emergent patterns rather than specific or isolated instances.

Significance of the Study

In a special issue of the Idea Reporter it was stated:

Our frequently discouraging experiences with educational innovation during the '60's poses a potential problem for the schools as the '70's open. The concept of educational change may have been so discredited during the last decade that we may be faced with our own credibility gap; many schoolmen might react by resolving not to depart from traditional practice in this decade. Yet it is clear that our schools MUST change if they are to educate successfully a generation growing up in a world that differs in important respects from the one that shaped our convictions, expectations, intellectual assumptions, and emotional responses.\(^8\)

Therefore, it was of the utmost importance that this study prove that

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change and innovation can be successful, that students, staff and the community can profit by change, if it is effectively planned and implemented.

Not only does this study have an importance relative to the support of innovation and change; but, more specifically and to the point, it was vital to show that there is a way of changing a Junior High School, a way that can make learning exciting and beneficial for all concerned.

Innovation changes an entire school. It affects both staff and student morale, curriculum, school organization and school governance. Whether this change is significant or not depends to a great extent on the planning, organization and implementation. Hopefully, this study provides the guidance and direction to determine this success for other school systems.

**Organization of the Dissertation**

In Chapter I of the dissertation, the problem was described and its background given. The design of the study, its limitations, and its significance was also presented. Chapter II consists of a review of the literature as it relates to the problem. In Chapter III there is a description of the Rockland Junior High School and a detailed account of the initiation, planning, organization, implementation, and operation of the Rockland Junior High Project. Chapter IV describes the methodology used for assessing the effectiveness of the Rockland Junior High Project in meeting the five objectives. In Chapter V there is a presentation and analysis of the data gained through the assessment procedures used in
the study. Chapter VI includes the summary, conclusions and recommendations.
CHAPTER II
REVIEW OF RELATED RESEARCH
AND RELATED LITERATURE

The advent of team teaching has helped somewhat to change the "lone wolf approach" of so many teachers; but, by and large, teachers have not felt that they belonged to a total team operation. As schools increasingly focus on accountability, they are forced to examine their staffing patterns and decision-making processes. This focus has resulted in alterations in the traditional pattern of school governance.

The investigator will present a brief history of the junior high school, the reasons for its establishment, its failure to meet these needs, as well as the principal's role in bringing about change. The development of the team approach, various styles of the team concept, related programs, and the necessity for team governance will be presented.

Brief History of the Junior High School

The junior high schools, originally founded approximately sixty years ago to meet the physical, psychological, and mental growth of children on a level intermediate between elementary school and high school, appear to have fallen short of helping the children for whom they were established.

As detailed in literature in the early 1900's, the most frequently
mentioned reasons for establishing the junior high school were to build a
democratic school system that recognized the nature of the pupil at ado-
lescence, to provide conditions for better teaching and scholarship, as
well as to improve opportunities for socializing.¹

A review of the reasons of junior high school education was published in 1927.² In this review the purposes most frequently mentioned
were: (1) to meet individual differences of pupils, (2) to provide pre-
vocational training and exploration, (3) to provide counseling or guidance,
(4) to meet the needs of the early adolescent group. No reference was
made to better scholarship, one of the more important demands for the
establishment of the junior high school.

The writings of Leonard V. Koos³ and Thomas H. Briggs⁴ during the
1920's and more recently those of Gruhn and Douglass⁵ and Gertrude Noar,⁶

¹Leonard V. Koos, Junior High School (enlarged ed; Boston: Ginn and Company, 1927), p. 506.


along with others, provide acceptable and definitive statements of obj-
jectives and functions of the junior high school.

However, Eichlom in a paper presented at the Southeast Mississippi
State College stated:

The junior high school came into existence at the
turn of the twentieth century. Throughout the
early stages of the junior high school movement
the need for transitional organization was stated.
Unfortunately the junior high school in practice
patterned itself after the senior high school model
and therefore never reached the worthy goals for
which it was clearly intended.  

Gertrude Noar in her second edition of The Junior High School stated
"many forces are being brought to bear on them (the junior high school)
in an effort to effect their ultimate destiny".  

Summary

The investigator discussed briefly the history of the junior high
school, the most frequently mentioned reasons for its birth and its
failure. In the following section the principal as a force to effect
needed change will be discussed.

7Donald H. Eichlom, Middle School - "Promise of the Future",
Speech presented at the Southeast Mississippi State College,

8Gertrude Noar, The Junior High School: Today and Tomorrow (New
The Principal as a Change Agent
of the Junior High School

One of those forces that holds a unique position to bring about needed change in the junior high schools is the principal. In most textbooks on school administration and articles concerning the duties of the secondary school principal, writers frequently noted that the primary duty of the principal was curriculum improvement. Most practicing administrators, however, have agreed their time was more often than not taken up by "Administrivia". This neglect was brought about by the tremendous expansion in size and complexity of the junior high school over the past fifty years. Throughout all this expansion, the principal's extent of control became greater, and in many instances, unwieldy. The office of vice (assistant) principal was established; this helped to shorten the extent of control and allowed the principal some time for effecting curriculum change. In most cases the principal was only a curriculum

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generalist and what he needed was the assistance of a specialist. As a result, the departmental organization became the dominant pattern for the junior high school.13

Within recent years the departmental organization has come under increasingly sharp attack.14 In some instances the division organization, which combined several subjects into a team-teaching unit, came into being.15 Norman Riggs said:

If the principal continues to be the person responsible for the curriculum of the school, and there appears no reason why he should not, then he will need sufficient administrative and quasi-administrative help to do this task effectively.16


Authors of educational textbooks have also been guilty of neglecting the importance of organization. In their book, Griffiths\(^\text{17}\) and his co-authors claimed that a review of the standard texts in school administration indicated an almost complete lack of question for that problem.

As early as 1940 reference was made in literature to organizational patterns. Spears indicated that the curriculum movements oversight of the administrative implications of reorganization promised to be its undoing.\(^\text{18}\)

As stated previously, the main responsibility of the principal was curriculum improvement. Miller\(^\text{19}\) agreed with that and also stated that when change in an organization did happen, it happened from the top down, and not from the bottom up. McCleary and Hencley back up the need for the principal to lead by stating the following:

\[
\text{The leadership approach to instructional improvement is based on the premise that instruction can best be improved at the school building level with effective guidance from the building administrators.} \quad \text{\cite{20}}
\]


The literature indicated that it was not always easy for the principal to assume that leadership, as too often the administrative tasks in the operation of the school were so large that they blinded the principal's view of the instructional area.\textsuperscript{21}

As further evidence of the problem faced by the principal in his attempt to organize for curriculum improvement were the following statements made by Van Norman:

1. The secondary school administrator must manage a great many, and often conflicting operations. However he may delegate authority, he remains, as does the army company commander, responsible for all.

2. The sheer number of authoritative sources (bosses, if you will) in a position to define his role for him is very large and the hierarchy is poorly defined.

3. Principals must account to more people in various positions (and not simply satisfy them as customers) than do administrators in most other enterprises.

4. His basic mission is essentially vague; his fundamental \textit{raison d'etre} is far from clear.

5. There is an imprecision in means used to measure his product.

\textsuperscript{21}Spears, \textit{op. cit.}, p.185.
6. The school administrator must govern in many areas where he does not have competence. Taken in toto, the list is impressive, the Kafka-like picture of a man assigned a task of great quantitative complexity by a large number of disagreeing authorities, to produce a product vaguely defined and impossible really to measure, but requiring the management of specialties in which he is ignorant.\(^\text{22}\)

The job which faced the administrator was clearly defined by Lazarsfeld. He stated the administrator must fulfill the goals of the organization and must make use of other people in fulfilling these goals not as if they were machines, but rather in such a way as to release their initiative and creativity.\(^\text{23}\)

The administrator must be aware of morale and the belief that under good conditions people will perform more effectively. Provisions for innovation, for change, and for development must be built into the administrator's organization.

McCleary and Hencley suggested that the approach to curriculum improvement should be a "team approach" which utilized the skills of both the generalists and the specialists.\(^\text{24}\)

\(^{22}\) Royce Van Norman, "School Administration: Thoughts on Organization and Purposes," Phi Delta Kappan, XLVII (February, 1966), 315.16.


\(^{24}\) McCleary and Hencley, \textit{op. cit.}, p.84.
The very word "team" indicated organization of some kind. The task facing education required that some type of organization was necessary. Donald H. Ross of the New York State Education Department described the need for change in education in the following:

The school enterprise is bigger and more expensive than ever...Education is a more complicated process with greater promise than ever dreamed of before...Schools are expected to serve more people. Schools are expected to do things never before considered responsibilities of educational institutions, and to do deeper, more effective jobs in terms of traditional educational purposes...More informal operational democracy is demanded by school administration both in terms of working with the public and working with the staff.25

The major keystone to curriculum leadership by the junior high principal was the creation of an organizational pattern that provided him with the necessary curriculum expertise, assistance with administrivia, and appropriate staff involvement.

Summary

The principal's inability to devote his time to curriculum improvement due to the expansion in the growth of the junior high school was described. The resultant development of the departmental organization and its lack of success which eventually evolved into a team approach was outlined. The discussion which follows will present many of the

characteristics and concepts of team teaching.

**Team-Teaching**

The approach to team-teaching can involve many types of organizational patterns. Bair and Woodward listed some of the most important characteristics of team-teaching.

1. A teaching team consists of from 3 to 7 or more teachers jointly responsible for the instruction of 75 to 225 or more students in one or more grade or age levels.

2. Teams may have teachers assigned to different levels of responsibility depending on their ability and experience, with higher salaries and higher status given to the senior teachers and the team leader.

3. Team-teaching permits the supervision of the junior members of the team by the senior or leadership personnel. The schedule also permits less experienced personnel to observe the outstanding teacher, adjusting to his program as the teaching-learning situation develops.

4. Team-teaching emphasizes the team, rather than the individual teacher, in the planning, teaching, and evaluating cycle.

5. In many team-teaching programs, each member of the team specializes in a different curriculum area and helps all members of the team plan, teach and evaluate in the area of his specialty.

6. All team-teaching programs emphasize the effective utilization of the strengths of each member of the staff.

7. As team-teaching promotes non-gradedness within the school, so does non-gradedness promote team-teaching.
8. Team-teaching programs emphasize varying class sizes and class lengths based upon instructional objectives, content, techniques, and student needs.

9. Many team-teaching programs use aides for non-professional tasks.

10. Most team teachers make effective use of the instructional media.\textsuperscript{26}

Shaplin describes "team teaching" as a type of instructional organization involving teaching personnel and the students assigned to them, in which two or more teachers working together are given responsibility for all, or a significant part of the instruction, of the same group of students.\textsuperscript{27}

One type of organizational pattern was called the Instructional Team Organization. The pattern was developed at Old Orchard Junior High School in Skokie, Illinois, with good success. The procedure, described in \textit{Clearing House}, was as follows:

With our normal teaching load of six class periods in a nine period day, a team works with approximately 180 students. One math teacher, one science teacher, one language arts teacher and one social studies teacher are assigned to this basic instructional group of 180 students...a common planning period is provided for the teachers to ensure that this small team of teachers will have the opportunity to plan for, and to exchange insights about,


their students... the teacher responsible for providing the leadership in meeting the objectives is the Instructional Team Coordinator.28

The Instructional Team Organization promotes the improved professional performance of teachers and, therefore, of the educational program by: (1) providing the means to integrate study, (2) allowing teachers to know pupils better and, as a result, relate better to them and their parents, (3) retaining the advantages of departmental organization.29

Team Teaching Concepts

Team teaching presents a profuse array of concepts to an ever-growing number of interested school administrators. In simple terms, a teaching team is a group of teachers who take joint responsibility for the instruction of a given segment of a school's population. The variety of concepts of team teaching have been categorized by Harry I. Wigderson as Concepts of Occurrence, Concepts of Assignation, and Concepts of Orientation.

The Concepts of Occurrence is the frequency of the team function and consists of a fragmentary, adjuvant, partial and total team whereas the Concept of Assignation is the inter-relationship of the membership of the team. The relationship of the teacher to the pupil falls into the category of Concepts of Orientation.


29 Ibid., p.303.
Team teaching involves many other staff utilization practices. Some new trends in education that appear to be closely allied with the team teaching movement are:

1. Variability of pupil grouping (generally small group/large group organizations)
2. Flexibility of scheduling (individualization through modular or staggered scheduling)
3. Differentiation of teacher roles (with or without salary differentials)
4. Utilization of technological devices (a multi-media approach)
5. Innovative interaction approaches in curricula (inquiry, research and/or programmed oriented)
6. Modification of plant design
7. Re-assignment of non-teaching duties
8. Emphasis on student responsibility\(^{30}\)

Team teaching is an education innovation that by its very nature provides an opportunity to break away from traditional classroom structures and give the teacher a more stimulating and professional role:

Team teaching does this by giving a teacher flexibility in planning, implementing and evaluating courses of instruction cooperatively. It means that he will teach in association with his fellow

teachers and will be subjected to the inspiration and team discipline that this association will provide. The value to the students follows as they are taught on an increasingly professional level by teachers who are more able to concentrate on their individual teaching strengths within the team.31

Summary

The major characteristics and the various concepts of team teaching were discussed in the preceding section. The investigator will describe some of the factors influencing the emergence of team governance, and staff participation in the decision-making process in the discussion which follows.

Team Governance

To those who have read the literature in the behavioral and social sciences, it is obvious that there has been a change in the administrative process. Groups have become more aggressive and insistent on involvement in decisions which affect them. Gregg reported:

Groups (teachers) want more chance to participate in making decisions that affect their activities and opportunities. It was found that by giving groups an opportunity to participate, administrators not only get more cooperating in implementing the

choices that are made, but also may get better quality decisions.32

A decrease in the number of school districts and the increase in pupil membership have resulted in the growth of larger and more complex school systems. This complexity in size and organization has tended to bring about even greater bureaucracy. Teachers have developed a tremendous distaste for, and have shown greater dissatisfaction with, authoritarian and paternalistic administration. They have heard the call of their association leaders for staff participation in the decision making process, and they are pleased with what they have heard. In addition, the introduction of new staffing patterns in the organizational structure of the schools, such as team teaching, and the employment of interns and teacher-aides, have encouraged some teachers to involve themselves in expanded responsibilities for decision-making.

Norman J. Boyan in his paper, "The Emergent Roles of the Teacher and the Authority Structure of the Schools" stated:

The aspirations of teachers as professionals in public bureaucracies and the militant behavior of teachers as members of extra-school organizations have brought them into sharp confrontation with the traditional authority structure of the school.33


In the governmental set-up of education, the role of the teacher has been that of low man on the totem pole according to A. Eugene Howard in his speech "Determining Educational Policy, Who Shall Be Involved".\footnote{A. Eugene Howard, "Determining Educational Policy: Who Shall Be Involved," Speech presented at Southern Association of Colleges and Schools, Daytona, Florida, July, 1970.}

As innovations in organization occur the school moves from a factory-like system to a more individualized, more personalized, and hopefully, more relevant system. The development of multi-unit schools and flexible staffing programs is rapidly forcing teachers and administrators to work together as a team. Figure 1 on the following page indicates the influence teachers believe they have on school policy, as opposed to the influence they would like to have. Also, it has been discovered that in more innovative schools teachers believed they had more influence on decisions than in less innovative schools.\footnote{Ibid.} (See Figure 1.)

The combined effect of personal attitudes, reorganization within the school and teacher organizations has stimulated many teachers to seek through their organizations an expanded role in the governance of schools. School committees and administrators should take the lead in expanding the role of the teachers in the governance of the schools.
School Board  
Superintendent  
Principal  
Colleagues  
Self  

NONE  LITTLE  SOME  GREAT DEAL  

--- Perceived Influence  
----- Preferred Influence  

Figure 1 TEACHERS' PERCEPTIONS AND PREFERENCES OF VARIOUS PERSONS' INFLUENCE ON SCHOOL POLICY  

Staff Participation in the Decision-Making Process

There is considerable documentation to support the view that teacher participation in decision-making has positive consequences. Studies done in industry, dating from the Western Electric Studies at Hawthorne, Illinois,\(^{37}\) to more current studies, such as Coch and French,\(^{38}\) Guest,\(^{39}\) Vroom,\(^{40}\) Maier,\(^{41}\) and Wickert\(^{42}\) indicate the value of staff involvement.

In the area of education, Chase's study involving 1800 teachers in 216 systems in 43 states, noted that "teachers who report opportunity to

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participate regularly and actively in making policies are more likely to be enthusiastic about their school systems than those who report limited opportunity to participate". 

Sharma, in a study of 500 teachers from all sections of the United States, indicated that teacher satisfaction was related directly to the extent to which they were involved in decision-making.

Resistance to change and innovation will be minimal if teachers are allowed to participate in the decision-making process. This is substantiated by the work of Goodwin Watson, who concluded that:

1. Resistance will be less if participants in the change process have worked together to diagnose a situation and to agree on a basic problem and to feel it is important.

2. Resistance will be less if the goals are adopted by consensual group decision.

3. Resistance will be reduced if proponents are able to empathize with opponents to recognize valid objections and to take steps to relieve unnecessary fears.

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4. Resistance will be reduced if individuals experience acceptance, support, trust, and confidence in their relations with one another.  

Staff involvement in the decision-making process is important. Openness and acceptance are key characteristics of a good team situation. Teachers have the chance to direct their own destiny and to plan together to make wise decisions. They feel free to express their ideas without worry of criticism and retaliation. Team members support each other and their leader because as a team they are all responsible for their decisions and subsequent actions. Donald A. Myers believes:

> Teachers will never become professionals until they are allowed to make all instructional decisions - until they are free to make mistakes with dignity but not with impunity.  

The concept that the principal should not make instructional decisions has been mistakenly interpreted to mean that the principal has no say in the decisions of the school. Griffiths contends that it is the function of the administrator to see that the decision-making process proceeds in an effective manner. Griffiths further states that:


The effectiveness of a chief executive is inversely proportional to the number of decisions which he must personally make concerning the affairs of the organization. It is not the function of the chief executive to make decisions; it is his function to monitor the decision-making process to make certain that it performs at the optimum level. 49

It is not always easy for a principal to monitor the extent to which leadership should be focused on himself or on his teachers. He may believe that in a certain instance teachers should be involved in the decision; yet at the same time he believes that he knows the issue better than the faculty, therefore he should make the decision. The range of possible leadership involvement by principal and teacher is illustrated by Tannen and Schmidt. (See Figure 2.)

Summary

In the preceding the investigator presented a review of the factors influencing the emergence of team governance as well as staff-participation and the decision-making process. In the following, two related programs involving team teaching and team governance in Massachusetts will be described.

49 Ibid.
Principal-centered leadership

Teacher-centered leadership

Figure 2 CONTINUUM OF LEADERSHIP BEHAVIOR

makes decision and announces

"sells" decision.

presents tentative decision subject to change.

presents problem, gets suggestions, makes decision.

defines limits; asks group to make decision.

permits subordinates to function within limits defined by superior.

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Related Programs

On continuing pages two team teaching and team governance projects in Massachusetts will be described. Where possible, indications as to their problems and success will be included.

In 1958 there were approximately fifty school systems throughout the United States studying the team approach to education. The number increased to three hundred by 1960, and as high as two thousand by 1963. Toward the end of the sixties over five thousand variations of the team concept appeared to be in operation.

Boxford, Massachusetts

A new organizational pattern of team teaching and team governance was established at Masconomet Regional Junior High School in the fall of 1970. The pre-planning and organization took place during the 1969-70 school year. At that time the faculty and administration of this junior high stated:

In the recognition that one of the purposes of education is to perpetuate the democratic system within American society, we will use that very democratic system as the best means to effectuate all growth and progress. Specifically, every teacher will have equal opportunity to initiate and develop ideas, innovations, and policies within the Masconomet Regional Junior-Senior High School.51

The faculty was divided into six teams of four teachers each, three for grade seven and three for grade eight. The major subject areas of English, Mathematics, Science and Social Studies were represented on each team. One member of the team was selected as a team leader. Every two teams had a guidance counselor and reading specialist assigned to it, and every three teams an Art and Music teacher. (See Figure 3.) The learning team had complete responsibility for curriculum, discipline and the advisory program. The duties of the components of the team were as follows:

A. Team Leader:

1. Responsible for effective operation and implementation of resources available.

2. Elected annually from team.

3. Responsible for communication with other team leaders and with principal.

4. Responsible for substitute teachers.

5. Responsible for evaluating members of the team.

6. Responsible for interviewing applicants for positions within the structure.

7. Responsible for making recommendations for tenure.

8. Responsible for arranging field trips.

9. There shall be no pay differential between the team leader and other members of the team.

\[52\text{Ibid.}\]
Figure 3 ORGANIZATIONAL CHART OF TEAM TEACHING AND TEAM GOVERNANCE PROJECT AT MASCONOMET REGIONAL JUNIOR HIGH SCHOOL BOXFORD, MASSACHUSETTS
B. Teachers:

1. To act as student advisors in all phases of student growth.
2. To participate in curriculum development and planning for the team.
3. To cooperate with other members of the team and to maintain consistent growth within the team.
4. To participate in peer evaluation for other teachers in the team.
5. To make recommendations for tenure.
6. To maintain open communication with the home.

C. Students:

1. To take some responsibility in developing curriculum for the team.
2. To choose own advisor.
3. To assist in maintaining acceptable standards of behavior.
4. To maintain communication with advisor and other teachers.\(^{53}\)

The Superintendent of Schools received a communication from Peter H. Coffin, Senior Supervisor in Education for the Massachusetts Department of Education, in which he commended the faculty and administration for inaugurating a program that involves teachers in the improvement of instruction and the decision-making process. The Massachusetts Association of School Committees believed this project was innovative and exciting, and published a report on it in their monthly journal. As of this writing, this project is in its second year and still functioning effectively. The members

\(^{53}\text{Ibid.}\)
of the faculty have noted that the addition of teacher interns and released time for planning would further strengthen their program.

Rockland, Massachusetts

As a result of the article in the Massachusetts Association of School Committees Journal describing the Team-Teaching and Team-Governance Project at Masconomet Regional Junior High School, Boxford, Massachusetts, personnel from many school systems throughout Massachusetts visited the school to see this system in operation. Selected members of the faculty and administration of the Rockland Junior High School likewise visited Masconomet.

The organizational pattern established at Masconomet Regional Junior High School appeared to offer many educational advantages to students, teachers, and administrators that, if adopted for the Rockland Junior High School, would bring about much desired changes in their rigid traditional junior high organizational structure. The Rockland teachers, however, felt that simply to duplicate the Masconomet program was inappropriate as the needs of the Rockland Junior High School differed from those of Masconomet. Therefore, they developed a structure and plan uniquely for Rockland, building on the Boxford experiment.

The tracking of the students, as existed in the past, was eliminated. Student team groups were established by random selection and all teams were heterogeneous. With an individual team, however, various forms of grouping could be implemented by the vote of the team. Each team was
autonomous within its own structure.

Basically, the organization of the teams is similar to that used in the Boxford experiment, as depicted in Figure 3. Each team selects its own team leader and all team leaders meet with the principal on a weekly basis to assist in the governance of the school.

The duties of the components of the team were modeled after the Boxford plan, except Rockland employed six interns and three clerical aides; one intern was assigned to each team and one aide to every two teams. This change was due to the evaluation from the Boxford faculty indicating that interns would strengthen their program. Another aspect of the Rockland program that was different in nature from that of Boxford's involved a weekly released time plan for planning and organization of the curriculum. These two major changes, as recommended by the faculty and administration of the Masconomet Regional Junior High Schools, have tremendously improved the effectiveness of the Rockland Junior High Team Teaching and Team Governance Project. The planning, organization and implementation of this project will be described in greater detail in Chapter Three.
Flexible Staffing as it Relates to Team Teaching and Team Governance

As the pattern described in the preceding pages emerged in the Rockland Junior High School Project, the need for flexible staffing became evident.

Flexible staffing is a new trend in education that is closely related to team teaching and team governance. The investigator will review the literature on flexible staffing as it relates to team teaching and team governance and will present the legal aspects of this type of staffing as it applies in the Commonwealth of Massachusetts.

Team teaching is only one alternative to flexible staffing patterns in schools throughout the country. Team governance is the result of a change in administration brought about by the persistence of teachers for involvement in the operation and administration of the public schools.

Definitions of Flexible Staffing

Over the past few years flexible staffing has become synonymous with differentiated staffing. In fact, both terms have been used so interchangeably that it is difficult to arrive at a definition of one that is not similar in nature to the other.

Operationally, the term most used when discussing flexible staffing is differentiated staffing. It appears appropriate to present various defini-
tions of the term. An exact definition is unlikely; however, one that has common concepts of flexible staffing can be indicated. One such definition emerged from the Cherry Creek, Colorado, Staffing Project which is as follows:

Differentiated staffing is a personnel design and system organization that seeks to make more effective and efficient use of human and non-human resources through a better definition of job tasks and functions and differentiation of role, status, competencies, and rewards.54

Edelfelt has defined differentiated staffing as an extension and refinement of team teaching which also provides for both training and career incentive.55 Smith explains differentiated staffing when he states that:

The major difference in the differentiated teaching staff is that it offers many services at the immediate classroom level and the services are offered by the immediate teaching staff. Differentiated staffing is a design to attract manpower. It seeks to make use of the talents not only of the educational community but the community as a whole. Differentiated staffing offers a new dimension and versatility in education.56

54Cherry Creek Public Schools, Differentiated Staffing (Englewood, Colorado: Cherry Creek Public Schools, 1969), p.15.


56Rodney Smith, "A Teacher is a Teacher is a Teacher?" Florida Schools (September-October, 1968), p.17.
8. The advanced positions in the teacher hierarchy are service rather than supervisory positions.

9. Some teachers should earn more than school administrators.\textsuperscript{59}

**Summary**

Whatever the term flexible staffing or differentiated staffing is used, both imply the utilization of personnel with varied degrees of training and expertise performing differentiated roles. The purpose of employing school paraprofessionals is to make it possible for the certified person to use his skills and training more effectively. It is obvious that this new staffing pattern is still "team orientated" and that it involves team governance of a school where both teachers and principals share in the decision-making process. Although an exact definition of flexible staffing, or differentiated staffing, as it has become more commonly known, is difficult to find; the reasons and necessity for a new concept in staffing patterns are more uniformly recognized. The investigator will describe some of these reasons in the following discussion of related literature. The terms "flexible staffing" and "differentiated staffing" will be used interchangeably.

\textsuperscript{59} Op Cit., pp. 53-54.
to function. But it is not the kind of staff needed to achieve change, nor to provide for on-going innovation; differentiated staffing is one of the possible answers to new leadership arrangements in schools.  

Various concepts of differentiated staffing have been suggested by J. Lloyd Trump, Myron Lieberman, and Dwight W. Allen. Rodney P. Smith views the concept of team teaching as the forerunner of differentiated staffing.

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Teacher Professionalism

Teachers have long felt that teaching is not held in as high esteem as other professions. Trump and Miller noted that:

The further professionalization of teaching, an essential ingredient in curriculum improvement, requires more than higher salaries, smaller classes, and improved certification. What teachers do, how their competencies are utilized, the personnel and technical support they receive, and the educational setting in which they work determine not only the professional concepts held by teachers themselves, but also the understanding that others hold of teaching as a profession.67

If competent and qualified teachers are to be employed and retained it is essential that education be restructured. Trump and Miller express this viewpoint as follows:

The professional concept requires that teachers have enough time and the proper facilities for such activities as preparing for their professional tasks, keeping up to date, conferring frequently with colleagues, conducting research and innovations, and improving the evaluation of what they do and what their pupils accomplish...Also, he should have the opportunity to improve his income on the basis of what he does rather than be inhibited by uniform standards applied indiscriminately to all teachers.68

Flexible staffing aims to develop these requisites for teacher professionalism. Its objectives are to recognize individual differences among teachers. Donald Hair believes that the main goal of differen-

67 Trump and Miller, op. cit., p. 317.

68 Ibid., p. 318.
tiated staffing is to give teachers the opportunity to advance in status and salary without leaving the classroom. 69

Flexible staffing could be the means for improving the status of the teaching profession by involving the teachers in the governance of the schools. Kevin Ryan notes that the formation of a flexible or differentiated staffing pattern will lead to more teacher involvement in the decision-making process. He feels such participation is presently limited to salary matters. He perceives teachers in a differentially staffed school as having a real voice in policy decisions. 70

**Individualization**

Flexible staffing attempts to develop and meet not only the requisites for the professionalization of teachers, but the individual needs of students as well. Its goals are to better recognize the individual differences among teachers and students and to better utilize the special abilities of each person.

Dr. Dwight W. Allen expressed the view that: All the talk in education today about meeting the individual needs of students indicates that


70 Kevin A. Ryan "Where Are We Going and How Can We Get There?" The Teacher and His Staff: *Differentiating Teaching Roles*, (Washington, D.C.: NEATEPS, 1968), pp. 72-85.
attention to individual differences among teachers is long overdue.\footnote{Allen, \textit{op.cit.}, p.169.}

According to Allen, non-differentiated staffing patterns perpetuate the waste of teacher time and talents. We staff schools as though differences in teacher ability don't exist or don't matter if they do.\footnote{\textit{Ibid}.}

Dr. John Goodlad, Dean of U.C.L.A. Graduate School of Education, makes the following statement concerning national efforts to individualize instruction over the past ten years:

\begin{quote}
We were unable to discern much attention to pupil needs, attainments, or problems as a basis for individual opportunities to learn. Teaching was predominantly telling and questioning by the teacher, with children responding one by one or occasionally in chorus. In all of this the textbook was the most highly visible instrument of learning and teaching. Rarely did we find small groups intensely in pursuit of knowledge; rarely did we find individual pupils at work in self-sustaining inquiry... We are forced to conclude that much of the so-called educational reform movement has been blunted on the classroom door.\footnote{Dr. John Goodlad, "The Schools vs. Education," \textit{Saturday Review}, (April, 1969), p. 9.}
\end{quote}

The investigator believes that a major weakness of past efforts to individualize instruction has been the reluctance to realize, or to admit that adequate individualization requires more manpower than before. One
of the underlying assumptions of flexible staffing is that in order to individualize instruction, we must bring more and different manpower resources to bear on the issue than at present. Peter Drucker in his observation notes:

> It has always been believed that the teacher spends his time teaching in the classroom - and no one ever looked to test this belief. We have, in other words, done with respect to the teacher's work what, before the advent of scientific management, we used to do for all work: we guessed... Some of our studies make it appear plausible that the productivity of the teacher may, after all, not be so very low; it is simply that he (or she) spends so little time teaching. Certainly one of the main aims of any change in the schools must be to multiply the time that the pupils spends on learning and the teacher spends on teaching.\(^\text{74}\)

**Summary**

The investigator presented a review of the need for the restructuring of the staffing patterns of the public schools. The concepts of flexible staffing as a possible solution to the professionalization of teachers and the need for more individual instruction for students was described.

No system or program devised is without its problems and limitations. Barbee notes that although differentiated staffing has many ad-

4. Additional unresolved questions posed by classroom teachers which relate to (a) the relative importance of the teaching process per se and the organizational-administrative aspects of the teacher's role (b) the nature of the personnel hierarchy (c) the possible unevenness of teacher role performance (d) the possibility of divisiveness in the teaching staff (e) the matter of differential remuneration (f) the difficulty of assigning differential tasks an appropriate place in the hierarchy. 77

**Unproven Effects of Flexible Staffing**

Barbee stated that improvement in the individualized instruction for students should be the main objective of differentiated staffing programs. 78 However, Lown says that the presumption that a change in organization will necessarily change learning is yet to be proven. 79

Lee and Joan Firester allude to this scarcity of empirical evidence:

> Although it is assumed that increased staff differentiation will improve the educational opportunity for pupils there is, in fact, no substantive evidence that this is so. Further, there is no hard evidence that finer differentiation, even with clear career lines characterized by improved rewards and incentives, will upgrade or has upgraded the quality of the educational personnel. 80

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78 Barbee, op. cit., p. 4.


Monetary Concerns of Flexible Staffing

There is some question among educators that differentiated staffing is primarily a method for the development of a merit pay system.\(^{81}\) Merit pay is a method of rewarding teachers working on similar tasks with a salary differential on the basis of exemplary performance. Many of those in favor of differentiated staffing believe, however, that differentiated staffing rewards a salary differential proportionate to the degree of responsibility, not on performance.

Many teacher organizations are concerned that if they are not involved in the planning and implementation of a differentiated staffing program with differentiated salaries, that such a design could very well evolve into a merit pay scheme. Olivero notes there is also some concern that misinformed legislators will pass laws which, while supporting differentiated staffing, will actually result in merit pay.\(^{82}\)

In a publication of the N.E.A., classroom teachers expressed the concern that a flexible staffing pattern of differentiated teaching assignments could very well be used to reduce school budgets. Some teachers would receive higher salaries, but most would not.\(^{83}\) Jerome Shapiro notes:

\(^{81}\) Edelfelt, *op. cit.*, p.11.

\(^{82}\) Ibid.

There are those, however, who feel that a major drawback to differentiated staffing is the higher cost of its implementation when contrasted to non-traditional staffing designs. Many differentiated staffing projects are now receiving support from E.P.D.A. funds as well as from under other U.S.O.E. titles. If additional districts wish to establish flexible staffing designs, or if those presently funded projects should lose their federal support, the question of whether the local school district can afford the program remains.84

Barbee also feels that there is no proof available to educators that differentiated staffing can, in fact, be established with a decrease in expenditures.85

Student Contact

Educators supporting the concept of differentiated staffing claim that teaching and the person who teaches are the most valuable assets in an educational system. Yet most salary schedules provide pay in inverse proportion to the time spent with students.86

Edelfelt also discusses this problem, but believes that the ultimate increase in the quality of student contact more than compensates for the loss in the amount of time.87

84Shapiro, *op. cit.*, p.15.
85Barbee, *op. cit.*, p.4.
86Association of Classroom Teachers, *op. cit.*, p.78.
87Edelfelt, *op. cit.*, p.11.
Other Unresolved Questions

Additional unresolved and serious troublesome concerns have been listed by the Association of Classroom Teachers of the National Education Association as follows:

1. Is the actual teaching process as important as the planning and other supportive tasks related and essential to teaching? What are or will be the criteria for judging the relative importance of the various teaching roles?

2. Can differentiated staffing be accomplished only by establishing a new hierarchy? Is there not a system by which different personnel assume different roles at different times? Might not horizontal rather than only vertical movements for the teacher or a plan of rotating assignments be equally effective?

3. Is a good teacher necessarily a good coordinating teacher or a good curriculum planner or a good learning analyst? Might not one teacher be best equipped to be the coordinating teacher in one area but perform as a regular staff teacher in another area?

4. Will differentiated staffing foster greater solidarity among teachers, or will specialization and differentiation be a divisive factor?

5. If teaching is the primary function of the teacher, and since the teacher's status is related to his degree of remuneration, can any plan be successful if it is implemented on the basis of the hierarchy described in most differentiated staffing plans?

6. Are the various assignments in differentiated teaching so specialized that they fall automatically into a hierarchical pattern? Cannot certain tasks conceivably be performed by certain teachers under certain conditions but
by other teachers under other conditions? 
If one accepts the premise that each individual has both strengths and weaknesses, does a hierarchical system maximize strengths and minimize weaknesses?

Summary

The investigator pointed out that professionalization of teachers, improved individual instruction, the employment and retention of good teachers, recognition and rewarding of individual abilities and differences among teachers are some of the advantages of flexible staffing. Some of the more obvious disadvantages; lack of student contact, concerns relative to differentiated staffing resulting in merit pay, concern over the possibility of reduced budgets, lack of evidence that individual instruction is, in fact, improved, as well as other unresolved questions were described.

The discussion which follows will point out the legal aspects of flexible staffing in Massachusetts.

Legal Aspects of Flexible Staffing in Massachusetts

In Massachusetts there are 312 towns and 39 cities. With certain important exceptions the geographic boundaries of each of these 351 cities and towns constitute a separate school district. The management of the public schools in each of these municipalities has been placed by law in the hands of the school committee. The provisions of law relating to the membership of school committees in towns are not found in the various town charters, but are contained in the General Laws. 89

From 182690 until the present time, the control and management of the public schools have been vested exclusively in the school committee. The members of this board are not accountable to any higher authorities91 of the town or city, including the voters at the town meeting and the council and executive head of the city. Since their powers are derived from the Legislature and not from the governing authorities of the municipality, the members of the school committee, in the exercise and performance of their powers and duties, act as public officers and not as agents of the city or town. 92

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89 Massachusetts General Laws, Chapter 71, Sections 14-16, 1949.
90 Massachusetts General Laws, Chapter 143, Section 5, 1826.
91 Massachusetts Reports, Morrison v. Lawrence, 181 Mass. 127, 63 N.E. 400, 1902.
The most accurate description of a school committee in Massachusetts was given by Chief Justice Rugg in the leading case of Leonard v. Springfield:

The policy of the commonwealth from early times has been to establish a board elected directly by the people, separate from other governing boards of the several municipalities and to place the control of the public schools within the jurisdiction of that body unhampered as to details of administration and not subject to review by any other board or tribunal as to acts performed in good faith...93

It appears from the above that in Massachusetts, school committees have the power and authority to determine the staffing patterns of the schools under their jurisdiction. In general this would be true. However, any decision made by a school committee must be in accord with the General Laws of Massachusetts. To guide school committees in the daily operations of the public schools the Massachusetts Department of Education has published a book entitled General Laws Relating to Education. The specific laws that would relate to the establishment of flexible staffing in Massachusetts school system are section 38, 38G and 40 concerning the employment of teachers. In 1961, these laws read as follows:

Committee to contract with teachers (Am.1960,333, S 2). It shall elect and contract with the teachers of the public schools, shall require full and satis-

factory evidence of their moral character, and shall ascertain their qualifications for teaching and their capacity for the government of schools. No school committee shall refuse to elect and contract with a candidate for a teaching position because of such person's blindness.94

Ch.71, Sec.38G: Certification of teachers by board of education. Requirements (Last am.1960, 333 S 1). The board of education, hereinafter referred to as the board, shall grant certificates upon application to teachers, principals, supervisors, directors, school librarians, superintendents and assistant superintendents of schools... This section shall not apply to trade, vocational, temporary substitute teachers or exchange teachers.95

Ch.71, Sec.40: Minimum salary for teachers: equal pay (Last am.1959, 602, S 1). The compensation of every teacher employed in any public day school in the commonwealth, except persons in training and those employed as temporary substitutes, shall be at a rate of not less than four thousand dollars for the school year. Women teachers employed in the same grades and doing the same type of work with the same preparation and training as men teachers shall be paid at the same rate as men teachers. Such equal pay shall not be effected by reducing the pay of men teachers...96

Summary of the Early Laws

Chapter 71 Section 38 relative to the employment of teachers is


95Commonwealth of Massachusetts, op. cit., p.56.

96Ibid.
silent as to the employment of teacher interns or aides; two positions that are characteristic of a flexible staffing pattern. Chapter 71 Section 38G relative to the certification of teachers is also silent as to the status of teacher interns or aides.

Chapter 71 Section 40 relative to minimum salary and equal pay makes no mention of these two positions, although reference was made as "to those in training". The stipulation that women teachers in the same grade and doing the same type of work with the same preparation and training as men, shall be paid the same appears to create a minor stumbling block to flexible staffing. It would further appear that with the laws silent at that time concerning the employment of teacher interns or aides that a school committee had the authority to employ people in such positions.

Changes in the Laws

In 1964 with the passage of P.L. 89-10, the Elementary and Secondary Education Act, many school committees began to employ teacher aides to assist teachers with clerical duties, thus freeing the teachers to spend more time with their pupils. This seemed to be the beginning of flexible staffing in Massachusetts. All was not smooth, however, as in many communities objection was raised to the employment of teacher aides by school committees. To resolve this problem the Massachusetts Legislature amended Chapter 71 Section 38 and 38G.
In 1965 Chapter 71 Section 38 was amended as follows: It (school committees) may also hire instructional or administrative aides for assignment in laboratories and classrooms. An instructional or administrative aide, as used in this section shall be a person who does no actual teaching, but acts as an assistant to a teacher.97

Chapter 71 Section 38G was also amended in the same year and the section that applies to teacher interns or aides states:

This section shall not apply to trade, vocational, temporary substitute teachers, or exchange teachers, or to teaching or administrative interns from an institution of higher learning in the commonwealth, provided approval for the employment of such personnel shall be granted by the department under such rules and regulations as it may adopt. As used in this section "teaching or administrative intern" shall be a student who has completed his practise teacher requirements and seeks additional experience in part-time teaching or administrative positions.98

Chapter 71 Section 40 was also amended; however, the only change here was an increase in the minimum salary from $4,000.00 to $5,000.00. The stipulation that men and women receive the same pay was still indicated.

Even with the 1965 amendments to Chapter 71 Section 38 and 38G a true flexible staffing plan was impeded as the interns and aides could do


98 Commonwealth of Massachusetts, op. cit., p. 124.
actual teaching. This limitation and the stipulation of equal pay in Chapter 71 Section 40 were not to be insurmountable.

Another law was passed in 1965, Chapter 149 Section 178G "Collective Bargaining". This law gave the teachers the right to bargain collectively on questions of wages, hours and other conditions of employment. With the passage of this law, teachers were in the position to be directly involved in any new staffing patterns that would involve salaries. Teachers could now negotiate for a salary differential for team leaders or master teachers, whereas before this was in the discretion of the school committees.

In 1970 one of the major impediments to a flexible staffing pattern was resolved when Chapter 71 Section 38 was amended as follows:

An instructional aide as used in this section, shall be a person employed in subprofessional duties, as opposed to noninstructional duties including clerical work and the care of school children.\(^9\)

In summary this last amendment to Chapter 71 Section 38 has removed the final major obstacle to implementing a flexible staffing pattern consistent with many of the philosophies previously outlined. The investigator believes the problem relative to equal pay for equal preparation, training

\(^9\)Commonwealth of Massachusetts, op. cit., p.126.

and work is not of major consequence and will be resolved either by an amendment to Chapter 71 Section 40 or through collective bargaining.

Summary

The advantages of team teaching and team governance in bringing about an innovative organizational pattern that would involve the teachers in the decision-making process and improve instruction at the junior high level were described. Two related programs in Massachusetts, the Boxford Experiment and the Rockland Plan were noted. Indications of problems and successes were indicated, where applicable.

The investigator described flexible staffing as it related to team governance and team teaching. Definitions of flexible staffing were discussed as well as the major advantages of teacher professionalization and individualized instruction. Some of the potential disadvantages of flexible staffing were outlined. The importance of involving teachers in the planning and implementation of flexible staffing programs was emphasized.

The legal aspects of implementing a flexible staffing program in Massachusetts were discussed. The Massachusetts General Laws relating to education as they applied to flexible staffing were reviewed and the obstacles and their ultimate resolutions were described.
CHAPTER III

A DESCRIPTION OF THE ROCKLAND JUNIOR HIGH SCHOOL
AND A
DETAILED ACCOUNT OF THE INITIATION, PLANNING,
ORGANIZATION, IMPLEMENTATION, AND OPERATION
OF THE
ROCKLAND JUNIOR HIGH PROJECT

In the previous chapter, a review of the literature related to team
governance and team teaching was presented, as well as the relationship
to flexible staffing. The legal aspects of flexible staffing in Massachu-
setts was traced from the year 1961 to 1972. It is the purpose of the
present chapter to describe the inception, organization, and implementa-
tion of the Rockland Junior High Project in order to identify the major
actors, incidents and legal problems.

A Description of the Rockland Junior High School

Junior high education in the United States has not changed markedly
in fifty years. While innovations and radical changes have been found
with some frequency in elementary and high school education, the junior
high school in America has been largely unmarked either by change or,
consequently, progress.

Junior high education has been in a state of limbo because there is
no universal certainty as to the function of the junior high school. As a
result, junior high education appears to have been relegated to a second
class status. Frequently one finds that to be a junior high teacher con-
fesses to some lack in ability or professional quality, and it is not un-
known to find that junior high schools are staffed and supplied with cast-
offs. There is no clear picture of what a junior high school ought to be,
although of late the junior high school years have come to be thought of
as transitional years, the bridge between elementary and high school,
but with no clear function of their own other than as a kind of holding
place. Not surprisingly, no one is quite sure what to do with these years,
even in those places where the prevailing notion is to regard the junior
high as a preparatory school leading to high school and its "comprehensive" education.

Rockland is not vastly different. Prior to its present program there
was no stated philosophy of what the town considered the role and pur-
pose of junior high school education to be. In general statements about
education, the Junior High School appears to have been thought of as a
holding tank and, to a much lesser degree, as preparation leading to high
school.

The Rockland school system is established on a 6-2-4 basis, the
junior high consisting of grades seven and eight. The student enrollment
numbered approximately 750,\(^1\) with slight increases experienced each year
as the town continues to grow. Class size was approximately thirty pupils
per teacher prior to the present program. Each grade was divided into
twelve divisions, the students grouped according to ability or "tracked".

\(^1\)Enrollment Records, Rockland Public Schools.
The program of studies was typical: the major subjects of English, Mathematics, Science and History met for five weekly sessions of forty-four minutes each; Health, Reading (for all seventh graders and Track III eighth graders), Physical Education, Home Economics (all girls) and Mechanical Drawing (seventh grade boys) or Shop (eighth grade boys) met twice per week (Home Economics, Shop and Mechanical Drawing met for double periods); Music and Art were given for a single period each week. Track I and II students in grade eight had five periods of French.

Each day numbered seven periods, for a total of thirty-five periods per week. Additionally, each student had a twenty-minute "free" period either before or after his lunch. Divisions not having a full academic program, all seventh grades and Track III eighth grades, were given assigned study halls during periods of inactivity, a weekly total of three for the seventh and Track III eighth grades.

Teachers were assigned, usually, five teaching periods plus one study hall per day. One period per day was supposedly available for teacher preparation, although in practice these periods were lost occasionally when substitutes were unavailable.

Additionally, each teacher was assigned lunchroom duty, which meant that for most teachers two or three lunch periods per week were

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2 Rockland Teachers' Association Contract, Article 9, Paragraph 95, p. 6.
lost. If one had his "free" period during period one or seven or lost his free period altogether, he might not have lunch at all.

Traditionally, discipline of students was carried out by the Assistant Principal and after-school "detention". Chronic offenders were referred to the principal's office and joined tardy students for a period of time in detention, the length of punishment depending upon the severity of the offense. At one time detention duty was rotated among the faculty; in recent years one teacher was assigned year-long duty, being relieved of a certain amount of teaching duty as compensation.

Being nearly fifty years old, the junior high school building, originally built as a high school, was suffering from lack of total maintenance and modernization. Beginning in 1968, a program of improvement and updating was begun on the building and has continued to the present time. Projections to be presented to the 1972 Town Meeting for meeting town school building needs include major renovations and additions to the junior high school. Fortunately, the town built a substantial structure in the 1920's, one which has withstood neglect and still allows, with adequate modernization, a continued and useful life.

For all its difficulties, staleness and uncertainty, junior high education in Rockland has fulfilled a useful, sometimes meaningful if unclear, function. Organizationally and physically the school was antiquated,

but at its heart was a sound curriculum, a skilled guidance program, and a core of dedicated and qualified teachers.

Perhaps the dedication of the teachers was a disservice in the long run. In order to teach they put up with inadequacies in materials and hardships in the plant; they provided instructional items and supplies from their own pockets when the school budget refused to provide what was needed; they bore duties and inconveniences for small reward when teachers in other systems were better compensated and less burdened. To no small extent the teachers took the town off the hook; by not complaining or pointing out the dire facts of the situation they unintentionally failed to impress upon the town the needs or importance of their school.

The years, however, took their toll. The rate of teacher turnover became excessive, thirty per cent or more per year. Teacher morale sunk lower and lower, and the teacher absence rate increased alarmingly and to an extreme degree. Frequently the detention hall overflowed to a second room, and in the last year or two student suspensions increased to new and outlandish heights.

Academically, education in Rockland has been in continuous evolution. It has been and is subject to constant review and revision. No area in Rockland's educational program receives more work and attention than the curriculum and throughout the school system teachers generally

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4Annual Report by the Superintendent to the School Committee relative to Teacher Turnover.
seem to feel that their curriculum compares favorably with the best in the Commonwealth. The curriculum in the junior high school is no exception. The work of many years has gone into each of the areas; there is nothing stagnant or sacred about any facet of any area; methods and materials are judged on their meeting the needs of the students. Teachers are encouraged to exercise freedom and initiative in the conduct of their individual classrooms; curriculum guides are guides, not straightjackets. There is an immense variety and imagination present which gives richness and vitality to the separate classrooms.

Thus a sound basic curriculum has undergirded the junior high and enabled the school to meet traditional needs for many years. Basic curriculum changes made recently in the junior high school, with the exception of the history core curriculum, are not the result of changes within the school as they are described here, but are the result of the continuing evaluation in curriculum matters which has been a part of the system since its beginning 100 years ago.

Initiation of the Project

The junior high school in Rockland had been on the mind, and perhaps the conscience, of many for several years. It was the focus of much dissatisfaction throughout the town, although few were able to articulate the reasons for not being pleased with junior high education either in Rockland or elsewhere. Particularly displeased were members
of the school committee and the superintendent and his assistant. One could isolate individual faults or failings within the school but no single one or even combinations of deficiencies seemed to account for the general lack of success. Piecemeal remedies were tried but the truth was that no one knew why the school was ill; it looked like thousands of other junior high schools throughout the country, was organized like them and had much the same curriculum. Teachers were certified, qualified and certainly dedicated.

Yet both teacher and student morale were low: teacher turnover was high and teacher absence was high; student absence and truancy were extreme, and student vandalism unnervingly so. There was, generally, little pride in the school and considerable ill will and tension. Whatever was wrong with the school had been wrong for a long time; it was a progressive illness, and in the minds of many it was terminal.

Foremost, in terms of teacher morale, appeared to be the lack of teacher involvement in the decision-making process. Teachers were not consulted in matters which affected them. Decisions were made at the top and passed down. Policies were enacted by someone higher up and announced. There was little opportunity to engage in discussion let alone significantly modify "the law". Even when the possibility for faculty decisions was present, the faculty was unable to achieve harmony. Frequently issues were decided on the basis of who proposed them rather than on the merits of the arguments. The faculty came very
close to being incapable of making decisions or even agreeing on whether the junior high school faculty should evaluate its own school and effect changes when given the opportunity.

The low student morale is more difficult to describe. It is a fact that much is attributable to the tracking system used in Rockland. The lowest of the Track III divisions became dumping grounds, and these divisions contained most of the problem children from whom came most of the vandalism. But there is something deeper than that. Once a child was tracked it was very nearly impossible for him to move up; he was tracked for the remainder of the public school years in Rockland. In a sense he was condemned to his level, whether misplaced in a top group or a bottom group.

**How Changes Were Made**

By the fall of 1970 it was apparent that major school committees and administrative attention must be focused upon the junior high school. Morale, absenteeism, discipline and vandalism had reached such alarming proportions that the problems had to be confronted, and at once.

The principal was therefore directed to make substantial major changes in every area. No area of junior high education was to be left unexamined or untouched. The administration and the school committee would expect recommendations for sweeping changes before the 1970-71
school year was out.  

On October 26, 1970, the principal called a special faculty meeting to present the issue. The faculty was invited to exercise its own initiative, to be a full participant in recommending and instituting changes. So dramatic was the charge to the faculty that it was also given the authority to organize itself in any way it chose in order to function creatively should it accept this unique opportunity. There was no mistaking the challenge.

The faculty was given some time to think it over and to make concrete proposals. At that time, however, the faculty had no mechanism for debating, let alone reaching, decisions. There was no faculty leader, no faculty organization, and no precedence. The faculty was without form or structure.

Before the faculty was recalled, word came to the administration about a new team teaching project recently undertaken in the Masconomet (Topsfield-Boxford) Regional Junior High School. The superintendent sent his assistant and the junior high principal to Boxford for a closer look. They liked what they saw and subsequently invited two representatives of the Masconomet Regional Junior High School, a teacher and a member of the guidance department, to address a meeting of the Rockland Junior High School faculty. Their story inspired the faculty and gave the

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5Minutes of the Rockland School Committee, 1970.
Rockland teachers considerable direction. Visits to the Masconomet school were arranged for other Rockland teachers and members of the Rockland school committee, and in all four separate groups totaling fifteen teachers visited the school.

**Planning and Organization of the Project**

At a later faculty meeting it was agreed to adopt the "Boxford Plan", so-called, and to establish a committee that would prepare the way for its institution in the Rockland Junior High School. The committee was charged with adapting the plan to fit Rockland's needs and situation.\(^6\)

The committee was formed by nomination; any name volunteered by a member of the faculty was automatically a member of the committee if he or she so desired. Eight persons did. Later, two additional members were added. Shortly after the committee began its work the original chairman resigned because of taking a new post within the system.

The committee met every two or three days from January 14, 1971 to April 26, 1971. Every faculty member was invited to attend each meeting; every faculty member received the minutes of each meeting. One of the reasons why the program and its planning has been so successful was the immediate opening of the lines of communication. The administration cooperated by allowing early school dismissal days each week in order for

\(^6\)Minutes of Junior High Faculty Meeting, January 7, 1971.
the faculty to take unhurried time in consideration of its proposals. The faculty would have liked more early dismissal days, however this created a legal problem relative to the number of hours that school had to be in session. The Massachusetts Department of Education requires secondary schools to be in session 5 1/2 hours per day and 27 1/2 hours per week, and early dismissal is allowed only if the aggregate number of hours for the week is at least 27 1/2. Fortunately, the school week for the Rockland Junior High School was long enough to permit some early dismissal time but only one afternoon each week.7

When the committee first met it made two major decisions, both of which had far reaching consequences. The first decision was to deal with the philosophy of the junior high school in such a way that the junior high school would be considered more than a side station on the student's way from elementary school to high school. The faculty ultimately adopted a philosophical statement that recognized also that junior high education goes beyond the academic role of the school and recognizes the special socializing function of the school.

The second major decision made by the committee was to act upon the authority given it when the requirement for change was first made. The committee, and ultimately the faculty, took it upon itself to speak

7 Regulations set by the Massachusetts Department of Education.
for the entire school, administration and staff. This stance was potentially explosive; it could result in a confrontation between the school administration and the faculty; if an irresolvable confrontation ensued, the explosion would be damaging to all concerned with ramifications rebounding throughout the length and breadth of the community. On the part of the committee it was a calculated risk. Did the superintendent mean what he said when he affirmed that the future of the school was in the hands of the teachers? Did the principal mean what he said when he affirmed that he would not interfere with faculty debates and decisions? Would these and other administrative officers have the courage and the faith to see the process through?

It clearly meant that the Rockland school administration had given the control of its junior high school over to the teachers.

Not all faculty members were enthusiastic about working so hard; in spite of continued reassurance several believed that the involvement of the faculty was some sort of trick or that the privilege of faculty involvement would be withdrawn. A few teachers saw nothing wrong with the school, and a few others wanted to take the "Boxford Plan" part and parcel and impose it upon the Rockland Junior High School. It is to the credit of all that the entire faculty had come to accommodate itself to the new program, not with equal enthusiasm, perhaps, but with hope that the changes also meant progress.
The few real skeptics seem to have been won over and appear to relish their part in the whole program. Again it must be cited the total openness of communication as the largest single factor which has made this possible. Every decision, major and minor, had been a faculty decision; the final recommendations, in the form of a report to the school committee, were weighed word by word by the faculty during the last of its early dismissal time meetings.

One positive outcome among many was the faculty's growth in its ability to compromise when faced with seemingly irreconcilable views. The achievement of creative compromises has marked the maturity of a faculty which a year ago was just short of open conflict.

It was agreed to organize the school into teams of teachers and students, the method of teacher team selection was discussed frequently. No one wanted to employ the obvious methods of selection: by lot, by the principal's assignment, etc. At one time it was suggested that a sensitivity group leader be employed, but few of the faculty members wanted to risk the results of being involved in a sensitivity group, especially when the group or groups would be under a deadline. Most recognized that hostilities were present and deep enough to require more than a superficial session or two.

Thus, while recognizing the importance of the teams and the importance of finding a harmonious method to be used to create the teams, the issue was put off until the very end of the planning. It was a troublesome
issue avoided because the faculty had genuine fears about making this decision. As it turned out, team selection was not made until after the school committee had accepted the reports and its recommendations in their entirety.

Ultimately, team selection was demanded and the faculty chose to have the teams organized in a haphazard and random way. Individual faculty members would simply ask others to be on a team. In other words, four major subject area teachers would make up a team if they could agree to do so. Whether this was the best method for selecting teams will probably be debated; yet the teams have worked better and with more harmony than most people dared hope they would.

Exactly four months had passed from the visitation of the two representatives from Masconomet to the April 15, 1971 meeting at which the faculty reluctantly achieved a division of itself into five teams. The faculty would meet once more to reach final agreement and to have the teams select their leaders. That meeting took place on April 26. With the selection of the team leaders, the original committee was disbanded, the future of the school placed in the hands of the team leaders and principal.  

Radical changes in education demand community support. It was de-

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8Minutes of the Rockland Junior High Faculty Meeting, April, 1971.
cided that before any program was presented to the school committee the faculty would have to demonstrate that a significant measure of community approval for change was present. The committee undertook to present its proposals to the town. It did so by announcing an open house for April 1. Notices were sent to all junior high school parents and to all parents of sixth graders. Releases were given to the newspapers serving the town. A program was worked out which would demonstrate what was possible in terms of a coordinated curriculum. The Civil War was taken as the theme. Music, art, the food that was served following the program (hot cider, corn cakes, etc.), science displays relating the development of the telegraph, the photograph and arms, math problems such as map reading and plotting cannon trajectory, literature from wanted slave posters to Parker's Journals all focused on the Civil War and engaged the visitors in a total experience involving all of the senses.  

More than two hundred interested parents and others turned out. The number itself was sufficient testimony to the desire for change. Heretofore, thirty or forty guests would have been remarkable. In any case, the evening was an unqualified success, not the least of the reasons being that the faculty had presented itself as one unified and enthusiastic about the future of junior high education in Rockland. That display of

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9 Minutes of the Rockland Junior High Faculty Meeting, March, 1971.
enthusiasm was contagious and continues to be so.

Armed with its success, the committee was invited to make its proposals to the school committee. Every committee member was present; the opportunity was too strong to prevent anyone from missing it!

School committee members each had had a preliminary draft of the report; each had had the final, faculty approved, copy. There was little need to go into involved details about the report and the recommendations. A straightforward request for acceptance of the report was made, a summary of its major recommendations given, and the hope expressed that the school committee would find its faith in the faculty justified.

The school committee had questions; it had done its homework. If the school committee had ever wanted to demonstrate its concern and interest and support of the junior high school it could not have chosen a more suitable and dramatic method than it did in allotting an hour and a half to the junior high committee and unanimously approved the recommendation.\(^{10}\)

The recommendations aside, more was done to boost morale and to reaffirm the integrity of the junior high school in that meeting than could have been accomplished with a thousand memos or reams of newspaper releases. For the first time in most person's memories the junior high

\(^{10}\) Minutes of the Rockland School Committee, April, 1971.
Legal Problems Encountered in Developing the Flexible Staffing Phase of the Project

As part of the team-teaching aspects of the project it was planned to utilize a flexible staffing concept as described in Chapter Two. A teacher intern was to be assigned to each team as well as a teacher aide for each of two teams. This concept was unique to the Rockland Junior High Project as the Boxford Plan which was used as a model did not have either interns or aides.

In Chapter Two it was mentioned that in Massachusetts school committees have the power and authority to determine the staffing of the schools under their jurisdiction. This power and authority, however, is subject to the General Laws of Massachusetts. Prior to 1965 the laws were silent as to the employment of teacher interns or aides; two positions that are characteristic of a flexible staffing pattern. Therefore, it would have appeared that with no prohibition against the employment of interns and/or aides that a school committee had such authority.11

In 1964 with the passage of P.L. 89-10, the Elementary and Secondary Education Act, many school committees began to employ teacher aides, but some committees protested this action. To resolve this problem, the Massachusetts Legislature amended the law relative to the employment

of teachers to include teacher aides as well. This amendment, however, stated that the aide shall be a person who does no actual teaching.\textsuperscript{12}

It was not until 1970 that this section of the Massachusetts General Laws was further amended to indicate that an instructional aide shall be a person employed in subprofessional duties as opposed to non-instructional duties. This last amendment to Chapter 71, Section 38 removed the first major obstacle to implementing a flexible staffing pattern. It was still necessary, however, to receive the approval of the Division of Teacher Certification and Placement, Massachusetts Department of Education.\textsuperscript{13}

The superintendent of the Rockland Public Schools met with the Director of the Division of Teacher Certification and Placement in April, 1971 to seek his approval. The meeting was extremely cordial and the Director appeared to be extremely excited about the project. The outcome of the meeting was that approval would be granted upon receipt of a letter from the Superintendent of Schools which stated that there would be no reduction in the present staff at the Rockland Junior High School.

During the faculty deliberations it had been suggested that it might be possible to achieve a working arrangement with one of the local


\textsuperscript{13}\textit{Ibid.}, 1970, p. 142.
teachers' colleges for the placement of student teachers in sufficient quantity to attempt this internship program in the junior high school. Approaches were made to several colleges. Eastern Nazarene College in Quincy responded favorably and on April 12, 1971, the superintendent and the committee chairman visited the college and talked at length with the president and others of his staff. As a result, Eastern Nazarene prepared a program for senior and postgraduate students, offering credits and scholarship assistance, for the placement of six interns in the junior high school. During May and June prospective interns were interviewed by the teams. In September six interns were assigned to the individual teams by a drawing of lots.14

While the interns are used somewhat differently from team to team, they are considered to be full members of the teaching teams and carry on teaching assignments which may vary from intern to intern because of his particular college requirements for teacher certification. The interns are paid a modest stipend, the amount having been budgeted by the school committee.

Implementation and Operation of the Project

To implement the project it was necessary to restructure the school

14 Prospectus for Professional Interns, Rockland Public Schools.
in such a way to insure that maximum attention could be given each student. The school was organized into five "schools within a school".

There was nothing magic about five teams, that number happened to best fit the student population, teaching staff and physical facilities. It is anticipated that for the 1972-73 school year there will be six teams, three seventh grade and three eighth. For the present, however, there were two seventh grade teams, two eighth grade teams and one mixed team, half seventh and half eighth grade. Each team was made up of four groups, each under the leadership of a major subject area teacher (math, English, social studies and science). The teams, insofar as possible within the limits of the building, are in adjoining classrooms. Each team makes up its own schedule within large blocks of time determined only by the opening hour of school (8:00 a.m.), lunch, and the agreed end of academic programming (1:00 or 1:15 depending upon the team). Classes generally seem to have balanced out to approximately one hour's duration. The class time is increased because each major subject area teacher has four classes to teach rather than the five of previous years.15

Each team has approximately 132 pupils, and class size runs between 32 and 34 pupils. This is an increase over class size of other years but was necessary in order to accommodate all of the students in the teams available. If a sixth team is possible, the major reason for its creation

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15 Minutes of Rockland Junior High Faculty Meeting, March, 1971.
will be the reduction of class size. (See Figures 4, 5 and 6.)

The four major subject area teachers and their intern have the potential for developing an intense relationship with their own students. The teaching team handles all discipline, including that dealt out for such offenses as truancy and vandalism. The team may handle the problems in any way that team deems best. As it has worked out, discipline problems as such have decreased remarkably.

Students for the teams have been selected randomly by the alphabet. There is no grouping of students insofar as team makeup is concerned, although teams have the privilege of grouping their students if that best serves the students. In a few instances the students have been assigned within the teams to specific groups, particularly in math. But the teams themselves are heterogeneous and in most instances the students remain so grouped for all of their academic work. All of the teams have team leaders, the five team leaders meeting as a group with the principal and the guidance counselor and together carrying on most of the affairs of the school that relate to students and student's programs.

Teams have the privilege of appointing their team leader on any basis they choose. Some teams have appointed a leader who will serve the entire year; others have a rotating leadership, with all team members (not including the intern) sharing the post of team leader.

The integrity of the teams is one key to their success. Just as there are many ways to teach an individual subject, so there are many ways to
### New Grade 7  1971-1972

<table>
<thead>
<tr>
<th>Team</th>
<th>Pupils</th>
<th>7A1</th>
<th>7A2</th>
<th>7A3</th>
<th>7A4</th>
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<tr>
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<td>130</td>
<td>32</td>
<td>32</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Team B</td>
<td>130</td>
<td>32</td>
<td>32</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Team E</td>
<td>64</td>
<td>32</td>
<td>32</td>
<td></td>
<td></td>
</tr>
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</table>

### New Grade 8  1971-1972

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<th>Team</th>
<th>Pupils</th>
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<th>8E4</th>
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</thead>
<tbody>
<tr>
<td>Team E</td>
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<td>31</td>
<td>32</td>
</tr>
<tr>
<td>Team C</td>
<td>125</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Team D</td>
<td>125</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

**Figure 4** BREAKDOWN OF PUPILS BY TEAMS
<table>
<thead>
<tr>
<th>Room</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Drawing</td>
<td>109</td>
</tr>
<tr>
<td>E.D.</td>
<td>108</td>
</tr>
<tr>
<td>Health Room</td>
<td></td>
</tr>
<tr>
<td>V. Principals Office</td>
<td></td>
</tr>
<tr>
<td>Main Office</td>
<td></td>
</tr>
<tr>
<td>106 Supply Room</td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td></td>
</tr>
<tr>
<td>101 Grade 6</td>
<td></td>
</tr>
<tr>
<td>102 Grade 6</td>
<td></td>
</tr>
<tr>
<td>103 Girls' Lavatory</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td></td>
</tr>
<tr>
<td>Boys' Locker Room</td>
<td></td>
</tr>
<tr>
<td>Gym Office</td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td></td>
</tr>
<tr>
<td>Industrial Arts Shop</td>
<td></td>
</tr>
<tr>
<td>Receiving</td>
<td></td>
</tr>
<tr>
<td>Girls' Locker Room</td>
<td></td>
</tr>
<tr>
<td>Pan room</td>
<td></td>
</tr>
<tr>
<td>Boiler Room</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5** LAYOUT OF BASEMENT AND FIRST FLOOR OF BUILDING BY TEAMS
Figure 6  LAYOUT OF SECOND AND THIRD FLOORS OF BUILDING BY TEAMS
organize and schedule for the teams. The pitfall of assuming that there is only one "right" way was avoided.

Teachers' Meetings and Released Time

Indispensable and unique to the operation of the school and the growth of the program is the early dismissal of school on Wednesday afternoons. All students are released at 12:45, the faculty meets at one o'clock for a two-hour session.

The team leaders and the principal prepare each meeting's agenda, and the team leaders take turns chairing the meetings. The use of the two-hour sessions vary: teams may meet individually before or after the faculty meetings, the faculty may meet as a group for the two full hours, the faculty may divide in the midst of the meetings for small group discussions. The nature of the week's concerns determines the structure of the meetings. School policies are established in these meetings as well as means to further implement the program. When large issues arise or when an issue reaches a stalemate, the faculty may appoint a subcommittee to attempt clarification or it may table the issue for consideration at a later time.

The Relationship Between the Principal and the Faculty

If any one aspect of our program is unique it is the power which the faculty has over the school. By administrative assurances and by school committee vote, the junior high school faculty, as a body organized into teams and led by team leaders, has been given a major responsibility for
The welfare and programming of the school. The extent of this responsibility may be illustrated by the fact that the secondary department coordinators are advisory to the junior high school staff and, should a confrontation arise, may be overruled by the junior high faculty.

On the whole the faculty takes this responsibility very seriously. It is at once a remarkable demonstration of faith on the part of the school committee and the administration and the ultimate test of whether forty or fifty professional teachers can in fact run their own school. That the faculty has thus far been successful in carrying out its unique task in no small measure is the result of a willing readjustment by the principal as to his role and to the changing nature of the principalship.

An Experiential Curriculum

The purpose of an experiential curriculum is to provide a basic experience and a total learning situation for each student. In a conventional junior high school, including the former setup in the Rockland Junior High, learning was segmented into periods of math, sewing, English, Science, shop, social studies, etc., with little or no attempt to relate the various subjects. If there were relationships the student had to discover them for himself.

A technique was developed to create a common core upon which the

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16 Minutes of the Rockland School Committee, April, 1971.
whole school could focus. It was determined that the most common academic experience in the former junior high learning situation was United States and world history. It was felt that of the alternatives open, history could serve as the core around which to construct a total learning situation.

In other years world history was taught to seventh grade students and the history of the United States to eighth graders. A shift was made. Since present eighth graders had already had a year of world history, every student in both grades would study United States history in the school year 1971-72. All students would be focused toward a common experience, the history of their country. In the academic year 1972-73 the core will be world history, and in subsequent years United States and world history will be alternated.17

With the entire student body thus aimed upon a singular experience, the other areas began to develop their coordination. It was natural, for instance, for the English curriculum to concentrate on American literature in 1971-72, and world literature in 1972-73. The music, art and home economics departments likewise could easily tie in with the core. While science is a somewhat different type of study, the possibilities for drawing attention to the relationship of the development of science and scien-

17 Minutes of the Rockland Junior High Faculty Meeting, March, 1971.
tific thought to history seemed numerous and meaningful. Math was the one subject that represented certain difficulties, and yet it, too, could make a substantial contribution: budgets, boundaries, navigation, architecture, statistics all require sound principles of mathematics and all are intricately interwoven in any study of history.

Resource Time

Every day every student has an hour available for his use. Ideally, the hope was to develop an unique ancillary to the academic program which would serve to broaden the student’s opportunities and lengthen his vision. The projected image of the program is sufficiently varied activities to involve everyone at least part of the time. Numerous clubs, such as cooking, homemaking, French, sport, drama, and activities such as the school newspaper, interteam sports, junior high interscholastic basketball, cross country and track, and cheerleading were put into operation. The library is open for research as well as borrowing. Homework may be done in the homeroom, or teachers may work with selected students on remedial or makeup work.

One of the purposes of the resource time is to make a contribution to the social and physical development of each youngster, and to have that contribution made within the school and as part of the school.

The Six Day Cycle

To accommodate teaching needs and the diversity of programming, the faculty instituted a six-day cycle in place of a five-day week. In
essence, this means that the 180 days of the school year are divided into 30 cycles rather than the 36 weeks of earlier scheduling. Cycling is best understood via an example. If school began on a Monday, that Monday would have been day one. Tuesday would have been day two, Wednesday day three, and so on. The second Monday would have been day six, the second Tuesday day one, and continuing through the following Tuesday which would have been day six. One practical demonstration of the desirability of the six-day cycle has to do with the Wednesday released time. As far as the programming is concerned, the students do not miss the same last class each week.

Cycling is further enhanced by what has come to be called "cycled" and "uncycled" time. "Uncycled" time are those cycles when the teams do not have the services of a special subject teacher. The teams therefore have their students for the entire day: classes may be longer or students may have two periods of a single subject. During "cycled" time, of which there are three in every set of five cycles, the students are involved in music, art and reading, one of these special subjects being taught during each of the three cycles.

Thus far the only serious problem with the cycles has been attempting to have the cycles explained cogently to the parents; the students and teachers are unanimous both in understanding and in favor of the device.
Guidance

Changes have taken place in the junior high's guidance program that are not necessarily the result of the new program. To some extent it is difficult to identify all of the changes which have come about because of the new program and those changes which have or would have been made whether or not there was a new program.

One positive and unique guidance change is the involvement of teachers. Not only are the major subject teachers closer identified with the students because of the nature of the teams, but the faculty under the leadership of the guidance counselor has established a "teacher counseling" program. All students in the school are encouraged to select one teacher to whom they can relate well and to whom they might go for help of one sort or another. In many instances this help has been real and beneficial for the student (and the teacher) and has eased the burden of the guidance counselor. The students were free to select any teacher in the school, irrespective of team or grade. Most students have done so.

Guidance is a shared responsibility; never have the students of the Rockland Junior High School had more attention than now. This attention, together with renewed enthusiasm for the total involvement of the junior high in a child's life; it is believed it will serve the students better than they have been served for many, many years.

Summary

The investigator gave a description of the Rockland Junior High prior
to the inception of the Team Governance-Team Teaching Project. A detailed account of how the project was initiated as well as the planning, organization and implementation by the staff was presented. The presentation of the proposal to the Rockland School Committee and their reaction was explained and the legal ramifications were outlined. The methodology used for assessing this project is described in the next chapter.
CHAPTER IV

DESCRIPTION OF THE METHODOLOGY
USED TO ASSESS THE EFFECTIVENESS OF THE
ROCKLAND JUNIOR HIGH SCHOOL PROJECT

In Chapter III, a description of the Rockland Junior High School and
a detailed account of the initiation, planning, organization, implementa-
tion, and operation of the Rockland Junior High Project was presented.
This chapter describes the methodology used for assessing the effective-
ness of the Rockland Junior High Program in meeting the five objectives.

A need for change in the staff, curriculum, and organization of the
Rockland Junior High was recognized by Rockland Public School person-
nel and a formalized design was composed to analyse the Rockland Junior
High's philosophies and students educational needs in terms of how these
could be met through a complete restructuring of the staff and governance
procedures. This resulted in the selection of the five objectives to be
used as a focal point for the first year of the project.

The five objectives selected for the project are stated below:

1. To increase individual student academic
   achievement and skills in reading, math
   and work-study habits.

2. To create a unique educational environment
   conducive to achieving maximum positive
   student attitudes about education.

3. To increase positive community attitudes and
   support for the school and junior high educa-
   tion.
4. To create a professional environment in which maximum teacher time may be spent on high level professional tasks.

5. To provide an educational climate for teachers which will ensure a high degree of job satisfaction and enhance the opportunity for increased goal accomplishment.

The investigator assessed the project's effectiveness in meeting the five objectives. In the following sections, a description of the methodology utilized in this study as it relates to each of the five objectives is presented.
Objective Number One

To increase individual student academic achievement and work-study habits.

Design

A pretest-posttest equivalent control group experimental design was utilized to determine the cognitive changes which took place in the Rockland Junior High School and School "X". These cognitive changes relate to the student's achievement in reading comprehension, work-study habits, and arithmetic computations.

Instrument Utilized

The Iowa Tests of Basic Skills (1964) was administered to the students at Rockland Junior High School and School "X". This series of tests were selected for the study for the following reasons:

1. It was well known and the most commonly used achievement test in the Rockland area.

2. A nearby town used the Iowa in the seventh grade and their superintendent was willing to let the eighth grade be tested.

3. It has an acceptable evaluation in Buros Mental Measurements Yearbook.

4. It contains subtests in reading, work-study skills, and arithmetic concepts.

Description of the Iowa Tests of Basic Skills

The reading, work-study skills, and arithmetic subtests of Form 3 and 4 of the 1964 edition Iowa Tests of Basic Skills was used in Rockland and
School "X". Copies of the first pages may be found in Appendix A.

The tests provide for comprehensive measurement of those basic skills crucial to the total educational development of the pupil. The Iowa consists of eleven separate tests for grades 3 through 9 of which 3 were used for this study.

In the reading area, a single comprehensive test was utilized. There were three subtests used in the work-study area related to map-reading, reading graphs and tables, and knowledge and use of references. One subtest for arithmetic concepts was used in the arithmetic area. Organization of the battery is found in Table 1.

The data presented in this table shows that the tests include 127 items on Work-Study Skills for grade 6, 128 items for grade 7, and 129 items for grades 8-9; on Arithmetic Concepts 45 items for grade 6, 48 items for grade 7, and 48 items for grades 8-9; on Reading Comprehension 76 items for grade 6, 78 items for grade 7, and 80 items for grades 8-9.

The Iowa Tests of Basic Skills have been tested for validity and reliability. There were fourteen earlier editions of the Iowa tests utilized. In Forms 3 and 4, the items were tested in approximately 400 schools by the State University of Iowa. The tests were made long enough by the authors to ensure reliability of tests. The reliability of the tests were checked by Split-Halves using the Spearman-Brown formula and by Equivalent Forms Reliability.
<table>
<thead>
<tr>
<th>Page No.</th>
<th>Tests</th>
<th>Work Time</th>
<th>No. of Item</th>
<th>No. of Pages</th>
<th>No. of Items</th>
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<td>A-Arithmetic</td>
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<td>30</td>
<td>16-51</td>
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<td>31-72</td>
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<td>25-98</td>
<td>74</td>
<td>61-135</td>
<td>76</td>
<td>80-157</td>
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</tbody>
</table>
Sampling and Testing Procedure

The Iowa Tests of Basic Skills in reading comprehension, arithmetic computation, and work-study skills were administered to a random sample of 60 students in grades 6 and 7 at Rockland Junior High School and to a matched group of 60 students at School "X" in May, 1971. In April, 1972, all these students in both schools were retested.

Stanines were utilized to record the results of the Iowa tests. Each stanine represents a band or distance from the baseline of the normal curve of one-half of a standard deviation and the entire range is divided into nine such bands. The stanine conversions in this study were obtained from the percentile ranks, according to the relationships shown in Table 2.

TABLE 2

STANINE CONVERSION OF IOWA TESTS OF BASIC SKILLS

<table>
<thead>
<tr>
<th>Percentile ranks</th>
<th>Stanine</th>
</tr>
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<tbody>
<tr>
<td>96 and up</td>
<td>9</td>
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<tr>
<td>89-95</td>
<td>8</td>
</tr>
<tr>
<td>77-88</td>
<td>7</td>
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<td>60-76</td>
<td>6</td>
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</tr>
<tr>
<td>23-39</td>
<td>4</td>
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<tr>
<td>11-22</td>
<td>3</td>
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<tr>
<td>4-10</td>
<td>2</td>
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<tr>
<td>Below 4</td>
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</table>

A random selection table, Table 3, was set up based on the use of one die. The die was shaken to derive numbers by stanines for back subtest. The die was shaken a total of 60 times. The numbers in order
were arbitrarily arranged in a bell-shaped curve.

TABLE 3

RANDOM SAMPLE PROCEDURE OF STUDENTS SELECTED FOR THE IOWA TESTS OF BASIC SKILLS

<table>
<thead>
<tr>
<th>STA-9</th>
<th>Reading Comprehension</th>
<th>Total Work Study</th>
<th>Arithmetic Concepts</th>
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</thead>
<tbody>
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<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>1,2</td>
<td>6,1</td>
<td>2,5</td>
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<tr>
<td>6</td>
<td>6,2,4</td>
<td>4,1,3</td>
<td>5,3,6</td>
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<td>3,4,2,1,5</td>
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<tr>
<td>1</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

The random sample of students was selected first at Rockland Junior High School. The student whose name was at the number on the random sample table was counted through for each subtest. The second subtest was counted off immediately where the first finished. It was necessary to go back to the beginning of the list before all the names for the third subtest were secured.

For each grade level on subtest, students from School "X" were matched with students from Rockland according to sex and national stanine.
Class of '76

Reading

<table>
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<tr>
<th>No. of Students</th>
<th>X</th>
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<th>X</th>
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<tr>
<td>T 8</td>
<td></td>
<td>X</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td>A 7</td>
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<td></td>
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<td>O</td>
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<td>X</td>
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<td>O</td>
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N = 38

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<th>X</th>
<th>O</th>
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</thead>
<tbody>
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<td>O</td>
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<tr>
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<td>O</td>
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<td>O</td>
</tr>
<tr>
<td>E 3</td>
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<tr>
<td>N 3</td>
<td>X</td>
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</table>

N = 38

Arithmetic Concepts

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<th>O</th>
<th>X</th>
<th>O</th>
</tr>
</thead>
<tbody>
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<td>X</td>
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<tr>
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<td>X</td>
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</tr>
<tr>
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</tr>
<tr>
<td>N 3</td>
<td>X</td>
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</tbody>
</table>

N = 40

X represents one student at School "X"
O represents one student at Rockland

Figure 7 COMPOSITION OF MATCHED GROUPS AT ROCKLAND JUNIOR HIGH AND SCHOOL "X"
(See Figure 7.)

Treatment of Data

The individual student scores on the Iowa from both schools were compared at each grade level for the two times the Iowa was administered. The grade equivalent scores for each grade level at Rockland Junior High School were compared with the grade equivalent scores for each grade level at School "X". To determine whether the differences in mean scores for the two schools is significant, the data was subjected to an analysis of variance.
Objective Number Two

To create a unique educational environment conducive to achieving maximum positive student attitudes about education.

Experimental Design

A posttest-only control group quasi-experimental design was used to determine positive or negative student attitudes toward school which took place in Rockland Junior High School and School "X".

Instrument Utilized

The School Morale Scale was utilized to assess the student attitudes toward Rockland Junior High School. This instrument has also been utilized to evaluate ESEA Title II projects and by the Dade County School System.

Description of the School Morale Scale

The School Morale Scale was originally developed by Lawrence Wrightsman and others. The primary considerations used in limiting the dimensions to be measured were: (1) the aspects of school life and relationships that influence a student's feelings about school, and (2) the kinds of innovative activities going on in certain Federal projects. From these, seven dimensions of morale were adopted, namely: School Plant; Instruction; Administration; Staff Regulations; Community; Other Students; Teacher-Student Relations and General. For each of the seven subscales, twelve items were developed making a total of 84 items.

The students were asked to indicate their agreement or disagreement
by marking an "A" or "D" with each statement. Following are examples of the first ten questions of the Student Morale Inventory.

1. Compared to most school buildings I've seen, this building is nicer.

2. There are many more audio-visual materials available at this school.

3. There are too many rules and regulations at this school.

4. The people in this community want the schools to try out new educational methods and materials.

5. If there were more clubs here, this school would be a lot friendlier place.

6. All my teachers know me by name.

7. I look forward to Friday afternoons because I won't have to go to school for two days.

8. My school building is too large; it is too far to walk from one class to another.

9. Our library is not a very friendly place.

10. The principal of this school is very fair.

The complete Student Morale Inventory is presented in Appendix B.

On each subscale, the number of agreements with positive statements and the number of disagreements with negative statements were figured to calculate the score on that subscale. A twelve would indicate extremely good morale for that subscale. The score from the seven subscales were added together to give a total score, which has a range of 1 (very poor morale) to 84 (very good morale). The items listed under each subscale
are presented in Table 4.

**Sampling and Testing Procedure**

The SMI was administered in January, 1972 to a group of fifty students from Rockland Junior High School and fifty students from School "X" randomly selected from one hundred twenty who took the Iowa Tests. Equal numbers were taken from grades seven and eight.

**Treatment of Data**

The mean scores were compared for each of the seven categories represented by the subscales of the SMI. The data was subjected to an analysis of variance to determine the statistical level of significance of the differences in mean scores.
<table>
<thead>
<tr>
<th>SCHOOL PLANT</th>
<th>INSTRUCTION</th>
<th>ADMINISTRATION STAFF REGULATIONS</th>
<th>COMMUNITY</th>
<th>OTHER STUDENTS</th>
<th>TEACHER-STUDENT RELATIONS</th>
<th>GENERAL</th>
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<td>80</td>
<td>81</td>
<td>82</td>
<td>83</td>
<td>84</td>
</tr>
</tbody>
</table>
Objective Number Three

To increase positive community attitudes and support for the junior high school and junior high education.

Assessment Design

Rockland community attitudes were surveyed by means of telephone interviews to assess the progress of increasing positive community attitudes and support for the school and junior high school education. It was a structured survey that was composed of "closed-ended" and "open-ended" questions. The investigator considered this to be a most useful and reliable method in which to obtain information related to community attitudes.

During the month of January, 1971, fifty parents were called; thirty (15 from each grade) of whom were selected randomly from those parents whose children took the Student Morale Inventory. The remaining parents representing equally, grades seven and eight, were chosen at random from the attendance list.

In March, 1972, an additional fifty parents from the attendance list were contacted. They were asked the same questions in the same manner.

Instrument Utilized for the Rockland Junior High School Phone Survey

This survey was adopted from the instrument devised to measure community attitudes by the Project Lighthouse (Title III-ESEA Project No. OEG 3-7-701873574) assessment team. A copy of the modified phone survey
instrument is presented in Appendix C.

Seven representative questions from the Student Morale Inventory were added as being more representative of the seven factors measured by the Student Morale Inventory. The parents were asked whether they agree or disagree with each statement.

1. Compared to most school buildings you've seen, Rockland Junior High is nicer.

2. There is too much emphasis on the academics (English, math, science, history) at Rockland Junior High and not enough opportunity for students to develop their own interests.

3. There is too much supervision of students at Rockland Junior High.

4. Most of the teachers at Rockland Junior High are very friendly and understanding.

5. Your child has many good friends at Rockland Junior High.

6. Each morning your child looks forward to coming to school.

7. The Rockland community really supports the school.

The parents were also asked to rate certain school activities by using an A B C D F grading system. A rating of "C" was considered average. These questions are as follows:

1. How well do you think Rockland Junior High is teaching the basic academic subjects (English, math, science, history)?
2. How well is your child's learning at Rockland Junior High meeting his present needs?

3. How well is your child's learning at Rockland Junior High meeting his future needs?

4. How well do you rate the total program at Rockland Junior High School?

5. What kind of job are the teachers doing in Rockland Junior High School?

6. What kind of job does the principal do at Rockland Junior High School?

7. What do you think of the grading system used at Rockland Junior High to mark your child's work?

8. What do you think about information you get concerning Rockland Junior High?

Treatment of Data

Rockland's community attitudes were surveyed by means of two structured telephone surveys. The data from the surveys was processed and presented in table form. An analysis of variance was used to determine the statistical level of significance of the differences which appeared among the two surveys.
Objective Number Four

To create a professional environment in which maximum teacher time may be spent on high level professional tasks.

Design

The School Personnel Task Log was used by the Junior High School teaching staff in order to assess the accomplishment of the creation of a professional environment in which maximum teacher time may be spent on high level professional tasks. Each coordinator, teacher, intern, and teacher aide in the junior high school completed the task log on a weekly basis.

Instrument Utilized

The first step in preparing the task log was the submission by all teachers of ideas pertaining to their job to the assessment team. The analysis of the teaching act that the Rockland Junior High School staff had participated in served as a basis for the construction of the instrument. This log is presented in Appendix D. These ideas were taken and arranged into three levels. Level 1 items (22) were considered "most professional"; Level 2 items (20) were considered "less professional"; and Level 3 items (18) were considered "non-professional". The question numbers for each level are presented in Table 5. The investigator analyzed the tasks at each level.
TABLE 5

QUESTION NUMBERS FOR EACH LEVEL
OF THE WEEKLY TASK LOG

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<th>LEVEL 1 Most Professional</th>
<th>LEVEL 2 Less Professional</th>
<th>LEVEL 3 Least Professional</th>
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<td>50</td>
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<tr>
<td>51</td>
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<td></td>
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<tr>
<td>59</td>
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<td>56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

Teachers were expected to perform some Level 1 tasks, many tasks in Level 2 and very few in Level 3. The Rockland Junior High School interns were expected to perform mostly Level 2 and Level 3 tasks but attempting Level 1 tasks as their individual competencies progress. The teacher aides were expected to be performing mostly in Level 3.

Duplications were eliminated and the remaining 60 items were refined. The items were scrambled and then reassembled to form the log. There
was no indication of the level of the task on the log. Each teacher, intern, and teacher aide were instructed to check the log by task performed in the box that indicated the number of times that task was performed.

In the training sequence of an intern, the internee performed tasks from levels 2 and 3. Also master teachers performed mostly level 1 tasks, occasionally level 2 tasks, but seldom level 3 tasks.

Procedure

The Rockland Junior High School coordinators, teachers, interns, and teacher aides completed the logs weekly for the month of February, 1972.

The answers were weighted according to the level and the number of times the task was performed. (See Figure 8.)

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Col.1 = 9</td>
<td>Col.1 = 6</td>
<td>Col.1 = 1</td>
</tr>
<tr>
<td>Col.2 = 8</td>
<td>Col.2 = 5</td>
<td>Col.2 = 2</td>
</tr>
<tr>
<td>Col.3 = 7</td>
<td>Col.3 = 4</td>
<td>Col.3 = 3</td>
</tr>
</tbody>
</table>

Figure 8  KEY TO WEIGHTED ANSWERS BY LEVEL OF WEEKLY TASK LOG

The weighted answers were totaled and divided by the number of times to obtain the average score for each person. Averages of 9, 8, or 7 falls within the Level 1 range. An average of 6, 5, 4 falls within the Level 2 range. An average of 3, 2, 1 is within the Level 3 range.
Treatment of Data

The results from the data collected were arranged in table form and analyzed to determine if the level of tasks performed by the staff members were significantly different.
Objective Number Five

To provide an educational climate for teachers which will ensure a high degree of job satisfaction and enhance the opportunity for increased goal accomplishment.

Design

A pretest-postest quasi-experimental design was utilized to determine the attitudinal changes in Rockland Junior High School and School "X".

The primary instrument used to assess the accomplishment of this objectives was the Purdue Teacher Opinionaire (PTO). In addition, Peck's Sense of Power Scale was also used to determine attitudinal changes.

Purdue Teacher Opinionaire

The Purdue Teacher Opinionaire was developed by Ralph Bentley and Averno M. Rempel\(^1\) as a means of providing a measure of teacher morale. See Appendix E for a copy of the Purdue Teacher Opinionaire. There are ten factors in which the questions are structured around. These ten factors are as follows:

\(^1\)Ralph Bentley and Averno M. Rempel, *Purdue Teacher Opinionaire Manual* (West Lafayette, Indiana: Purdue University, 1968), p.3.
Factor 1. "Teacher Rapport with Principal" - deals with the teacher's feelings about the principal - his professional competency, his interest in teachers and their work, his ability to communicate, his skill in human relations.

Factor 2. "Satisfaction with Teaching" - pertains to teacher relationships with students and feelings of satisfaction with teaching. According to this factor, the high morale teacher loves to teach, feels competent in his job, enjoys his students, and believes in the future of teaching as an occupation.

Factor 3. "Rapport among Teachers" - focuses on a teacher's relationship with other teachers. The items here solicit the teachers opinion regarding the cooperation, preparation, ethics, influence, interest, and competency of his peers.

Factor 4. "Teacher Salary" - pertains primarily to the teacher's feelings about salary and salary policies. Are salaries based on teacher competency? Do they compare favorably with salaries of other school systems? Are salary policies administered fairly and justly, and do teachers participate in the development of these policies?

Factor 5. "Teacher Load" - deals with such matters as record-keeping, clerical work, "red tape", community demands on teacher time, extra curricular load, and keeping up-to-date professionally.

Factor 6. "Curriculum Issues" - solicits teacher reactions to the adequacy of the school program and student needs, in providing for individual differences, and in preparing students for effective citizenship.

Factor 7. "Teacher Status" - samples feelings about the prestige, security and benefits afforded by teaching. Several of the items refer to the extent to which the teacher feels he is an accepted member of the community.

Factor 8. "Community Support of Education" - deals with the extent to which the community understands and is willing to support a sound educational program.

Factor 9. "School Facilities and Services" - has to do with the adequacy of facilities, supplies, and equipment, and the efficiency of the procedures for obtaining materials and services.

Factor 10. "Community Pressures" - gives special attention to community expectations with respect to the teacher's personal standards, participation in outside-school activities, and his freedom to discuss controversial issues in the classroom.
The first form of the Purdue instrument was composed of 145 items categorized into 8 components. It was validated against a 100-item instrument that identified ten factors of morale. The data accumulated from 3,023 teachers utilizing the test-retest method determined reliability. A second and revised form of the Purdue instrument was designed in 1970.

Testing Procedure

In most cases at Rockland Junior High School, the opinionaire instruments were filled out during the weekly released time faculty meeting under the direction of the principal and guidance counselor. The same procedure was followed at School "X" during their monthly faculty meeting.

In both schools the teachers recorded their answers on IBM answer cards which were mailed to the Measurement and Research Center at Purdue University, Lafayette, Indiana, for scoring and analysis.

The Peck Sense of Power Scale

The Peck Sense of Power Scale was developed by Dr. Roger H. Peck.² With the scale, the teacher's sense of power refers to the degree that a teacher perceives as influencing the events in the school. A set of nine Lickert-type questionnaire items were used to measure the teacher's sense of power within the school building in which he teaches. The

teachers responded to each item by choosing "strongly agree", "agree", "undecided", "disagree", or "strongly disagree". The questionnaire items are as follows:

In this school, a teacher like myself...

1. Feels free to experiment with new teaching procedures without consulting the principal beforehand.

2. Finds ways to get the principal to actively try to obtain the needed materials for a new teaching approach which he, the teacher, has initiated.

3. Can determine what he will teach in the classroom.

4. Feels that he does not have to follow suggestions made by the principal.

5. Finds ways to obtain materials and equipment, at the school's expense, for use in a new teaching approach, even if the principal does not favor the new approaches.

6. Feels free to experiment with new teaching procedures even if the principal does not favor the new approaches.

7. Can persuade the principal to give whole-hearted support for new ideas which he, the teacher, has initiated.

8. Can decide what teaching methods he will use in his classroom.

9. Can get the principal to listen to a request to use a new teaching procedure on a trial basis.
10. Feels free to deviate from the prescribed curriculum if he believes it is inappropriate for the kind of student he has.

The questionnaire was administered to the Rockland Junior High and School "X" teaching staffs in order to determine whether these items would provide a cumulative unidimensional sense of power scale. See Appendix F for a copy of the Peck Sense of Power Scale. The Guttman scaling technique was used for scaling the responses.

**Treatment of Data**

The Purdue Teacher Opinionnaire was administered to the Rockland Junior High School twice and School "X" once. The results of the Rockland Junior High staff was compared with School "X" for each of the ten subcategories. Also a comparison of the results of the two administrations conducted at Rockland for each of the ten subcategories was made. The raw data was processed at the Measurement and Research Center at Purdue University.

The Peck Sense of Power Scale was also administered to the Rockland Junior High and School "X" teaching staffs. A comparison of the results of the two administrations was made and the differences were subjected to an analysis of variance.

**Summary**

The investigator, in this chapter described the methodology used to assess the effectiveness of the Rockland Junior High Project in meeting the five stated objectives. In order to fulfill this goal, a multifaceted
assessment was utilized in this study. Data collected from the following sources was used: (1) standardized instruments, (2) a task log that measured the utilization of teacher time, (3) written questionnaires, (4) telephone interviews with parents, and (5) research studies. This data was analyzed and synthesized in order to assess the effectiveness to which the five objectives of the Rockland Junior High Program have been reached. In Chapter V is a presentation and analysis of the data gained through the assessment procedures used in the study.
CHAPTER V
PRESENTATION AND ANALYSIS OF
THE ASSESSMENT DATA

In the previous chapter a description was given of the methodology employed for gathering and processing the data to be utilized in the assessment phase of the present study. In this chapter are presented the analyses of these data. More specifically, the task was to determine the relative degree of effectiveness of the Rockland Junior High School Project in achieving the five selected objectives. The five objectives are as follows:

1. To increase individual student academic achievement and skills in reading, math and work-study habits.

2. To create a unique educational environment conducive to achieving maximum positive student attitudes about education.

3. To increase positive community attitudes and support for the school and junior high education.

4. To create a professional environment in which maximum teacher time may be spent on high level professional tasks.

5. To provide an educational climate for teachers which will insure a high degree of job satisfaction and enhance the opportunity for increased goal accomplishment.

In the following sections the data for each of the five objectives are presented and analyzed. In these analyses, each objective is treated separately.
Presentation and Analysis of the Data Relating to Objective Number One

The first objective of the Rockland Junior High Project was, to increase individual student academic achievement and skills in reading, mathematics and work-study skills. The major instrument for assessing this objective was the Iowa Test of Basic Skills.

In Tables 6 through 8, which follow, are presented the results of the data on reading which was tabulated for purposes of assessing this objective. As is indicated by the data presented in Table 6, the sample of seventh grade Rockland students, when tested in May, 1971, had an advantage of only 4 months over the sample of seventh grade students from School "X". In May, 1971 the Rockland seventh grade students received a total achievement score of 1,330 months; while the seventh grade students from School "X" received a score of 1,326 months. In May, 1972 the Rockland students received a total score of 1,508 months, for an increase of 178 months. At this same time, the students in School "X" scored 1,454 months for a gain of 128 months. These data indicate that the Rockland seventh grade students achieved a total of 50 months more than the students from School "X".

The data presented in Table 7 indicate that the eighth grade Rockland students, when tested in May of 1971, were 2 months behind the eighth grade students from School "X". In May, 1971 the Rockland eighth grade students had a total achievement score of 1,439 months;
<table>
<thead>
<tr>
<th>SCHOOL &quot;X&quot;</th>
<th>ROCKLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENT</td>
<td>GRADE</td>
</tr>
<tr>
<td></td>
<td>EQUIV</td>
</tr>
<tr>
<td>1</td>
<td>McL</td>
</tr>
<tr>
<td>2</td>
<td>FRA</td>
</tr>
<tr>
<td>3</td>
<td>SCH</td>
</tr>
<tr>
<td>4</td>
<td>MER</td>
</tr>
<tr>
<td>5</td>
<td>PAT</td>
</tr>
<tr>
<td>6</td>
<td>STL</td>
</tr>
<tr>
<td>7</td>
<td>DEV</td>
</tr>
<tr>
<td>8</td>
<td>RID</td>
</tr>
<tr>
<td>9</td>
<td>HAM</td>
</tr>
<tr>
<td>10</td>
<td>DER</td>
</tr>
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<td>11</td>
<td>GOO</td>
</tr>
<tr>
<td>12</td>
<td>DOH</td>
</tr>
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<td>13</td>
<td>FON</td>
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<td>RYA</td>
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<td>McD</td>
</tr>
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<td>SAL</td>
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<td>18</td>
<td>DEA</td>
</tr>
<tr>
<td>19</td>
<td>RAS</td>
</tr>
<tr>
<td>20</td>
<td>HAM</td>
</tr>
<tr>
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<td>1326</td>
</tr>
</tbody>
</table>

The Rockland students gained 50 months more than the students from School "X".
<table>
<thead>
<tr>
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<th>SCHOOL &quot;X&quot;</th>
<th>ROCKLAND</th>
</tr>
</thead>
<tbody>
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<td>GRADE EQUIV</td>
<td>STUDENT</td>
</tr>
<tr>
<td></td>
<td>5/71</td>
<td>5/72</td>
<td></td>
</tr>
<tr>
<td>VAY</td>
<td>101</td>
<td>101</td>
<td>HEA</td>
</tr>
<tr>
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<td>90</td>
<td>90</td>
<td>ROG</td>
</tr>
<tr>
<td>ROB</td>
<td>97</td>
<td>87</td>
<td>STE</td>
</tr>
<tr>
<td>SPI</td>
<td>85</td>
<td>107</td>
<td>WOO</td>
</tr>
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<td>84</td>
<td>ABB</td>
</tr>
<tr>
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<td>67</td>
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</tr>
<tr>
<td>McL</td>
<td>73</td>
<td>77</td>
<td>BUR</td>
</tr>
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<td>CIF</td>
<td>74</td>
<td>74</td>
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</tr>
<tr>
<td>DIA</td>
<td>81</td>
<td>90</td>
<td>DEL</td>
</tr>
<tr>
<td>HIL</td>
<td>79</td>
<td>88</td>
<td>DON</td>
</tr>
<tr>
<td>BRE</td>
<td>80</td>
<td>80</td>
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</tr>
<tr>
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<td>96</td>
<td>GRA</td>
</tr>
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<td>69</td>
<td>HIT</td>
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<td>68</td>
<td>JON</td>
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<td>HIL</td>
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<td>82</td>
<td>KOS</td>
</tr>
<tr>
<td>HWB</td>
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<td>64</td>
<td>McL</td>
</tr>
<tr>
<td>BER</td>
<td>61</td>
<td>53</td>
<td>STR</td>
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<tr>
<td>HOB</td>
<td>47</td>
<td>72</td>
<td>TAM</td>
</tr>
<tr>
<td>FRA</td>
<td>46</td>
<td>55</td>
<td>MAL</td>
</tr>
<tr>
<td>CAR</td>
<td>38</td>
<td>55</td>
<td>MOI</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1441</td>
<td>1559</td>
<td>+118</td>
</tr>
</tbody>
</table>

The Rockland students gained 52 months more than the students from School "X".
while the eighth grade students from School "X" achieved a total score of 1,441 months. In May, 1972 the students from Rockland scored 1,609 months, for a gain of 170 months. At this time the School "X" students scored 1,559 months, for a gain of 118 months. These results indicate that the eighth grade students from Rockland received a 52 month greater gain than the students from School "X".

In Table 8 are presented the analysis of variance and adjusted mean scores for the seventh and eighth grade reading scores.

**TABLE 8**

**A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE READING SCORES**

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degree of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>12.644</td>
<td>1</td>
<td>.098</td>
<td>n.s.</td>
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<tr>
<td>Grade</td>
<td>34.592</td>
<td>1</td>
<td>.268</td>
<td>n.s.</td>
</tr>
<tr>
<td>Interaction</td>
<td>4.750</td>
<td>1</td>
<td>.037</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>128.832</td>
<td>72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REPORT OF ADJUSTED MEANS**

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 19</td>
<td>N = 19</td>
</tr>
<tr>
<td>7th Grade</td>
<td>X = 8.263</td>
<td>X = 7.947</td>
</tr>
<tr>
<td></td>
<td>N = 19</td>
<td>N = 19</td>
</tr>
<tr>
<td>8th Grade</td>
<td>X = 7.747</td>
<td>X = 6.758</td>
</tr>
</tbody>
</table>
The data in this table indicate that the difference between schools relative to the reading scores; the difference in scores between grades; or the difference relative to interaction did not reach a level of statistical significance. The Rockland seventh grade students had an adjusted mean score of 8.263, as compared to the mean score of 7.947 for the seventh graders in School "X". The results indicate that the difference of 0.316 in these adjusted mean scores was not statistically significant.

The Rockland eighth grade students had an adjusted mean score of 7.747 as compared to the mean score of 6.758 for the eighth graders in School "X". The results also indicate that the difference of 0.989 was not found to be statistically significant.

In Tables 9-11 which follow are presented the results of data on mathematics which was tabulated for purposes of assessing this objective. As indicated by the data presented in Table 9, the sample seventh grade Rockland students began the year 11 months behind the sample of students from School "X" and finished the year 62 months behind.

In May, 1971 the Rockland seventh grade students received a total achievement score of 1,287 months, while the seventh grade students from School "X" received a score of 1,298 months. In May, 1972 the Rockland students received a total score of 1,484 months for an increase of 197 months (average of 10 months per student). At this same time the students from School "X" scored 1,557 months for a gain of 259 months. These data indicate that the School "X" seventh grade students achieved a
# Table 9

## Comparison of Iowa Tests of Basic Skills in Arithmetic Concepts by Schools, Grade 7

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>SCHOOL &quot;X&quot;</th>
<th>ROCKLAND</th>
<th>DIFFER COMPARISON</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>GRADE EQUIV</td>
<td>GRADE EQUIV</td>
<td>GRADE EQUIV</td>
</tr>
<tr>
<td></td>
<td>5/71</td>
<td>5/72</td>
<td>5/71</td>
</tr>
<tr>
<td>1 JWR</td>
<td>90</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>2 MAH</td>
<td>81</td>
<td>104</td>
<td>+23</td>
</tr>
<tr>
<td>3 DIC</td>
<td>81</td>
<td>99</td>
<td>+18</td>
</tr>
<tr>
<td>4 CON</td>
<td>71</td>
<td>81</td>
<td>+10</td>
</tr>
<tr>
<td>5 ELM</td>
<td>75</td>
<td>101</td>
<td>+26</td>
</tr>
<tr>
<td>6 LEE</td>
<td>73</td>
<td>101</td>
<td>+28</td>
</tr>
<tr>
<td>7 WIL</td>
<td>71</td>
<td>81</td>
<td>+10</td>
</tr>
<tr>
<td>8 BUR</td>
<td>64</td>
<td>76</td>
<td>+12</td>
</tr>
<tr>
<td>9 PAL</td>
<td>66</td>
<td>72</td>
<td>+6</td>
</tr>
<tr>
<td>10 SMI</td>
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<td>67</td>
<td>0</td>
</tr>
<tr>
<td>11 CAM</td>
<td>68</td>
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<td>+24</td>
</tr>
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<td>12 MOR</td>
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<td>+7</td>
</tr>
<tr>
<td>13 HAY</td>
<td>58</td>
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<td>+11</td>
</tr>
<tr>
<td>14 MAR</td>
<td>62</td>
<td>79</td>
<td>+17</td>
</tr>
<tr>
<td>15, MOO</td>
<td>62</td>
<td>67</td>
<td>+5</td>
</tr>
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<td>52</td>
<td>60</td>
<td>+8</td>
</tr>
<tr>
<td>17 ROB</td>
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<td>+15</td>
</tr>
<tr>
<td>18 GUR</td>
<td>56</td>
<td>60</td>
<td>+4</td>
</tr>
<tr>
<td>19 SHU</td>
<td>60</td>
<td>74</td>
<td>+24</td>
</tr>
<tr>
<td>20 FEL</td>
<td>39</td>
<td>50</td>
<td>+11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1298</td>
<td>1557</td>
<td>+259</td>
</tr>
</tbody>
</table>

The School "X" students gained 62 months more than the students from Rockland.
TABLE 10

COMPARISON OF IOWA TESTS OF BASIC SKILLS IN ARITHMETIC CONCEPTS
BY SCHOOLS.  GRADE 8

<table>
<thead>
<tr>
<th>SCHOOL &quot;X&quot;</th>
<th></th>
<th></th>
<th></th>
<th>ROCKLAND</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENT</td>
<td>GRADE</td>
<td>GRADE</td>
<td>DIFFERENCE</td>
<td>STUDENT</td>
<td>GRADE</td>
<td>GRADE</td>
<td>COMPARISON</td>
</tr>
<tr>
<td></td>
<td>EQUIV</td>
<td>EQUIV</td>
<td></td>
<td></td>
<td>EQUIV</td>
<td>EQUIV</td>
<td></td>
</tr>
<tr>
<td>5/71</td>
<td>5/72</td>
<td></td>
<td>5/71</td>
<td>5/72</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>BEC</td>
<td>97</td>
<td>97</td>
<td>0</td>
<td>GRI</td>
<td>107</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>JEN</td>
<td>96</td>
<td>103</td>
<td>+ 7</td>
<td>HAG</td>
<td>94</td>
<td>93</td>
</tr>
<tr>
<td>3</td>
<td>BUR</td>
<td>90</td>
<td>87</td>
<td>- 3</td>
<td>PRA</td>
<td>96</td>
<td>105</td>
</tr>
<tr>
<td>4</td>
<td>RIC</td>
<td>90</td>
<td>90</td>
<td>+ 7</td>
<td>DAL</td>
<td>86</td>
<td>96</td>
</tr>
<tr>
<td>5</td>
<td>IBB</td>
<td>85</td>
<td>61</td>
<td>-24</td>
<td>SNO</td>
<td>87</td>
<td>91</td>
</tr>
<tr>
<td>6</td>
<td>WAT</td>
<td>87</td>
<td>85</td>
<td>- 2</td>
<td>WAL</td>
<td>82</td>
<td>105</td>
</tr>
<tr>
<td>7</td>
<td>PAT</td>
<td>76</td>
<td>94</td>
<td>+18</td>
<td>BOR</td>
<td>74</td>
<td>81</td>
</tr>
<tr>
<td>8</td>
<td>GAU</td>
<td>74</td>
<td>67</td>
<td>- 7</td>
<td>BRU</td>
<td>77</td>
<td>76</td>
</tr>
<tr>
<td>9</td>
<td>HOL</td>
<td>76</td>
<td>97</td>
<td>+21</td>
<td>CAR</td>
<td>79</td>
<td>86</td>
</tr>
<tr>
<td>10</td>
<td>SUL</td>
<td>81</td>
<td>106</td>
<td>+25</td>
<td>DAV</td>
<td>80</td>
<td>66</td>
</tr>
<tr>
<td>11</td>
<td>GOO</td>
<td>76</td>
<td>101</td>
<td>+25</td>
<td>FIN</td>
<td>79</td>
<td>98</td>
</tr>
<tr>
<td>12</td>
<td>BEA</td>
<td>70</td>
<td>54</td>
<td>-16</td>
<td>HAY</td>
<td>72</td>
<td>84</td>
</tr>
<tr>
<td>13</td>
<td>TUR</td>
<td>71</td>
<td>67</td>
<td>- 4</td>
<td>KEN</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>14</td>
<td>OLI</td>
<td>71</td>
<td>69</td>
<td>- 2</td>
<td>LaP</td>
<td>66</td>
<td>63</td>
</tr>
<tr>
<td>15</td>
<td>ELD</td>
<td>71</td>
<td>43</td>
<td>-28</td>
<td>McC</td>
<td>66</td>
<td>72</td>
</tr>
<tr>
<td>16</td>
<td>McD</td>
<td>61</td>
<td>54</td>
<td>- 7</td>
<td>McL</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>17</td>
<td>JON</td>
<td>64</td>
<td>64</td>
<td>0</td>
<td>PHI</td>
<td>60</td>
<td>68</td>
</tr>
<tr>
<td>18</td>
<td>MAH</td>
<td>56</td>
<td>71</td>
<td>+15</td>
<td>RIC</td>
<td>55</td>
<td>56</td>
</tr>
<tr>
<td>19</td>
<td>CRO</td>
<td>51</td>
<td>87</td>
<td>+36</td>
<td>BAK</td>
<td>48</td>
<td>60</td>
</tr>
<tr>
<td>20</td>
<td>WEB</td>
<td>51</td>
<td>54</td>
<td>+ 3</td>
<td>WIL</td>
<td>43</td>
<td>60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1487</td>
<td>1551</td>
<td>-64</td>
<td></td>
<td></td>
<td>1481</td>
<td>1590</td>
</tr>
</tbody>
</table>

The Rockland students gained 45 months more than the students from School "X".
total of 62 months more than the students from Rockland.

The data presented in Table 10 indicate that the eighth grade Rockland students when tested in May of 1971 were six months behind the eighth grade students from School "X". In May, 1971 Rockland's eighth grade students had a total achievement score of 1,481 months, while the eighth grade students from School "X" achieved a total of 1,487 months for a gain of 109 months.

In May, 1972 the students from Rockland scored 1,590 months for a gain of 109 months. At this same time the School "X" students scored 1,551 months for a gain of 64 months. These results indicate that the eighth grade students from Rockland received a 45 month greater gain than the students from School "X".

In Table 11 are presented the analysis of variance and adjusted mean score for the seventh and eighth grade mathematics scores.
TABLE 11

A REPORT OF THE ANALYSIS OF VARIANCE AND THE ADJUSTED MEANS FOR THE MATHEMATICS SCORES

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degree of Freedom</th>
<th>F</th>
<th>Level Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>8.224</td>
<td>1</td>
<td>1.268</td>
<td>n.s.</td>
</tr>
<tr>
<td>Grade</td>
<td>1256.329</td>
<td>1</td>
<td>0.064</td>
<td>n.s.</td>
</tr>
<tr>
<td>Interaction</td>
<td>162.118</td>
<td>1</td>
<td>9.829</td>
<td>.003</td>
</tr>
<tr>
<td>Total</td>
<td>127.813</td>
<td>72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 19</td>
<td>N = 19</td>
</tr>
<tr>
<td>7th grade</td>
<td>X = 10.053</td>
<td>X = 13.631</td>
</tr>
<tr>
<td></td>
<td>N = 19</td>
<td>N = 19</td>
</tr>
<tr>
<td>8th grade</td>
<td>X = 4.842</td>
<td>X = 2.579</td>
</tr>
</tbody>
</table>

The data in this table indicate that the difference between schools relative to the mathematics scores; or the difference relative to interaction did not reach a level of statistical significance. The difference in the scores between grades seven and eight reached a level of statistical difference at the .003 level (F = 9.829).

The Rockland seventh grade students had an adjusted mean score of 10.053 as compared to the mean score of 13.631 for the seventh graders in School "X". The results indicate that the difference of 3.578 in these adjusted mean scores was not statistically significant. The Rockland
eighth grade students had an adjusted mean score of 4.842 as compared to the mean score of 2.579 for the students in School "X". The results also indicate that the difference of 2.263 was not found to be statistically significant.

In Tables 12-14 which follow are presented the results of data on work-study habits which was tabulated for purposes of assessing this objective. As indicated by the data presented in Table 12 the sample of seventh grade Rockland students began the year equal with the sample of students from School "X" and finished the year ahead by 116 months. In May, 1971 the Rockland seventh grade students and the seventh grade students from School "X" received a total achievement score of 1,320 months. In May, 1972 the Rockland students received a total score of 1,546 months for an increase of 226 months. At this same time the students from School "X" scored 1,431 months for a gain of 110 months. These data indicate that the Rockland seventh grade students achieved 116 months more than the students from School "X".

The data presented in Table 13 indicate that the eighth grade Rockland students when tested in May of 1971 were 2 months behind the eighth grade students from School "X". In May, 1971 Rockland had a total achievement score of 1,527 months, while the eighth grade students from School "X" achieved a total of 1,529 months. In May, 1972 the students from Rockland scored 1,658 months for a gain of 131 months. At this same time the School "X" students scored 1,592 months for a gain
TABLE 12

COMPARISON OF IOWA TESTS OF BASIC SKILLS IN WORK STUDY BY SCHOOLS
GRADE 7

<table>
<thead>
<tr>
<th>SCHOOL &quot;X&quot;</th>
<th>ROCKLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENT</td>
<td>GRADE EQUIV 5/71</td>
</tr>
<tr>
<td>1 BOO</td>
<td>85</td>
</tr>
<tr>
<td>2 DIA</td>
<td>87</td>
</tr>
<tr>
<td>3 SCH</td>
<td>79</td>
</tr>
<tr>
<td>4 DAN</td>
<td>86</td>
</tr>
<tr>
<td>5 FLA</td>
<td>77</td>
</tr>
<tr>
<td>6 RAN</td>
<td>72</td>
</tr>
<tr>
<td>7 MAD</td>
<td>71</td>
</tr>
<tr>
<td>8 STE</td>
<td>68</td>
</tr>
<tr>
<td>9 WHI</td>
<td>67</td>
</tr>
<tr>
<td>10 THI</td>
<td>65</td>
</tr>
<tr>
<td>11 CUN</td>
<td>63</td>
</tr>
<tr>
<td>12 HOR</td>
<td>70</td>
</tr>
<tr>
<td>13 NAY</td>
<td>59</td>
</tr>
<tr>
<td>14 HIL</td>
<td>58</td>
</tr>
<tr>
<td>15 GRE</td>
<td>62</td>
</tr>
<tr>
<td>16 FRI</td>
<td>56</td>
</tr>
<tr>
<td>17 KIN</td>
<td>55</td>
</tr>
<tr>
<td>18 JOH</td>
<td>53</td>
</tr>
<tr>
<td>19 BRO</td>
<td>44</td>
</tr>
<tr>
<td>20 PLA</td>
<td>43</td>
</tr>
</tbody>
</table>

TOTAL 1320 1431 +110 1320 1546 +226

The Rockland students gained 116 months more than the students from School "X"
The Rockland students gained 68 months more than the students from School "X"
of 63 months. These results indicate that the eighth grade students from Rockland received a 68 month greater gain than the students from School "X".

In Table 14 are presented the analysis of variance and adjusted mean score for the seventh and eighth grades in work-study skills.

TABLE 14

A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE WORK-STUDY SCORES

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degree of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>440.644</td>
<td>1</td>
<td>4.932</td>
<td>.03</td>
</tr>
<tr>
<td>Grade</td>
<td>332.644</td>
<td>1</td>
<td>3.723</td>
<td>.05</td>
</tr>
<tr>
<td>Interaction</td>
<td>29.066</td>
<td>1</td>
<td>.325</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>89.342</td>
<td>72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 19</td>
<td>N = 19</td>
<td></td>
</tr>
<tr>
<td>7th Grade</td>
<td>X = 11.105</td>
<td>X = 5.684</td>
</tr>
<tr>
<td>N = 19</td>
<td>N = 19</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td>X = 5.052</td>
<td>X = 2.105</td>
</tr>
</tbody>
</table>

The data in this table indicate that there was a statistical significant difference between schools in work-study skills at the .03 level (F = 4.932); and no significant difference relative to interaction. The Rockland seventh grade students had an adjusted mean score of 11.105
as compared to the mean score of 5.684 for the seventh graders in School "X". The results indicate that the difference of 5.421 in these adjusted mean scores was found to be statistically significant. The Rockland eighth grade students had an adjusted mean score of 5.052 as compared to the mean score of 2.105 for the students in School "X". The results also indicate that the difference of 2.947 was found to be statistically significant.

In summary, a statistical difference in favor of the experimental group (Rockland) did not emerge in Reading and Mathematics when an analysis of means gain was presented even though this school scored higher in three out of four cases. The statistical difference in favor of the Rockland students on Work-Study Skills was significant which indicates that a measure of success has been met in accomplishing Objective Number One. This would seem to indicate that even though the Rockland students and School "X" students are doing equally well in Reading and Mathematics, the Rockland Junior High School Project is doing a much better job in preparing their students to work more independently.

The eighth grade students in both Rockland and School "X" did not do as well as those in the seventh grade. One would think the eighth grade students in Rockland would do better having attended school one year under the traditional program. This perceived discrepancy may have been due, in part, to the "ceiling effect" caused from using this lower level of the Iowa Test of Basic Skills.
Presentation and Analysis of the Data Relating to Objective Number Two

The second objective of the Rockland Junior High Project was to create a unique educational environment conducive to achieving maximum positive student attitudes about education. The major instrument for assessing this objective was the Student Morale Inventory.

In Figure 9 and Table 15-23 which follow are presented the results of the data on student morale which was tabulated for purposes of assessing this objective. As is indicated by the data in Table 15 and Figure 9 a comparison of the mean student scores at Rockland and at School "X" in each of the subscales of the Student Morale Inventory is presented.

The Rockland students received a total mean score of 6.5 on the Student Morale Inventory, while the students from School "X" received a score of 5.1. The results of the subscales were subjected to an analysis of variance to determine if the differences between Rockland and School "X" were significant.

In Table 16 are presented the analysis of variance and adjusted mean scores for the subsection School Plant of the SMI. The data in this table indicate there is no significant difference between schools relative to the School Plants, and no significant difference relative to interaction. There is, however, a significant difference at the .008 level (F= 7.239) level between grades. Rockland has an adjusted mean score of 18.28 as compared to the adjusted mean score of 18.20 for School "X". The dif-
Mean student morale at Rockland is 6.5
Mean student morale at School "X" is 5.1

1. School Plant
2. Instruction
3. Administration/Staff Regulations
4. Community
5. Other Students
6. Teacher-Student Relations
7. General

A='12' represents extremely good morale
A='0' represents extremely poor morale

Figure 9

COMPARISON OF MEAN STUDENT SCORES FOR EACH SUBSCALE OF THE SMII FOR ROCKLAND AND SCHOOL "X"
ference of 0.08 is not significant. The seventh grade students in both schools have an adjusted mean score of 17.62 as compared to the adjusted mean score of 18.86 for the eighth grade students. The difference of 1.24 is statistically significant at the .008 level ($F=7.239$).

**TABLE 15**

**COMPARISON OF THE MEAN STUDENT SCORES AT ROCKLAND AND SCHOOL "X"**

<table>
<thead>
<tr>
<th>Sub-scale</th>
<th>Mean Score Rockland</th>
<th>Mean Score School &quot;X&quot;</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Plant</td>
<td>5.1</td>
<td>5.4</td>
<td>-0.3</td>
</tr>
<tr>
<td>Instruction</td>
<td>6.5</td>
<td>5.3</td>
<td>+1.2</td>
</tr>
<tr>
<td>Administration</td>
<td>6.5</td>
<td>5.1</td>
<td>+1.4</td>
</tr>
<tr>
<td>Community Support</td>
<td>5.9</td>
<td>5.2</td>
<td>+0.7</td>
</tr>
<tr>
<td>Relation with the Student</td>
<td>8.0</td>
<td>6.6</td>
<td>+1.2</td>
</tr>
<tr>
<td>Teacher-Student Relation</td>
<td>7.2</td>
<td>6.5</td>
<td>+0.7</td>
</tr>
<tr>
<td>General</td>
<td>6.3</td>
<td>4.5</td>
<td>+1.8</td>
</tr>
<tr>
<td>Total Mean Score</td>
<td>6.5</td>
<td>5.1</td>
<td>+1.4</td>
</tr>
</tbody>
</table>
TABLE 16

A REPORT OF THE ANALYSIS OF VARIANCE AND THE ADJUSTED MEANS FOR THE SCHOOL PLANT FACTOR OF THE SMI

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>.16</td>
<td>1</td>
<td>.03</td>
<td>n.s.</td>
</tr>
<tr>
<td>Grades</td>
<td>38.44</td>
<td>1</td>
<td>7.239</td>
<td>.008</td>
</tr>
<tr>
<td>Interaction</td>
<td>.04</td>
<td>1</td>
<td>.008</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>509.60</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>17.64</td>
<td>17.60</td>
<td>17.62</td>
</tr>
<tr>
<td>8th Grade</td>
<td>18.92</td>
<td>18.80</td>
<td>18.86</td>
</tr>
<tr>
<td>Total</td>
<td>18.28</td>
<td>18.20</td>
<td></td>
</tr>
</tbody>
</table>

These results indicate that in both Rockland and School "X" the seventh grade students rate the schools better than the eighth graders do. Again, this could appear logical as the seventh graders come from various elementary schools and this would be their first year in a Junior High School. After one year when the newness wears off they view the building in a different perspective.

In Table 17 are presented the analysis of variance and adjusted mean scores for the subsection Instruction of the SMI.
TABLE 17

A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE INSTRUCTION FACTOR OF THE SMI

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>24.01</td>
<td>1</td>
<td>4.21</td>
<td>.04</td>
</tr>
<tr>
<td>Grades</td>
<td>1.69</td>
<td>1</td>
<td>.296</td>
<td>n.s.</td>
</tr>
<tr>
<td>Interaction</td>
<td>.04</td>
<td>1</td>
<td>1.685</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>15.57</td>
<td>17.12</td>
<td>16.32</td>
</tr>
<tr>
<td>8th Grade</td>
<td>16.40</td>
<td>16.76</td>
<td>16.58</td>
</tr>
<tr>
<td>Total</td>
<td>15.96</td>
<td>16.94</td>
<td></td>
</tr>
</tbody>
</table>

According to the data presented in Table 17, a significant difference at the .04 level (F=4.21) was found between schools in relation to Instruction. No significant difference, however, was found relative to grades and no significant difference was found relative to interaction. Rockland has an adjusted mean score of 15.96 as compared to the adjusted mean score of 16.94 for School "X". These results indicate that the difference of 0.98 is significant at the .04 level (F = 4.21). The seventh grade students have an adjusted mean score of 16.32 as compared to the adjusted mean score of 16.58 for the eighth grade students. The difference of 0.26 is not significant. There is a significant difference at the .04 level (F = 4.21) in the rating the Rockland students give
their instructional program as compared to the students in School "X".
The Rockland students in both grades give their instructional program a
higher rating. There is no significant difference between grades in either
school as to how they rate their instructional program.

In Table 18 are presented the analysis of variance and adjusted mean
scores for the subsection Administration of the SMI.

TABLE 18
A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE
ADMINISTRATION FACTOR OF THE SMI

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>46.24</td>
<td>1</td>
<td>88.14</td>
<td>.004</td>
</tr>
<tr>
<td>Grades</td>
<td>1.00</td>
<td>1</td>
<td>.191</td>
<td>n.s.</td>
</tr>
<tr>
<td>Interaction</td>
<td>.04</td>
<td>1</td>
<td>.008</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>5.247</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>16.72</td>
<td>18.12</td>
<td>17.42</td>
</tr>
<tr>
<td>8th Grade</td>
<td>16.96</td>
<td>18.28</td>
<td>17.62</td>
</tr>
<tr>
<td>Total</td>
<td>16.84</td>
<td>18.20</td>
<td></td>
</tr>
</tbody>
</table>

The data presented in Table 18 indicate there is a statistical signifi-
cance at the .004 level (F = 88.14) between Rockland and School "X" rela-
tive to Administration. There is, however, no significant difference be-
tween the grades and none relative to interaction. Rockland has an ad-
justed mean score of 16.84 and School "X" an adjusted mean score of 18.20. These results indicate that the difference of 1.36 was significant at the .004 level (F = 88.14). The seventh grade students have an adjusted mean score of 17.42 and the eighth grade an adjusted mean score of 17.62. The difference of 0.20 is found not to be statistically significant. There is a significant difference at the 0.04 level (F=88.14) in the rating the Rockland students give their Administration as compared to the students in School "X". The Rockland students in both grades give their Administration a higher rating. There is no significant difference between grades as to how they rate their Administration.

In Table 19 are presented the analysis of variance and adjusted mean score for the subsection Community of the SMI.
TABLE 19

A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE COMMUNITY FACTOR OF THE SMI

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>4.90</td>
<td>1</td>
<td>8.786</td>
<td>.004</td>
</tr>
<tr>
<td>Grades</td>
<td>77.44</td>
<td>1</td>
<td>13.886</td>
<td>.0006</td>
</tr>
<tr>
<td>Interaction</td>
<td>1.96</td>
<td>1</td>
<td>.351</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>5.577</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>15.88</td>
<td>17.36</td>
<td>16.44</td>
</tr>
<tr>
<td>8th Grade</td>
<td>16.96</td>
<td>18.28</td>
<td>17.62</td>
</tr>
<tr>
<td>Total</td>
<td>16.84</td>
<td>18.20</td>
<td></td>
</tr>
</tbody>
</table>

The data in Table 19 indicate there is a statistical significance at the .004 level (F = 8.786) between both schools regarding Community Support, and a significant difference at the .0006 level (F = 13.886) between the grades relative to this subsection. No significant difference was found relative to interaction. Rockland has an adjusted mean score of 16.96 and School "X" an adjusted mean score of 18.20. These results indicate the difference of 1.36 is statistically significant at the .004 level (F = 8.786). The seventh grade students have an adjusted mean score of 16.44 as compared to the average mean score of 17.62 for the eighth grade students. These results indicate the difference of
1.18 is statistically significant. There is a significant difference at the .0006 level ($F = 13.886$) in the rating the Rockland students give Community Support as compared to the students in School "X". The Rockland students in both grades give Community Support a higher rating.

The seventh graders rate Community Support for the program higher than the eighth graders do. Once again the seventh grade students at Rockland presented a higher showing than the eighth graders did. Even though it would appear that students in both grades believe the community is supporting the school, the seventh graders tend to believe this support to be greater. This is probably due to the greater support parents tend to give their children in the lower grades. This support has a tendency to decline as the students move from grade to grade. The overall support, however, of the Rockland Junior High Program by the community is greater than that given by the community of School "X" to its program.

In Table 20 are presented the analysis of variance and adjusted mean scores for the subsection Other Students of the SMI.
TABLE 20

A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE OTHER STUDENTS FACTOR OF THE SMI

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>33.64</td>
<td>1</td>
<td>8.249</td>
<td>.005</td>
</tr>
<tr>
<td>Grades</td>
<td>2.56</td>
<td>1</td>
<td>.628</td>
<td>n.s.</td>
</tr>
<tr>
<td>Interaction</td>
<td>3.24</td>
<td>1</td>
<td>.795</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>4.078</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>16.24</td>
<td>17.04</td>
<td>16.64</td>
</tr>
<tr>
<td>8th Grade</td>
<td>15.56</td>
<td>17.08</td>
<td>16.32</td>
</tr>
<tr>
<td>Total</td>
<td>15.90</td>
<td>17.06</td>
<td></td>
</tr>
</tbody>
</table>

The data in Table 20 indicate there is a significant difference at the .005 level (F = 8.249) between schools relative to Relationship with Other Students. There isn't any statistical significance between the grades relative to interaction. Rockland has an adjusted mean score of 15.90 and School "X" an adjusted mean score of 17.06. These results indicate the difference of 1.16 is significant at the .005 level (F=8.249). The Rockland students in both grades give this factor a higher rating. There is no significant difference between grades in either school as to how they rate their relationship with other students.

In Table 21 are presented the analysis of variance and adjusted
mean scores for the subsection Teacher-Student Relations of the SMI.

TABLE 21

A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE TEACHER-STUDENT RELATIONS FACTOR OF THE SMI

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>44.89</td>
<td>1</td>
<td>7.099</td>
<td>.009</td>
</tr>
<tr>
<td>Grades</td>
<td>1.69</td>
<td>1</td>
<td>.267</td>
<td>n.s.</td>
</tr>
<tr>
<td>Interaction</td>
<td>6.25</td>
<td>1</td>
<td>.988</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>6.323</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>15.56</td>
<td>17.40</td>
<td>16.48</td>
</tr>
<tr>
<td>8th Grade</td>
<td>16.32</td>
<td>17.16</td>
<td>16.74</td>
</tr>
<tr>
<td>Totals</td>
<td>15.94</td>
<td>17.28</td>
<td></td>
</tr>
</tbody>
</table>

Presented in Table 21 is data that shows that a significant difference at the .009 level (\(F = 7.099\)) exists between schools for Teacher-Student Relations. There is no significant difference between the grades and no significant difference relative to interaction. Rockland has an adjusted mean score of 15.94 and School "X" an adjusted mean score of 17.28. These results indicate the difference of 1.34 as significant at the .009 level (\(F = 7.099\)). There is a significant difference in the rating the Rockland students give Teacher-Student Relations as compared to the students in School "X". The Rockland students in both grades give
Teacher-Student Relations a higher rating. There is no significant difference between grades in either school as to how they rate this factor.

In Table 22 are presented the analysis of variance and adjusted mean scores for the subsection General of the SMI.

TABLE 22

A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE GENERAL FACTOR OF THE SMI

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>82.81</td>
<td>1</td>
<td>12.949</td>
<td>.0008</td>
</tr>
<tr>
<td>Grades</td>
<td>12.25</td>
<td>1</td>
<td>1.916</td>
<td>n.s.</td>
</tr>
<tr>
<td>Interaction</td>
<td>4.41</td>
<td>1</td>
<td>.690</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>6.395</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>17.64</td>
<td>19.04</td>
<td>18.34</td>
</tr>
<tr>
<td>8th Grade</td>
<td>17.92</td>
<td>20.16</td>
<td>19.04</td>
</tr>
<tr>
<td>Total</td>
<td>17.78</td>
<td>19.60</td>
<td></td>
</tr>
</tbody>
</table>

The data in Table 22 indicate there is a significant difference at the .0008 level (F = 12.949) between schools related to this subsection.

There is no significant difference between the grades and no significant difference relative to interaction. Rockland has an adjusted mean score of 17.78 and School "X" an adjusted mean score of 19.60. These results indicate the difference of 1.82 is significant at the .008 level
(F = 12.949). There is a significant difference in the rating the Rockland students give their program in general as compared to the students in School "X". The Rockland students in both grades give their program a higher rating. There is no significant difference between grades as to how they rate their program in general.

In Table 23 are presented the analysis of variance and the adjusted mean scores for the total SMI.

TABLE 23

A REPORT OF THE ANALYSIS OF VARIANCE AND ADJUSTED MEANS FOR THE TOTAL STUDENT MORALE INVENTORY

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>1584.04</td>
<td>1</td>
<td>10.625</td>
<td>.002</td>
</tr>
<tr>
<td>Grades</td>
<td>424.36</td>
<td>1</td>
<td>2.846</td>
<td>n.s.</td>
</tr>
<tr>
<td>Interaction</td>
<td>.36</td>
<td>1</td>
<td>.002</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total</td>
<td>149.09</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REPORT OF ADJUSTED MEANS

<table>
<thead>
<tr>
<th></th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>N = 25</td>
<td>N = 25</td>
<td>X = 119.24</td>
</tr>
<tr>
<td></td>
<td>X = 115.20</td>
<td>X = 123.28</td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td>N = 25</td>
<td>N = 25</td>
<td>X = 123.36</td>
</tr>
<tr>
<td></td>
<td>X = 119.44</td>
<td>X = 127.28</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>X = 117.32</td>
<td>X = 125.28</td>
<td></td>
</tr>
</tbody>
</table>
The data presented in Table 23 indicate that there is a significant difference at the .002 level (F = 10.625) between schools relative to the Total SMI. There is no significant difference between grades or relative to interaction. Rockland has an adjusted mean score of 117.32 and School "X" an adjusted mean score of 125.28. The results indicate the difference of 7.96 to be significant at the .002 level (F = 10.625). The seventh grade students have an adjusted mean score of 119.24 and the eighth grade students have an adjusted mean score of 123.36. The difference of 4.12 is not significant. The results indicate that the students in Rockland have a higher student morale than do the students in School "X". There is no significant difference between grades seven and eight in Rockland relative to student morale.

In summary, overall student morale of the Rockland students appears to be good, as compared to the students from School "X". Student morale at Rockland was higher than the morale at School "X" in all categories except that of the School Plant. In this category the students from School "X" provided a higher score than the Rockland students; however, the difference in these scores was not statistically significant. The categories which received the highest scores from the students at both schools, focused on (a) student-student relations, and (b) teacher-student relations. The smallest differences in scores between the students in Rockland and School "X", other than for School Plant, were in the categories related to (a) Community Support, and (b) Teacher-Student
Relations. The largest differences in scores between the two schools were in the areas of (a) Instruction, and (b) Administration.
Presentation and Analysis of the Data
Relating to Objective Number Three

The third objective of the Rockland Junior High Project was to increase positive community attitudes and support for the school and junior high education. The major instrument for assessing this objective was a Telephone Survey. In Tables 24-37 which follow are presented the results of the data from the telephone interviews which was tabulated for purposes of assessing this objective.

TABLE 24

THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "HAVE YOU BEEN IN THE ROCKLAND JUNIOR HIGH?"

<table>
<thead>
<tr>
<th>Responses</th>
<th>N=50 Survey</th>
<th>N=50 Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#1</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>49</td>
<td>98%</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>

The results in Table 24 indicate that in survey one all but one parent had visited the Rockland Junior High and that all the parents in survey two had been in the Rockland Junior High.
### TABLE 25

**THE RESULTS OF THE PARENT RESPONSES TO QUESTIONS** -

(1) "HOW MANY TIMES HAVE YOU GONE TO ROCKLAND JUNIOR HIGH THIS YEAR?"

(2) "HOW MANY TIMES HAVE YOU TALKED WITH AT LEAST ONE OF THE ROCKLAND JUNIOR HIGH TEACHERS?"

(3) "DURING THE YEAR HOW MANY TIMES HAVE YOU TALKED WITH THE PRINCIPAL?"

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
<th>N=50 Survey #1</th>
<th>%</th>
<th>N=50 Survey #2</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Several times</td>
<td>58%</td>
<td>44%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>32%</td>
<td>41%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all</td>
<td>10%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two</td>
<td>Several times</td>
<td>38%</td>
<td>18%</td>
<td>84%</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46%</td>
<td>58%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all</td>
<td>16%</td>
<td>24%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three</td>
<td>Several times</td>
<td>24%</td>
<td>10%</td>
<td>62%</td>
<td>62%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all</td>
<td>38%</td>
<td>90%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the foregoing figures in Table 25 it can be seen that more than 90% of the parents called in both surveys have been interested enough in the Rockland Junior High program to visit the school this year. Of the parents called in these surveys, 10% have not visited the school this year. However, of all the parents called only one had not been in the building at some time. In both surveys the teachers have spoken to approximately 80% of the parents called but the principal to 62% of those in the first survey and 10% in the second survey.
The answers to these questions in Tables 24 and 25 were factual and not subject to a person's perception of the Rockland Junior High program. The parents did or did not visit the Rockland Junior High; did or did not talk to the teachers or the principal. The questions in Tables 26-33 which follow, however, indicate the parents' perception of the program and even though the parents on the second survey did not talk to the teachers and principal to the same extent the parents in the first survey did; the group in the second survey had more time to assess the program. This appears to result in a greater overall support for the program by the parents called on the second survey as indicated by their responses.

For the responses to questions presented in Tables 26 through 33, parents were asked to rate certain activities by using an A, B, C, D, F grading system. A rating system of "C" was considered average.

TABLE 26

THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "HOW WELL DO YOU THINK ROCKLAND JUNIOR HIGH IS TEACHING THE BASIC ACADEMIC SUBJECTS (ENGLISH, MATH, SCIENCE, HISTORY)?"

<table>
<thead>
<tr>
<th>Responses</th>
<th>N=50 Survey #1</th>
<th>%</th>
<th>N=50 Survey #2</th>
<th>%</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Favorable</td>
<td>40%</td>
<td>80%</td>
<td>44%</td>
<td>76%</td>
<td>-4%</td>
</tr>
<tr>
<td>B) Neutral</td>
<td>12%</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) Unfavorable</td>
<td>0%</td>
<td>0%</td>
<td>4%</td>
<td>4%</td>
<td>+4%</td>
</tr>
<tr>
<td>F) Not sure</td>
<td>8%</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As indicated in Table 26 both telephone surveys show more than 75% of the parents called thought the school was doing an above average job of teaching the basic subjects. Only 4% of the parents sampled on the second survey thought the school was below average.

**TABLE 27**

**THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "HOW WELL IS YOUR CHILD'S LEARNING AT ROCKLAND JUNIOR HIGH MEETING HIS PRESENT NEEDS?"**

<table>
<thead>
<tr>
<th>Responses</th>
<th>N=50 Survey #1</th>
<th>N=50 Survey #2</th>
<th>N=50 Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Favorable</td>
<td>34% ) 72%</td>
<td>58% ) 84%</td>
<td>+12%</td>
</tr>
<tr>
<td>B) Neutral</td>
<td>18%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>C) Unfavorable</td>
<td>0% ) 4%</td>
<td>4% ) 4%</td>
<td>0%</td>
</tr>
<tr>
<td>D) Unfavorable</td>
<td>4% ) 4%</td>
<td>0% ) 4%</td>
<td>0%</td>
</tr>
<tr>
<td>Not sure</td>
<td>6%</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

As shown on Table 27 the first survey 72% of the parents sampled thought Rockland Junior High was doing an above average job of meeting their children's present needs. On the second survey those thinking the school was doing above average rose 12% to 84%. Only 4% of the parents in each survey felt the school was doing a below average job.
TABLE 28

THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "HOW WELL IS YOUR CHILD'S LEARNING AT ROCKLAND JUNIOR HIGH MEETING HIS FUTURE NEEDS?"

<table>
<thead>
<tr>
<th>Responses</th>
<th>Survey #1</th>
<th>Survey #2</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=50</td>
<td>N=50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) Favorable</td>
<td>28% (66%)</td>
<td>38% (58%)</td>
<td>-8%</td>
</tr>
<tr>
<td>B) Neutral</td>
<td>38% (20%)</td>
<td>20% (16%)</td>
<td></td>
</tr>
<tr>
<td>C) Unfavorable</td>
<td>2% (6%)</td>
<td>0% (2%)</td>
<td>-4%</td>
</tr>
<tr>
<td>Not sure</td>
<td>14%</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

Table 28 shows that 66% of the parents of survey one and 58% of the parents of survey two thought the school was doing an above average job of meeting future needs. On survey two the number of parents who were unsure rose 10% as compared to survey one.

TABLE 29

THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "HOW WELL DO YOU RATE THE TOTAL PROGRAM AT ROCKLAND JUNIOR HIGH?"

<table>
<thead>
<tr>
<th>Responses</th>
<th>Survey #1</th>
<th>Survey #2</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=50</td>
<td>N=50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) Favorable</td>
<td>26% (64%)</td>
<td>58% (84%)</td>
<td>+20%</td>
</tr>
<tr>
<td>B) Neutral</td>
<td>38% (26%)</td>
<td>26% (6%)</td>
<td></td>
</tr>
<tr>
<td>C) Unfavorable</td>
<td>6%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Not sure</td>
<td>28%</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>
As presented in Table 29 the total program is meeting with strong parent approval with 84% of the parents on the second survey giving the program an above average rating as compared to 64% in survey one. The number of parents not sure of the program dropped 20% in survey two as compared to survey one.

TABLE 30

THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "WHAT KIND OF A JOB ARE THE TEACHING DOING IN THE ROCKLAND JUNIOR HIGH SCHOOL?"

<table>
<thead>
<tr>
<th>Responses</th>
<th>N=50 Survey #1</th>
<th>N=50 Survey #2</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Favorable</td>
<td>58% ) 88%</td>
<td>60% ) 90%</td>
<td>+2%</td>
</tr>
<tr>
<td>B) Neutral</td>
<td>6%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>D) Unfavorable</td>
<td>0% ) 0%</td>
<td>0% ) 0%</td>
<td>0%</td>
</tr>
<tr>
<td>Not sure</td>
<td>6%</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

Table 30 indicates the parents feel that the teachers at Rockland Junior High are doing an outstanding job as approximately 90% of all the parents called on both surveys thought the teachers were doing an above average job. It is interesting to note that on the Purdue Teacher Opinionnaire, teacher estimates of status in the community (Factor 7) fell at the 51st percentile; whereas the phone survey seems to indicate much higher estimation of quality.
TABLE 31

THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "WHAT KIND OF A JOB DOES THE PRINCIPAL DO AT ROCKLAND JUNIOR HIGH SCHOOL?"

<table>
<thead>
<tr>
<th>Responses</th>
<th>Survey #1</th>
<th>%</th>
<th>Survey #2</th>
<th>%</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Favorable</td>
<td>58%</td>
<td>74%</td>
<td>70%</td>
<td>90%</td>
<td>+16%</td>
</tr>
<tr>
<td>B) Favorable</td>
<td>16%</td>
<td></td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) Neutral</td>
<td>8%</td>
<td></td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D) Unfavorable</td>
<td>0%</td>
<td></td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F) Unfavorable</td>
<td>0%</td>
<td></td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sure</td>
<td>18%</td>
<td></td>
<td>10%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Table 31 both surveys indicate the parents feel the principal is doing a very good job as evidenced by 90% in the second survey rating the principal above average as compared to 74% in the first survey.

TABLE 32

THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "WHAT DO YOU THINK OF THE GRADING SYSTEM USED AT ROCKLAND JUNIOR HIGH TO MARK YOUR CHILD’S WORK?"

<table>
<thead>
<tr>
<th>Responses</th>
<th>Survey #1</th>
<th>%</th>
<th>Survey #2</th>
<th>%</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Favorable</td>
<td>48%</td>
<td>66%</td>
<td>68%</td>
<td>94%</td>
<td>+28%</td>
</tr>
<tr>
<td>B) Favorable</td>
<td>18%</td>
<td>26%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C) Neutral</td>
<td>14%</td>
<td></td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D) Unfavorable</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td></td>
<td>-10%</td>
</tr>
<tr>
<td>F) Unfavorable</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sure</td>
<td>10%</td>
<td></td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Table 32 it is interesting to note that a new style report card went home for the first time between the two telephone surveys. The parents were very pleased with the new report card and especially liked the tea-
cher comments as indicated by the approximately 30% increase in the above average category between survey one and two.

TABLE 33

THE RESULTS OF THE PARENT RESPONSES TO QUESTION - "WHAT DO YOU THINK ABOUT INFORMATION YOU GET CONCERNING ROCKLAND JUNIOR HIGH?"

<table>
<thead>
<tr>
<th>Responses</th>
<th>N=50</th>
<th>N=50</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Survey #1</td>
<td>Survey #2</td>
<td></td>
</tr>
<tr>
<td>A) Favorable</td>
<td>54% ) 82%</td>
<td>74% ) 84%</td>
<td>+2%</td>
</tr>
<tr>
<td>B) Neutral</td>
<td>12%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>C) Unfavorable</td>
<td>0% ) 4%</td>
<td>2% ) 4%</td>
<td>0%</td>
</tr>
<tr>
<td>D) Not sure</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

As indicated by Table 33 approximately 83% of the parents sampled in both surveys felt the information they were getting from Rockland Junior High was more than satisfactory. The parents who thought the information received was unsatisfactory thought so only because it hadn't reached home.

On Question #10 of the surveys: The general feeling of parent response to the question "What do you think of it?" (Rockland Junior High) was positive in nature. On both surveys a total of 42 parents responded with a definitely favorable reply. Twenty-two responded favorably but with a qualifying statement, making a total of 62 favorable replies, only 38 were negative. All of the complaints concerned the old building. (See Appendix H)
On Question #14 of the surveys: In answer to the question "What experience or single incident has given you the most favorable feeling toward Rockland Junior High?" Most frequently mentioned were the excellent relationship between the teachers and children, because of "team learning" their children couldn't wait to get to school, how friendly and cooperative all Junior High personnel were and how beneficial the Introductory Program held the previous spring to explain team learning was to the parents who attended. (See Appendix H)

On Question #15 of the surveys: In response to the question "What experience or single incident has given you the most unfavorable feeling toward Rockland Junior High?" Fifty-eight per cent of parents called had no unfavorable feeling. Most mentioned as unfavorable were - need for more supervision on buses, and some interns couldn't cope with some children, a need for more clubs, and more help for children with problems and student-teacher relationship. (See Appendix H)

On Question #16 of the surveys: The last question asked for suggestions for improvement - 53% of the parents had no suggestions for improvements, however, many of the parents would like the building improved. They also showed a concern for slow learners. (See Appendix H)

Results of Student and Parent Comparisons. Table 34 - questions 1-7 show a comparison of student responses with parent responses. A total of seven questions, one from each subscale of the SMI, was taken as being representative. The same questions were asked of parents, the
wording being changed only to reflect the parent situation.

In comparing results of parent and student responses on seven questions from the SMI the students and parents agree on five out of seven questions. The two they don't agree on are question 1, "There is too much emphasis on the 'three R's' at this school and not enough opportunity for students to develop their own interests", and question 3, "There is too much supervision of students at this school". It would appear to be only natural that students and parents would disagree on these two. That eighty-seven percent of the students at Rockland Junior High look forward to coming to school seems to be a good reflection on the staff and the program.

TABLE 34

COMPARATIVE RESULTS ON SEVEN QUESTIONS FROM SMI STUDENTS WHO TOOK SMI AND PARENTS OF STUDENTS WHO TOOK SMI (N=30)

1. Compared to most school buildings I've seen, this building is nicer.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Parents</th>
<th>%</th>
<th>Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>4</td>
<td>13</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Disagree</td>
<td>23</td>
<td>77</td>
<td>27</td>
<td>90</td>
</tr>
<tr>
<td>No answer</td>
<td>3</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
2. There is too much emphasis on the 'three R's' at this school and not enough opportunity for students to develop their own interests.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Parents</th>
<th>%</th>
<th>Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>4</td>
<td>13</td>
<td>23</td>
<td>77</td>
</tr>
<tr>
<td>Disagree</td>
<td>25</td>
<td>84</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. There is too much supervision of students at this school.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Parents</th>
<th>%</th>
<th>Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>0</td>
<td>0</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>Disagree</td>
<td>28</td>
<td>93</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

4. Most of the teachers at Rockland Junior High are very friendly and understanding.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Parents</th>
<th>%</th>
<th>Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>28</td>
<td>93</td>
<td>22</td>
<td>73</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

5. Your child has many good friends at Rockland Junior High.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Parents</th>
<th>%</th>
<th>Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>27</td>
<td>90</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
<td>7</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
6. Each morning your child looks forward to coming to school.

<table>
<thead>
<tr>
<th>Response</th>
<th>Parents</th>
<th>%</th>
<th>Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>26</td>
<td>87</td>
<td>26</td>
<td>87</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>10</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

7. The community really supports our school.

<table>
<thead>
<tr>
<th>Response</th>
<th>Parents</th>
<th>%</th>
<th>Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>21</td>
<td>70</td>
<td>27</td>
<td>90</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>23</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The telephone survey was subjected to an analysis of variance to determine if there were any significant difference between the parent and student responses as well as between the two surveys. There was no significant difference on the seven SMI questions asked of the parents on either telephone survey as compared to the student responses. The only significant difference relative to the total telephone survey is reflected in Tables 26, 27 and 29 as analyzed in Tables 35, 36 and 37, as follows.

In Table 35 are presented the analysis of variance for the phone survey question on Academic Subjects.
As shown in Table 35 there is no significant difference between the first and second survey as to how well the parents thought the Rockland Junior High was teaching the basic academic subjects. There is, however, a significant difference at the .019 level between grades. The seventh grade parents (46) felt the teachers were doing a better job of teaching these subjects than the eighth grade parents did (32). These results indicate once again that not only the students in the seventh grade but their parents as well tend to support the Rockland Junior High Program to a greater degree than in the eighth grade. This is not to say that the eighth grade students and parents do not, as the results indicate that they most certainly do, but not to the same degree as in the seventh grade. In the investigator's opinion, as stated before, this is more than likely due to new surroundings and programs provided by the Rockland Junior High for these students as they began their education at a secondary level. By the time they reached the eighth grade some of the glamor has worn off. In effect, the rating of the seventh graders tends to be two-fold, one for their new surroundings and one for the new program, whereas

**TABLE 35**

A REPORT OF THE ANALYSIS OF VARIANCE FOR THE PHONE SURVEY ON ACADEMIC SUBJECTS

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th Grade</td>
<td>26</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>8th Grade</td>
<td>16</td>
<td>16</td>
<td>10</td>
</tr>
</tbody>
</table>

Significant difference at .019
the rating of the eighth graders appears to be reflective of their feelings concerning the new program.

In Table 36 are presented the analysis of variance for the Phone Survey question on Meeting the Child's Needs.

### TABLE 36

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>17</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>March</td>
<td>30</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Significant Difference</td>
<td>.036</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data in Table 36 indicate that the higher rating of the parents in the second survey relative to the Rockland Junior High meeting the child's needs is statistically significant at the .036 level. In the second survey 43 parents as compared to 38 in the first survey gave this question an A or B. The largest increase was in the A category - 17 in the first survey to 30 in the second. There is no significant difference between the rating given by parents of students in the seventh and eighth grades. The second survey was taken a short time after an "Open House" was held in which the teachers, with the assistance of members of the Rockland Parent Advisory Committee, explained the Rockland Junior High Program to the parents. At first there was some confusion on the part of the parents as to the objectives of this new program. This confusion appeared to be cleared up at the "Open House"
which was very well attended.

In Table 37 are presented the analysis of variance for the Phone Survey question Effectiveness of the Instructional Program.

TABLE 37

A REPORT OF THE ANALYSIS OF VARIANCE FOR THE PHONE SURVEY ON EFFECTIVENESS OF INSTRUCTIONAL PROGRAM

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>13</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>March</td>
<td>29</td>
<td>13</td>
<td>4</td>
</tr>
</tbody>
</table>

Significant Difference .035

As presented in Table 37 the higher rating of the parents in the second survey relative to the effectiveness of the instructional program at the Rockland Junior High is statistically significant at the .035 level. In the second survey 42 of the parents gave this question an A or B as compared to 33 on the first survey. Once again the increased emphasis was from 13 to 29 in the A category. There is no significant difference between the ratings given by parents of students in the seventh and eighth grades. Once again, in the opinion of the investigator, this increased support of the effectiveness of the instructional program was a result of the greater understanding of the Rockland Junior High Program that the parents gained at the "Open House" that was held between the time the two surveys were taken.

In summary, the teachers and principal of the Rockland Junior High received very high ratings by the parents in the second survey with an
increase of up to 16% for the principal. The overall rating of how the Rockland Junior High is meeting the student's present needs also received a substantial increase; however, relative to meeting future needs, the number of parents not sure rose 10% between the first and second surveys. The rating of the total program and the grading system were much higher in the second survey, with a 20% and 28% increase respectively.

In comparing the student and parent responses the answers were fairly consistent except for two questions. On these, too much emphasis on the three R's and too much supervision of students, the parents felt there wasn't enough emphasis on either and the students felt there was too much. In their thoughts about the building and teachers both were in very close agreement. Overall the telephone survey appeared to indicate support for the Team Teaching-Team Governance Project.
The fourth objective of the Rockland Junior High Project was, to create a professional environment in which maximum teacher time may be spent on high level professional tasks. The School Personnel Weekly Task Log was used by the Junior High School teaching staff in order to assess the accomplishment of the creation of a professional environment in which maximum teacher time may be spent on high level professional tasks. Each coordinator, teacher, intern and teacher aide in the junior high school completed the task log on a weekly basis.

The first step in preparing the task log was the submission by all teachers of ideas relating to their job performance. The analysis of the teaching act, by the Rockland Junior High School staff, served as a basis for the construction of the instrument. (This log is presented in Appendix D.) These ideas were taken and arranged into three levels. Level I items were considered "most professional"; Level II items were considered "less professional"; and Level III items were considered "non-professional".

Teachers were expected to perform some Level I tasks, many tasks in Level II, and very few in Level III. The Rockland Junior High School interns were expected to perform mostly Level II and Level III tasks, while attempting Level I tasks as their individual competencies progress. The teacher aides were expected to be performing mostly Level III tasks.
In Figure 10 which follows are presented the average scores on the

<table>
<thead>
<tr>
<th>Role</th>
<th>Average Task Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinators</td>
<td>5.7</td>
</tr>
<tr>
<td>Teachers</td>
<td>4.9</td>
</tr>
<tr>
<td>Interns</td>
<td>4.7</td>
</tr>
<tr>
<td>Teacher Aides</td>
<td>3.7</td>
</tr>
</tbody>
</table>

**FIGURE 10 AVERAGE SCORE OF TASK LOGS ACCORDING TO ORGANIZATIONAL ROLE**

task logs according to organizational role. As can be noted, the coordinators received an average score of 5.7; thereby indicating that they are performing higher level tasks than teachers, who received an average score of 4.9. Likewise, the teachers are performing slightly more Level II tasks than the interns, who received an average score of 4.7. As might be expected, teacher aides, with an average score of 3.7, are performing primarily Level III tasks. It can be inferred from the data presented in this table that the interns and teacher aides are relieving the teachers of many of the Level III tasks. The teacher-aide average is higher than it would be because one, of the three aides, worked part of the time as an intern at the time the task log was administered.

The data in Table 38 indicates the number of times the coordinators performed Level I, II and III tasks. As can be seen from these results,
Table 38
Rockland Junior High School Task Log, Coordinators

<table>
<thead>
<tr>
<th>Name</th>
<th>Coordinator Position</th>
<th>Number of Level 1</th>
<th>Number of Level 2</th>
<th>Number of Level 3</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. McC.</td>
<td>F</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>6.6</td>
</tr>
<tr>
<td>R.G.</td>
<td>M</td>
<td>20</td>
<td>17</td>
<td>14</td>
<td>5.4</td>
</tr>
<tr>
<td>G.J.</td>
<td>M</td>
<td>19</td>
<td>15</td>
<td>15</td>
<td>5.8</td>
</tr>
<tr>
<td>D.G.</td>
<td>M</td>
<td>20</td>
<td>22</td>
<td>18</td>
<td>4.9</td>
</tr>
</tbody>
</table>

The English Coordinator with an average score of 6.6, obtained the highest average score. This would indicate she is doing more Level I tasks, on the average, than the other coordinators. This could be accounted for by the fact that the English Department is by far the largest Academic Department in the Rockland School System.

It is also interesting to note that the Science Coordinator, with an average score of 4.9, perceives that he is performing more Level II tasks than Level I. This may be a reflection of his thinking as the Head Negotiator for the Teachers Association.

In Table 39 are presented the number of times the teachers performed Level I, II and III tasks. As can be noted from these results, the vast majority of the teachers see themselves as performing more Level II tasks than either Level I or III. It can be noted that one teacher, in each team,
# Table 39

**Rockland Junior High School Task Log, Teachers**

<table>
<thead>
<tr>
<th>Name</th>
<th>Academic Teams Position</th>
<th>Number of Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team A</td>
<td>J.C. Teacher</td>
<td>74</td>
<td>82</td>
<td>61</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>E.M. Teacher</td>
<td>50</td>
<td>60</td>
<td>53</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>J.R. Teacher</td>
<td>64</td>
<td>62</td>
<td>52</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>R.W. Teacher</td>
<td>49</td>
<td>55</td>
<td>63</td>
<td>4.6</td>
</tr>
<tr>
<td>Team B</td>
<td>L.H. Teacher</td>
<td>40</td>
<td>38</td>
<td>32</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>N.McS. Teacher</td>
<td>53</td>
<td>55</td>
<td>36</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>J.M. Teacher</td>
<td>69</td>
<td>72</td>
<td>51</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>M.R. Teacher</td>
<td>41</td>
<td>59</td>
<td>42</td>
<td>4.7</td>
</tr>
<tr>
<td>Team C</td>
<td>B.B. Teacher</td>
<td>25</td>
<td>34</td>
<td>32</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>K.J. Teacher</td>
<td>61</td>
<td>72</td>
<td>50</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>D.L. Teacher</td>
<td>40</td>
<td>52</td>
<td>49</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>M.O'B. Teacher</td>
<td>56</td>
<td>56</td>
<td>43</td>
<td>5.5</td>
</tr>
<tr>
<td>Team D</td>
<td>J.B. Teacher</td>
<td>62</td>
<td>59</td>
<td>53</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>E.C. Teacher</td>
<td>45</td>
<td>58</td>
<td>62</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>M.C. Teacher</td>
<td>56</td>
<td>59</td>
<td>45</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>C.K. Teacher</td>
<td>44</td>
<td>54</td>
<td>34</td>
<td>4.0</td>
</tr>
<tr>
<td>Team E</td>
<td>M.D. Teacher</td>
<td>56</td>
<td>60</td>
<td>23</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>L.F. Teacher</td>
<td>69</td>
<td>81</td>
<td>70</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>T.G. Teacher</td>
<td>65</td>
<td>64</td>
<td>47</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>J.R. Teacher</td>
<td>61</td>
<td>72</td>
<td>50</td>
<td>4.9</td>
</tr>
</tbody>
</table>
has a higher average score than the other three members of that team. The investigator has observed that each of these individuals have been exceptionally active in the team concert.

The data in Table 40 indicate the number of times and interns and teacher-aides performed Level I, II and III tasks.

TABLE 40
ROCKLAND JUNIOR HIGH SCHOOL TASK LOG, INTERNS AND AIDES

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Number of Level</th>
<th></th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>E.H.</td>
<td>Intern</td>
<td>11</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>J.M.</td>
<td>Intern</td>
<td>11</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>J.P.</td>
<td>Intern</td>
<td>15</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>B.P.</td>
<td>Intern</td>
<td>8</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>P.T.</td>
<td>Intern</td>
<td>9</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>M.P.</td>
<td>Intern</td>
<td>8</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>D.G.</td>
<td>Intern</td>
<td>9</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>C.S.</td>
<td>Intern</td>
<td>8</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>G.S.</td>
<td>Intern</td>
<td>2</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>A.B.</td>
<td>Tea. Aide &amp; Intern</td>
<td>3</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>A.G.</td>
<td>Teacher Aide</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>M.R.</td>
<td>Teacher Aide</td>
<td>3</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

As can be noted from these data in Table 40, the performance of the interns and aides tend to fall in the Level II and III columns. Nevertheless, three of the interns showed a relatively high number of Level I tasks. The aide, who also served as an intern, for a period of time, can
be detected by the high number of Level I and II tasks which she performed, in relation to the other aides.

In summary, the results of the data obtained through the use of the School Personnel Weekly Task Log indicate that there is a differentiation of tasks among the staff personnel roles in the Rockland Junior High School Program. The coordinators appear to be performing the greatest number of Level I (most professional) tasks while the teachers are performing a number of Level I tasks, in addition to a number of Level II tasks. The interns appear to be performing levels of tasks which are similar to the professional teachers; on the other hand, the teacher aides are performing mostly Level III (non-professional) tasks.
Presentation and Analysis of the Data Relating to Objective Number Five

The fifth objective of the Rockland Junior High Project was to provide an educational climate for teachers which will insure a high degree of job satisfaction and enhance the opportunity for increased goal accomplishment. The major instruments used to assess this objective are, (a) Peck Sense of Power Scale, and (b) the Purdue Teacher Opinionaire (PTO).

Figure 11 and Tables 41-47 which follow indicate data on teacher satisfaction and goal accomplishments which was tabulated for purposes of assessing this objective.

**Peck Power Scale.** Rockland Junior High teachers and those in School "X" were given the Peck Power Scale in January, 1972. For purposes of scoring, the responses were dichotomized as shown in Tables 48 and 49 in Appendix G. The scale scores for the teachers of the Rockland Junior High are presented in Table 41. The scale scores for the teachers in School "X" are presented in Table 42. The mean scale score for the teachers at Rockland was 5.50; while the mean scale score for the teachers at School "X" was 5.00. A comparison of the results of the differences in mean scale scores from the two administrations of Peck Sense of Power Scale were subjected to an analysis of variance.
### TABLE 41

**PECK POWER SCALE SCORES FOR THE TEACHERS OF THE ROCKLAND JUNIOR HIGH STAFF**

<table>
<thead>
<tr>
<th>Scale Score</th>
<th>Number of Teachers Making the Score</th>
</tr>
</thead>
</table>
| High Sense of Power | 3
| 9            | 3 |
| 8            | 4 |
| 7            | 0 |
| 6            | 9 |
| 5            | 6 |
| 4            | 3 |
| 3            | 2 |
| 2            | 2 |
| 1            | 1 |
| Low Sense of Power | 0 |
| 0            | 0 |

### TABLE 42

**PECK POWER SCALE SCORES FOR THE TEACHERS OF THE SCHOOL "X" STAFF**

<table>
<thead>
<tr>
<th>Scale Score</th>
<th>Number of Teachers Making the Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Sense of Power</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Low Sense of Power</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In Table 43 are presented the analysis of variance and the adjusted mean scores of the Peck Power Scale.
TABLE 43

PECK POWER SCALE ANALYSIS OF VARIANCE, ROCKLAND AND SCHOOL "X"

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>40.445</td>
<td>1</td>
<td>15.175</td>
<td>.001</td>
</tr>
<tr>
<td>Interaction</td>
<td>2.665</td>
<td>52</td>
<td>0</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

REPORT OF MEANS

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Total Mean Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rockland</td>
<td>30</td>
<td>6.367</td>
<td>1.098</td>
</tr>
<tr>
<td>School &quot;X&quot;</td>
<td>24</td>
<td>4.625</td>
<td>2.123</td>
</tr>
</tbody>
</table>

The data in Table 43 indicate there is a significant difference at the .001 level (F = 15.175) between the schools relative to the teacher sense of power, and no significant difference relative to interaction. The 30 teachers in Rockland have an adjusted mean score of 6.367 as compared to the adjusted mean score of 4.625 for the 24 teachers in School "X". The teachers in Rockland have a strong sense of power as compared to the teachers in School "X". This difference is very significant at the .001 level (F = 15.175). These results show that the teaching staff at the Rockland Junior High have a high sense of power. This tends to indicate that the majority of teachers at the Rockland Junior High more than the teachers at School "X", perceive that they are able to influence the course of events within the school. This would lend support to the concept of team governance now in operation at the Rockland Junior High as
previously explained in Chapter Three. Under this concept each team of four teachers selects a leader for its team. The team leaders then meet with the Building Principal on a weekly basis relative to the administration of the junior high. This concept has clearly given the teacher at the Rockland Junior High more control of their destiny, then they would have under a traditional governance arrangement.

*Purdue Teacher Opinionaire.* (Rockland and School "X", January, 1972)

The data in Table 44 indicates in percentiles the January, 1972 administration of the PTO at Rockland and at School "X". The values of the percentile scale represents the percentage of a norm group of schools that obtained either the same or lower median rating than did Rockland or School "X" on each factor.

In Figure 11 are presented in graph form these same results. As can be noted on the PTO, morale at Rockland Junior High is higher in every instance except Factor 10 (Community Pressures) than at School "X". The principal rated very high in rapport with teachers at Rockland Junior High as compared to School "X". The 91st percentile for Factor 2 (Satisfaction with Teaching) would seem to indicate that the teachers at Rockland Junior High are highly satisfied with teaching. At both schools the teachers are working well together and are satisfied with their salaries. Both faculties are unhappy with school facilities and services. The faculty of Rockland Junior High feels more undue pressure from the community than the faculty at School "X". It would appear that the Team
Teaching-Team Governance Project at the Rockland Junior High was responsible for the higher ratings in Factors 1 through 9. The lower rating for Factor 10 would also appear to be affected by this program as the teachers were concerned about community reaction.

TABLE 44

PURDUE TEACHER OPINIONAIRE - JANUARY, 1972, ROCKLAND AND SCHOOL "X"

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rockland</th>
<th>School &quot;X&quot;</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Teacher rapport with principal</td>
<td>87</td>
<td>17</td>
<td>+70</td>
</tr>
<tr>
<td>2 Satisfaction with teaching</td>
<td>91</td>
<td>66</td>
<td>+25</td>
</tr>
<tr>
<td>3 Rapport among teachers</td>
<td>73</td>
<td>60</td>
<td>+13</td>
</tr>
<tr>
<td>4 Teacher salary</td>
<td>89</td>
<td>87</td>
<td>+12</td>
</tr>
<tr>
<td>5 Teacher load</td>
<td>70</td>
<td>64</td>
<td>+6</td>
</tr>
<tr>
<td>6 Curriculum issues</td>
<td>87</td>
<td>19</td>
<td>+68</td>
</tr>
<tr>
<td>7 Teacher status</td>
<td>51</td>
<td>16</td>
<td>+35</td>
</tr>
<tr>
<td>8 Community support of education</td>
<td>53</td>
<td>15</td>
<td>+38</td>
</tr>
<tr>
<td>9 School services and facilities</td>
<td>21</td>
<td>12</td>
<td>+9</td>
</tr>
<tr>
<td>10 Community pressures</td>
<td>82</td>
<td>93</td>
<td>-9</td>
</tr>
</tbody>
</table>

Purdue Teacher Opinionaire (Rockland, January and March, 1972).

The data in Table 45 indicate the results of the January, 1972 and March, 1972 administration of the PTO at Rockland. The value of the percentile scales represent the percentage of a norm group of schools that obtained either the same or lower median score ratings than did Rockland in each factor.
Figure 11  PURDUE TEACHER OPINIONAIRE - JANUARY, 1972 Rockland and School 'X'
In Figure 12 are presented in graph form these same results. Factor 9, school facilities and services, increased more than twice. This was probably due to minor renovations and new equipment being provided. Community pressure (10) dropped 31 points which would indicate that as the program progressed the teachers felt more undue pressure from the town. The teacher salary factor (4) remained constant as the salary schedule did not change. Factor 6 and 7 showed a drop.

**Purdue Teacher Opinionaire.** (Rockland, January and March, 1972.)

Table 45 represents the results of January, 1972 and March, 1972.

**TABLE 45**

**PURDUE TEACHER OPINIONAIRE, ROCKLAND, JANUARY AND MARCH, 1972**

<table>
<thead>
<tr>
<th>Factor</th>
<th>January 1972</th>
<th>March 1972</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Teacher rapport with principal</td>
<td>87</td>
<td>56</td>
<td>-29</td>
</tr>
<tr>
<td>2 Satisfaction with teaching</td>
<td>91</td>
<td>71</td>
<td>-20</td>
</tr>
<tr>
<td>3 Rapport among teachers</td>
<td>73</td>
<td>44</td>
<td>-29</td>
</tr>
<tr>
<td>4 Teacher salary</td>
<td>89</td>
<td>89</td>
<td>0</td>
</tr>
<tr>
<td>5 Teacher load</td>
<td>70</td>
<td>53</td>
<td>-17</td>
</tr>
<tr>
<td>6 Curriculum issues</td>
<td>87</td>
<td>55</td>
<td>-22</td>
</tr>
<tr>
<td>7 Teacher status</td>
<td>51</td>
<td>33</td>
<td>-18</td>
</tr>
<tr>
<td>8 Community support of education</td>
<td>53</td>
<td>50</td>
<td>-3</td>
</tr>
<tr>
<td>9 School facilities and services</td>
<td>21</td>
<td>51</td>
<td>+30</td>
</tr>
<tr>
<td>10 Community pressures</td>
<td>82</td>
<td>51</td>
<td>-31</td>
</tr>
</tbody>
</table>
Figure 12 RESULTS OF PURDUE TEACHER OPINIONAIRE AT ROCKLAND JUNIOR HIGH, January 1972 - March 1972

Factor 1. Teacher rapport with principal
Factor 2. Satisfaction with teaching
Factor 3. Rapport among teachers
Factor 4. Teacher salary
Factor 5. Teacher load
Factor 6. Curriculum issues
Factor 7. Teacher status
Factor 8. Community support of education
Factor 9. School facilities and services
Factor 10. Community pressures
In summary, in the Peck Power Scale twenty-seven out of thirty-two teachers in Rockland are above the median indicating a high sense of power. In School "X", however, twelve out of twenty-four teachers fall below the median indicating a low sense of power. This trend shown in the Peck Power Scale is further supported by the results from the first administration of the Purdue Teacher Opinionaire where it is shown the Rockland teachers have higher morale scores than the teachers from School "X" in all categories except Community Pressures. The low score in this factor is evidence of the feeling of undue pressure on the Rockland teachers from the community. The Rockland teachers scored very high on factor two, satisfaction with teaching, whereas teachers in both schools rated school facilities and services very low. Community support of schools and teacher status, although scored higher by the teachers in Rockland, received a much lower rating compared to the other factors by both faculties. This could be a reflection of the many criticisms that education has been receiving lately. The Rockland teachers rated factor one, teacher rapport with the principal and factor six, curriculum issues, very high as compared to the teachers in School "X".

The results of the second administration in Rockland of the Purdue Teacher Opinionaire, when compared with the first administration, indicate a drop in these critical areas, (a) Teacher Rapport with the Principal, (b) Rapport Among Teachers and (c) Curriculum Issues. The scores related to Teacher Salary and Community Support remained about the same
for both administrations of the PTO. School Facilities and Services, however, took a big jump forward as a result of minor renovations and additional monies for supplies. Community pressures as the new program progressed appear to be even more concern to the teachers at this time.

**Related Findings**

It is too soon to get an accurate appraisal of the changes which have taken place in the Rockland Junior High School. Some of those changes are long range in that the full effect will not be known for several years; others are changes that might have been made anyway, regardless of the fact that the school has undergone a radical transformation.

It is felt that both the faculty and the students like what has happened; that school is a better place in which to teach and learn. Two sets of tables lend substance to this feeling.

Through the end of January, 1972 the school has experienced a remarkable 24% reduction in the student absentee rate when compared to the rate of the previous year as shown in Table 46.
### TABLE 46

**A COMPARISON OF STUDENT ABSENTEES FOR 1970-71 AND 1971-72**

<table>
<thead>
<tr>
<th>Month</th>
<th>1970-71 Days</th>
<th>No. Days Absent</th>
<th>1971-72 Days</th>
<th>No. Days Absent</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>18</td>
<td>537</td>
<td>17</td>
<td>422</td>
<td>-115</td>
</tr>
<tr>
<td>October</td>
<td>18</td>
<td>798</td>
<td>18</td>
<td>496</td>
<td>-302</td>
</tr>
<tr>
<td>November</td>
<td>17</td>
<td>808</td>
<td>18</td>
<td>712</td>
<td>-96</td>
</tr>
<tr>
<td>December</td>
<td>17</td>
<td>1,034</td>
<td>19</td>
<td>839</td>
<td>-195</td>
</tr>
<tr>
<td>January</td>
<td>20</td>
<td>1,734</td>
<td>20</td>
<td>1,254</td>
<td>-480</td>
</tr>
<tr>
<td>Totals</td>
<td>190</td>
<td>4,911</td>
<td>192</td>
<td>3,723</td>
<td>-1,188</td>
</tr>
</tbody>
</table>

The percentage decrease will be even greater if one considers that the current 1971-72 school year has thus far consisted of two school days more than the previous year. Through the first five months of the school year student suspensions have dropped to zero, as against seven in the year previous as shown in Table 47.

### TABLE 47

**A COMPARISON OF STUDENT SUSPENSIONS FOR 1970-71 AND 1971-72**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>October</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>November</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>December</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>January</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

**Teacher Absentees**

Teacher absenteeism, when compared to the five year average from
the school year 1967-68 to the present has decreased in the current year by 20%.

The average absence rate for the first five months of the five school years was 4.13 days per teacher. The teacher absentee rate for the current year is 3.50 days per teacher. These rates have not been adjusted for the actual number of days school has been in session. Were they so adjusted, the decreases in teacher absenteeism would appear even more favorable.

**Student Vandalism**

One seemingly fair assumption to make is that as school pride increases vandalism decreases. We have not developed an instrument to measure school pride, but we have interviewed the custodial staff to determine the frequency and extent of the destruction of school property. Estimates by the custodians reveal a decrease of from 80 to 90%. Since half of the student body was in this school last year, the decrease seems truly remarkable. At this time it is not possible to put a dollar valuation on the decrease, but it does appear that if the present diminished vandalism rate continues a saving of from $8,000 to $10,000 will be realized.

The lessened vandalism is immediately apparent to anyone familiar with the Junior High property. While one might point to the promotion of several chronic delinquents as a contributing factor, the overall impression is that the school suffers less at the hands of its present student
occupants than it suffered for many years in the past.

**Student Spirit**

Like school pride, school spirit is difficult to measure. The faculty is unanimous, however, in assessing the spirit of the school to be much higher than before. There is a cheerfulness among the students and a sense of well-being that had been missing. There is a contentment and even a feeling of joy observable that had not been present. The atmosphere is different.

**Teacher Morale**

It was admitted that teacher morale was exceedingly low. Even though some problems still exist, there can be no doubt that a transformation has taken place. We have a happy faculty which individually genuinely likes teaching in the Junior High School. The atmosphere is far more relaxed, most of the tensions and hostilities between individual teachers have moderated, there is rapport and cooperation where in some instances neither existed before. This is not to deny conflicts or the individual slacker. But the faculty is learning better ways of dealing with its disagreements or gaining other's support. They are working at looking at and treating one another as human beings and professionals, of finding the integrity of each as a peer, and of appreciating our individual differences.
CHAPTER SIX

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to assess the Team Governance-Team Teaching Program in the Junior High School of Rockland, Massachusetts, as well as to provide a detailed account of its initiation, planning, organization and operation. The findings were presented and analyzed in the preceding chapter. In this chapter the methodology used in the study will be reviewed and the findings will be summarized and presented. The conclusions arrived at from these findings will follow. Then the recommendations based on these findings and conclusions will be presented.

Summary and Conclusions

A summary of the procedures used to assess the effectiveness of the five objectives as well as a summary of the findings and the conclusions are presented by objective.

Summary and Conclusions of Objective One

To Increase Individual Student Academic Achievement and Skills In Reading, Math and Work-Study Habits.

Summary of procedures. To assess this objective, the Iowa Tests of Basic Skills in Reading Comprehension, Math Computation and Work-Study Skills were administered to a random sample of over one hundred students at the Rockland Junior High School in May, 1971. The Iowa Tests of Basic Skills were also administered to a matched group of over
one hundred students from a school similar in geographic location and in the socio-economic make-up of its students. The individual student scores on the Iowa Tests from both schools were compared at each grade level, and the control and experimental groups were selected from the initial group of students according to the following procedures:

1. For each grade level tested, students from Rockland and School "X" were matched according to sex and national stanine in Reading, yielding at least 80 matched pairs.

2. For each grade level tested, students from Rockland and School "X" were matched according to sex and national stanine in Mathematics Computation, yielding at least 80 matched pairs.

3. For each grade level tested, students from Rockland and School "X" were matched according to sex and national stanine in Work-Study Skills, yielding at least 80 matched pairs.

In April, 1972, all the students in the experimental and control groups were retested on the Iowa Tests of Basic Skills. The grade equivalent scores for each grade level at Rockland Junior High School were compared with the grade equivalent scores for each grade level at School "X". To determine whether the differences in mean scores for the two schools are significant, the data was subjected to an analysis of variance.

Summary of findings. In Reading the Rockland seventh grade students gained 50 months more than School "X" and the eighth grade students gained 52 months. In Mathematics the Rockland eighth grade
students realized a gain of 45 months over School "X". However, the seventh grade students in Rockland achieved 62 months less, although the average gain was ten months per student. In the area of Work-Study Skills it appears that the Rockland students did favorably in both grades with a gain over School "X" of 116 and 68 months respectively.

The differences in the seventh and eighth grade Reading scores, as well as the eighth grade Mathematics scores, although greater than that of School "X" were not statistically significant. The greater difference in the seventh grade Mathematics scores for School "X" was not significant either. The greater differences, however, in the Work-Study Skills for grades seven and eight for Rockland were statistically very significant.

Thus, a statistical difference in favor of the experimental group (Rockland) did not emerge in Reading and Mathematics when an analysis of means gain was presented even though this school scored higher in three out of four cases. This does not indicate, however, that Rockland has met with no success in the Accomplishment of Objective Number One as the statistical difference in favor of Rockland on Work-Study Skills was significant.

Conclusions

1. The findings seem to indicate that even though Rockland and School "X" are doing equally as well on Reading and Mathematics, that Rockland with its team-teaching program is doing better in preparing their students to work more independently.
2. It is the opinion of the investigator that improvement in a student's ability to work more independently will bring about improvement in his achievement in areas such as Reading and Mathematics.

3. Based on the findings grade eight did not achieve as well as grade seven in either Rockland or School "X".

4. The students in the higher stanines did not achieve as much as the students on the lower end.

5. Other evidence in this study points to the overall high morale of both the students and teachers at the Rockland Junior High. This high morale could contribute to better teaching and learning, thus increased achievement in the areas of Reading and Mathematics as well as other subject areas.

6. Generally, there tends to be a drop in the level of achievement in traditionally basic skills when a new program that relaxes a policy of strict discipline is adopted. The Team Governance-Team Teaching Project at the Rockland Junior High is such a program.

7. The fact that the achievement scores in five out of the six areas tested still increased, with two of them significantly, indicates the apparent success of Objective One.

8. This study attempted to assess three areas of basic skills only. A further study should concentrate on other related skills as well as affective learning areas.
Summary and Conclusions of Objective Two

To Create a Unique Educational Environment Conducive to Achieving Maximum Positive Student Attitudes about Education.

Summary of procedures. To assess this objective, the Student Morale Inventory (SMI) was used as the primary instrument. The SMI was administered to fifty students at Rockland Junior High and fifty students at School "X". These students were chosen by a random selection process from the students selected to participate in the administration of the Iowa Tests of Basic Skills.

The SMI was administered to these students in January, 1972. The mean scores for the two groups were compared for each of the seven categories represented by the subscale of the SMI. The data was subjected to an analysis of variance to determine the statistical level of significance of the differences in mean scores.

In addition to the above procedure, a total of seven questions were selected from the SMI. Each question represented one of the subscales on the SMI. These questions were asked of the parents, changing the wording only to the extent necessary to the parental situation.

Summary of findings. In the subscale School Plant the students in both Rockland and School "X" gave their school approximately the same rating, 5.1 and 5.4 respectively. In the area of Instruction the Rockland students indicated a higher rating of 6.5 compared to 5.3 for School "X". The Administrators in Rockland received a higher score of 6.5 whereas in
School "X" it was only 5.1. The Community Support of schools in Rockland was greater than that of School "X" with a rating of 5.9 compared to 5.2. In the areas of Relationship with Other Students and Teacher-Student Relations, the Rockland students gave their school extremely high ratings, 8.0 and 7.2 respectively. School "X" received a rating of 6.6 for Relations with Other Students and 6.5 for Teacher-Student Relations. In the General category Rockland received a mean score of 6.3 and School "X" 4.5. The average mean student morale at Rockland was 65.00 as compared to 55.14 at School "X".

In comparing results of parent and student responses on seven questions from the SMI the students and parents agree on five out of the seven questions. The two they didn't agree on are "There is too much emphasis on the 'three R's' at this school and not enough opportunity for students to develop their own interests"; and "There is too much supervision of students at this school". It would seem to be only natural that students and parents would disagree on these two.

The data indicates there is a significant difference between Rockland and School "X" relative to student morale. The results indicate that the difference was extremely significant with the Rockland students in both grades giving their program a higher rating. The students at Rockland have a much higher morale than do the students of School "X". Their morale was higher in all categories except that of the school plant where they were almost identical. The morale is particularly high in the selec-
tions of relations with other students and in teacher-student relations.

Conclusions

1. That eighty-seven percent of the students at Rockland Junior High look forward to coming to school indicates a good reflection on the staff and the program.

2. The attitudes and motivation of the Rockland students at the time the SMI was administered appears to be positive.

3. It is the opinion of the investigator as well as members of the teaching staff he talked to that if the SMI were given prior to the time the Team Governance-Team Teaching Program was initiated that the students in Rockland would have given their school a very low rating as compared to School "X". As indicated by the case study outline in Chapter Three, the Rockland Junior High had about the lowest morale possible.

4. Subscale one indicates conditions of the school plant in both Rockland and School "X" tend to have an adverse effect on student morale.

5. It is the opinion of the investigator that the high morale now evidenced in the Rockland Junior High is a direct result of the Team Governance-Team Teaching Program. Prior to the initiation of this program a strict discipline policy existed not only for the students but for the teachers as well. This policy resulted in an extremely unhappy staff which was reflected in their teaching. This in turn had an adverse effect on the students.

6. With the Team Governance aspect of this program, all teachers
are involved in the decision-making process which resulted in a marked increase in staff morale. This had been indicated in the Purdue Teacher Opinionaire.

7. This increased staff morale has generalized to the students and this effect combined with the Team Teaching improved the overall morale at the Rockland Junior High.

Summary and Conclusion of Objective Three

To Increase Positive Community Attitudes and Support for the School and Junior High Education.

Summary of procedures. To assess progress in meeting this objective, Rockland's community attitudes were surveyed by means of two structured telephone surveys. These were conducted as follows:

1. In January, 1972, fifty parents were called, thirty of whom were selected at random from the group of parents whose children took the Student Morale Inventory. The remaining parents were selected randomly from the attendance rolls. Each parent was asked the same questions in the same manner.

2. In March, 1972, the second telephone survey was conducted. This survey included fifty randomly selected parents.

The same questions were asked in the same manner for both surveys. The basic form of this survey was adapted from an instrument devised to measure community attitudes by the Project Lighthouse (Title III-ESEA Project No.OEG 3-7-703873574) staff.

The data from the survey was processed and presented in table form.
An analysis of variance was used to determine the statistical level of significance of the differences which appear between the two surveys.

**Summary of findings.** In comparing results of parent and student responses on seven questions from the SMI the students and parents agree on five out of the seven questions. The two they don't agree on are "There is too much emphasis on the 'three R's' at this school and not enough opportunity for students to develop their own interests", and "There is too much supervision of students at this school". It would seem to be only natural that the students and parents would disagree on these two. There was no significant difference on the seven SMI questions asked of the parents on either telephone survey as compared to the student responses.

There was no significant difference between the first and second survey as to how well the parents thought the Rockland Junior High was teaching the basic academic subjects. There was, however, a significant difference in that the seventh grade parents felt the teachers were doing a better job of teaching these subjects than the eighth grade parents did. This indicates once again that not only the students in the seventh grade but their parents as well tend to support the Rockland Junior High Program to a greater degree than in the eighth grade. This is not to say that the eighth grade students and parents do not, as the results indicate that they most certainly do, but not to the same degree as in the seventh grade. In the investigator's opinion, as stated before,
this is more than likely due to new surroundings and programs provided by the Rockland Junior High for these students as they began their education at a secondary level. By the time they reached the eighth grade some of the glamour has worn off. In effect rating of the seventh graders tend to be two-fold, one for their new surroundings and one for the new program, whereas the rating of the eighth graders tends to be reflective of their feelings concerning the new program.

The data indicates that the higher rating of the parents in the second survey relative to the Rockland Junior High meeting the child's needs is significant. In the second survey 43 parents as compared to 38 in the first survey gave this question an A or B. The largest increase was in the A category - 17 in the first survey to 30 in the second. There was no significant difference between the rating given by parents of students in the seventh and eighth grades. The second survey was taken a short time after an "Open House" was held in which the teachers, with the assistance of members of the Rockland Parent Advisory Committee, explained the Rockland Junior High Program to the parents. At first there was some confusion on the part of the parents as to the objectives of this new program. This confusion was cleared up at the "Open House" which was very well attended and rated extremely successful by everyone involved.

The higher rating of the parents in the second survey relative to the effectiveness of the instructional program at the Rockland Junior High was also significant. In the second survey, 42 of the parents gave this ques-
tion an A or B as compared to 33 on the first survey. Once again the increased emphasis was from 13 to 29 in the A category. There was no significant difference between the ratings given by parents of students in the seventh and eighth grades.

**Conclusion**

1. In the opinion of the investigator, this increased support of the effectiveness of the instructional program was a result of the greater understanding of the Rockland Junior High Program that the parents gained at the "Open House" that was held between the time the two surveys were taken.

2. On the open-ended questions the vast majority of the responses were favorable to the program, especially once again in the areas of relations with other students and teacher-student relations.

3. The poor condition of the building resulted in many negative replies.

4. The same group of parents should have been called for each survey as by using different groups it was difficult to make accurate comparisons.

5. Based on the responses of the telephone surveys as well as letters received from teachers and parents in praise of the Junior High Program, there appears to be a positive increase in community attitudes and support for the Rockland Junior High. This attitude was also reflected in an approximately 50% increase in the Junior High School budget approved by the School Committee. It is the firm opinion of the investigator based on
past attitudes towards the Junior High School that this would not have happened if the Team Governance-Team Teaching Program was not initiated.

**Summary and Conclusions of Objective Four**

To Create a Professional Environment in which Maximum Teacher Time may be spent on High Level Professional Tasks.

**Summary of procedures.** In order to assess accomplishment of this objective, an instrument called the School Personnel Weekly Task Log was used. The Task Log was developed in the following manner:

While formulating the plans for their program, one of the activities in which the Rockland Junior High staff participated was an analysis of the teaching act. The teachers "brainstormed" in order to analyze the various components comprising teaching. The tasks were then categorized according to complexity: most complex (highly professional), less complex (less professional), and least complex (paraprofessional and clerical). The resulting lists were refined until a total of sixty tasks emerged. These consisted of 20 Level 1 tasks (most professional), 22 Level 2 tasks (less professional), and 18 Level 3 tasks (least professional). The items were scrambled and assembled in the form of a log.

In the proposed study, each teacher, intern, and teacher aide self-administered the Task Log each week. These responses were weighted according to the level and number of times the task has been performed. This information was then totaled.

The data from these responses were presented in table form, and the findings were analyzed. This analysis consisted of attempting to deter-
mine if the level of tasks which the teachers, interns, and teacher aides performed were substantially different.

**Summary of findings.** As can be noted by the data in the previous chapter, coordinators at an average score of 5.7 are performing higher level tasks than teachers with an average score of 4.9. Likewise, teachers at an average score of 4.7 are performing more Level 2 tasks than interns with an average score of 4.7. As might be expected, teacher aides with an average score of 3.7 were performing primarily Level 3 tasks. It can be inferred from this data that the interns and teacher aides were relieving the teachers of most of the Level 3 tasks. The teacher aide average was higher than it would be because one of the aides worked part of the time as an intern at the time the task log was filled out.

The English Coordinator with an average score of 6.6 obtained the highest average score which would indicate she was doing more Level 1 tasks on the average than the other coordinators. This could be accounted for by the fact that the English Department was by far the largest Academic Department in the Rockland School System. It was also interesting to note that the Science Coordinator with an average score of 4.9 believes he was performing more Level 2 tasks than Level 1. This may be a reflection of his thinking as the Head Negotiator for the Teachers Association.

The vast majority of the teachers see themselves as performing more
Level 2 tasks than either Level 1 or 3. It can be noted in each team one teacher had a higher average score than the other three members of that team. In each case these individuals have been exceptionally active in the team concept.

The performance of the interns and aides tend to fall in the Level 2 and 3 columns. Three of the interns who showed a higher number of Level 1 tasks misconstrued their responsibility to the program in its earlier stages. The aide who also served as an intern for a period of time can be clearly indicated by the number of Level 1 and 2 tasks she performed in relation to the other aides.

Conclusions

1. It would seem to indicate that a team concept with flexible staffing gives the classroom teacher the opportunity to spend more of her time on tasks of a professional level. By providing interns and aides to perform those tasks which tend to be less or non-professional certainly lends more efficiency to any educational process.

2. Even though there was an overlapping of the various task levels by teachers, interns and aides, most of them pretty well fell into categories expected. The results of the Weekly Task Log has been and will continue to be used to indicate to teachers, interns and aides those levels at which they should be placing their greatest emphasis.

3. Due to the innovative nature of the intern program specific tasks for this group was not clearly defined.
4. The Weekly Task Log should be used over a longer period of time to assess this objective more effectively.

5. The interns and aides have performed many of the Level 3 tasks formerly done by the teachers. This in turn has given the teachers time to carry out many high level professional tasks not possible before. Examples of these tasks are the formation of many academic clubs and mini courses during the former study periods. One group of teachers proposed and organized a program by the Massachusetts Department of Public Health relative to the problems of alcohol among teenagers. Still another group of teachers set up a community aid project whereby Rockland Junior High students would assist various needy citizens not only during the resource period, but Saturdays and Sundays as well. A third group established a community resource bank designed to bring various talents of people in the community into the schools for educational programs.

6. One of the outstanding side-effects of the use of the interns and aides (flexible staffing) turned out to be the task performance of the various team leaders. The administration was able to view these teachers carrying out tasks that were not possible under the traditional program. Consequently, two of the team leaders have since received promotions within the school system.

7. It is the opinion of the investigator that the Team Governance-Team Teaching Program at Rockland Junior High created a professional
environment in which maximum teacher time is spent on high level professional tasks.

Summary and Conclusion of Objective Five

To Provide an Educational Climate for Teachers Which Will Insure a High Degree of Job Satisfaction and Enhance the Opportunity for Increased Goal Accomplishment.

Summary of procedures. In order to assess the accomplishment of this objective, the Purdue Teacher Opinionaire (PTO) was utilized as a primary tool.

The PTO was administered to the Rockland Junior High School and School "X" staff in January, 1972, and again in March, 1972, to the Rockland staff. To obtain the needed information:

1. The results of the Rockland Junior High staff were compared with School "X". This comparison was made for each of the ten subcategories comprising the PTO.

2. A comparison of the results of the two PTO administrations conducted at Rockland was made. This comparison was made for each of the ten subcategories comprising the PTO.

The raw data from the PTO was processed at the Measurement and Research Center at Purdue University, Lafayette, Indiana. An analyses of the processed data for determining statistical levels of significance in the comparisons was made.

In addition to the PTO, the Peck Sense of Power Scale was also used to assess the accomplishment of Objective Five. The Peck Sense of Power
Scale was administered to the Rockland Junior High and School "X" teaching staff in January, 1972. A comparison of the results of the two administrations was made, and the differences were subjected to an analysis of variance.

Summary of findings Peck Power Scale. The data indicated that there was a significant difference between the schools relative to the teacher sense of power. The 30 teachers in Rockland had a mean score of 6.367 as compared to the mean score of 4.625 for the 24 teachers in School "X". The teachers in Rockland showed a strong sense of power as compared to the teachers in School "X". This difference was very significant. These results showed that the teaching staff at the Rockland Junior High have a high sense of power. This tends to indicate that the majority of teachers at the Rockland Junior High believe they are able to influence the course of events within the Rockland Junior High School. This would lend support to the concept of Team Governance now in operation at the Rockland Junior High as previously explained in Chapter Three. Under this concept each team of four teachers selects a leader for its team. The team leaders then meet with the building principal on a weekly basis to discuss the administration of the junior high. This concept has clearly given the teachers at the Rockland Junior High more control of their destiny then they normally would have under a traditional type arrangement.

Summary of findings of the Purdue Teacher Opinionnaire. On the first
administration of the PTO between Rockland and School "X", morale at the Rockland Junior High was quite high, higher in every instance except Factor 10 than at School "X". The principal rated very high in rapport with teachers at Rockland Junior High. The ninety-first percentile for Factor 2 indicated that the teachers at Rockland Junior High are highly satisfied with teaching. At both schools the teachers were working well together and were satisfied with their salaries. Both faculties were unhappy with school facilities and services. The faculty of Rockland Junior High felt undue pressure from the community as opposed to the faculty at School "X".

In the second administration of the PTO in Rockland the overall drop in most factors appear to be due to a plateau being reached and some dissatisfaction setting in when all goals couldn't be reached. Factors 1, 2, 3 were influenced by internal misunderstanding and dissatisfaction which was straightened out as the year progressed. Factor 9, school facilities and services, increased more than twice. This was due to minor renovations and new equipment being provided. Community pressure (10) dropped 31 points which would seem to indicate that as the program progressed the teachers felt undue pressure from the town. The teacher salary factor (4) remained constant as the salary schedule did not change. Factors 6 and 7 showed a drop as teachers realized that this program resulted in a heavier workload rather than less and that curriculum issues were not always easily resolved even when they had an opportunity to
vote on those issues.

Conclusions

1. The Peck Power Scale indicated that the teachers in Rockland believed they had a stronger sense of power than did the teachers of School "X".

2. On the first administration of the Purdue Teacher Opinionaire the data showed that the Rockland teachers had extremely high morale.

3. On the second administration the teacher morale in Rockland tended to drop in most areas. In general discussions with staff, the investigator determined that in spite of the dip in morale, teachers were still noticeably pleased with the project.

4. The Monday afternoon meetings between the team leaders and the building principal, which were open to all staff members, created a line of communication that never existed in the Junior High before. The Wednesday afternoon meetings in which every member of the staff had an opportunity to be heard and to express their opinions tended to eliminate the usual rumors that seem to permeate most schools.

5. The dip in teacher morale as the school year progressed was expected. Even though the teachers were excited and pleased about being involved in the decision-making process, they found it difficult to come to unanimous decisions on most issues. In fact, quite often decisions were made by the group that if made by the principal under the previous arrangement would have been subject to criticism. It was soon discovered
by all concerned that total involvement in the operation of a school meant many additional hours of work.

6. Even though some problems still exist, there can be no doubt that a transformation has taken place. There is a happy faculty which individually genuinely likes teaching in the Junior High School. The atmosphere is far more relaxed, most of the tensions and hostilities between individual teachers have moderated, there is rapport and cooperation where in some instances neither existed before. This is not to deny conflicts or the individual slacker. But the faculty is learning better ways of dealing with its disagreements or gaining other's support. They are working at looking at and treating one another as human beings and professionals, of finding the integrity of each as a peer, and of appreciating their individual differences.

7. The Rockland Junior High Program has provided an educational climate that gave the teachers a high degree of job satisfaction. This program has also enhanced the opportunity for increased goal accomplishments for the staff.

**Recommendations**

1. A second year assessment of the Team Governance-Team Teaching Project at the Rockland Junior High School should be carried out.
   a. The achievement scores for Rockland in Reading, Math and Work-Study Skills for the 1972-73 school year should be compared with those of 1971-72 to determine if the previous gains
are maintained or if additional gains are made.

b. The Student Morale Inventory should be administered to the Rockland students earlier in the year as well as near the end. The eighth grade results should be compared with their scores for the 1971-72 school year to determine if any changes in attitudes have developed.

c. The students in the eighth grade in School "X" should take the Student Morale Inventory at the same times as those in Rockland. These results should be compared to determine if after a second year the attitudes of the Rockland students change in relation to those of School "X".

d. Two telephone surveys should be conducted with additional time between surveys. The same group of parents should be selected for both surveys to determine more accurately changes, if any, in community attitudes.

e. The "Daily Task Log" should be conducted for a longer period of time to determine the areas of overlapping. In-service programs should be held to assist teachers, interns and aides in selecting those tasks that would fall into their category.

f. The Peck Power Scale and Purdue Teacher Opinionnaire should be administered in Rockland to determine if the teachers still have a strong sense of power and high morale. These results should be compared with those of 1971-72.
2. An in-depth study of the role of the building principal in relation to Team Governance should be made.
   a. Construct and administer a survey scale reflecting the teachers' views and expectations of the building principal in Rockland Junior High School and another comparable junior high school.
   b. On the basis of random sampling survey other junior high school administrators to determine the extent of staff and program control and compare these results to those of the Rockland Junior High School Principal.

3. Assess the relationship of the Rockland Junior High curriculum to the 1972 State Department of Education's Goals and objectives as follows:
   a. **Physical and emotional well-being.** Education should contribute to the learner's physical and emotional well-being, especially to a sense of personal worth and to a capacity for influencing one's own destiny.
   b. **Basic communication skills.** Education should develop in each learner the basic skills needed for communication, perception, evaluation, and conceptualization of ideas. Among the most important are reading, writing, speaking, listening, visual and computational skills.
   c. **Effective uses of knowledge.** Education should provide for each learner access to man's cultural heritage, stimulate in-
tellectual curiosity, and promote intellectual development.

d. **Capacity and desire for lifelong learning.** Education should foster and stimulate in each learner the natural desire for lifelong learning and should develop the skills necessary to fulfill that desire.

e. **Citizenship in a democratic society.** Education should provide each learner with a knowledge and understanding of how our society functions in theory and in practice; education must also foster individual commitment to exercise the rights and responsibilities of citizenship and to protect the rights of others.

f. **Respect for the community of man.** Education should provide each learner with knowledge and experience which contribute to an understanding of human similarities and differences and which advance mutual respect for humanity and for the dignity of the individual.

g. **Occupational competence.** Education should provide the learner with the skills, experience and attitudes, and the guidance for initial job placement; it is equally important for the learner to develop a capacity to adapt to changing conditions.

h. **Understanding of the environment.** Education should provide each learner with knowledge and understanding of the social,
physical, and biological worlds and the balance between man and his environment and should develop attitudes and behavior leading to intelligent use of the environment.

i. **Individual values and attitudes.** Education should expand and advance the humane dimensions of all learners, especially by helping them to identify and cultivate their own spiritual, moral, and ethical values and attitudes.

j. **Creative interests and talents.** Education should provide each learner with varied opportunities to nurture interests, to discover and to develop natural talents, and to express values and feelings through various media.

4. Assess professional development and growth patterns of staff.
   a. Staff should be encouraged to visit other schools as a part of their professional awareness.
   b. Consultants from University of Massachusetts and other school systems should be invited to visit the school on a regular basis to insure the objectivity of the evaluation of this development.
   c. Total faculty development in planning the curriculum should be emphasized.

5. Each team should select and develop one area in curriculum innovation such as:
   a. Open Classroom
   b. Community Resources
c. Instructional Resource Center

d. Career Education

e. Teaching Packets

6. Evaluate functions and role of interns in following areas: Ability to motivate pupils, ability to organize subject matter, discipline and control of class, ability to communicate, provide for individual pupil differences, poise before a class, understanding of children or adolescence, ability to ask questions, ability to adapt, originality and imagination in teaching, knowledge of subject matter, utilization of classroom chalk and bulletin boards, create attentive attitude by students, advanced preparation for class, specific objectives for lesson understood by pupils, utilization of audio-visual materials, two-way communication between teachers and students, students prepared to participate in learning process, develop mutual respect between teacher and student, effective utilization of voice, clear explanation of new terms and principles, reasonable transition between one idea to the next by teacher, lesson appropriate for subject and grade level, subject matter within the framework of curriculum guides, offers suggestions for follow-up activities, utilization of supplementary resources, create proper physical condition of room, non-verbal mannerisms contributing to effective learning, allow students to freely ask questions relative to lessons, coopera-
tion with administration, understand role of colleagues at similar grade levels, understand role of specialists, understand role of administrators and understand philosophy of school system.
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APPENDICES
PLEASE NOTE:

Pages 227-238, "Iowa Tests of Basic Skills", ©1964 by State University of Iowa and pages 255-260, "The Purdue Teacher Opinionaire", ©1964 by The Purdue Research Foundation not microfilmed at request of author. Available for consultation at University of Massachusetts Library.

UNIVERSITY MICROFILMS.
Iowa Tests of Basic Skills

MULTI-LEVEL EDITION FOR GRADES 3-9

FORM 4

PREPARED AT THE STATE UNIVERSITY OF IOWA UNDER THE DIRECTION OF

E. F. Lindquist and A. N. Hieronymus

WITH THE ASSISTANCE OF

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Marking Your Name

Your answers to the test exercises will be marked on a separate answer sheet. The answer sheet will be scored by a machine. This machine will also "read" and copy your name from the answer sheet. To make this possible, you must mark your name in a special way on the "name block" on the answer sheet.

Look at the Sample Name Block below. This block has been marked for ARTHUR L. SWANSON. The name has been printed in the row of boxes across the bottom of the block. Notice that the last name is printed first, then the first name, then the middle initial. Notice, too, that a box has been left blank after SWANSON, and one after ARTHUR, to separate these parts of the name.

Notice that in the alphabet column above each letter the same letter has been covered with a heavy black mark. The S has been blackened above the S in SWANSON, the W above the W, and so on. The blank ovals at the top of the columns have been filled in above the empty boxes.

Study this sample carefully. Do not mark your own name on your answer sheet until you are told to do so.

SAMPLE NAME BLOCK

This test booklet is used by pupils in grades 3-9. You will answer some exercises in each of eleven tests, but never all the exercises in any test. The directions for each test will tell you where to begin and where to stop work on that test. Your answer sheet also will help you to keep the right place. It has answer spaces for marking only those exercises that you are supposed to answer.

Marking the Test Exercises

To help you understand how to answer the test exercises, a practice test is given on this page. In each exercise, you are to decide which one of the four numbered words has most nearly the same meaning as the word in heavy black type above them. The right answer has already been marked for each exercise. This was done by filling in a little oval. You are not to make any marks on this page.

PRACTICE TEST

<table>
<thead>
<tr>
<th></th>
<th>1. A large lake</th>
<th>2. The nice lady</th>
<th>3. I am glad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐ small ☐ pretty ☐ big ☐ tiny</td>
<td>1) man 2) woman 3) boy 4) girl</td>
<td>1) hungry 2) sleepy 3) sad 4) happy</td>
</tr>
</tbody>
</table>

In the test that you are about to take, the rows of ovals are on the separate answer sheet instead of on the test page. There is a row of ovals numbered to match each test exercise.

To mark an exercise, decide first which is the best answer. Then, on the answer sheet, find the row of ovals numbered the same as the question. Make a black mark in the oval for the best answer.

There are three important things to remember in marking:

1. **Make a heavy mark.** The mark should be large enough to fill the oval, but it should not go outside. Do not waste time making very neat marks. It is more important to make very black marks. Be sure to use a soft pencil.

2. **Keep your place on the answer sheet.** Make certain each time that your mark is placed in the row numbered the same as the exercise.

3. **Make only ONE mark in a row.** If you change your mind about an answer, erase your first mark as completely as you can.

MAKE NO MARKS ON ANY PAGES OF THIS TEST BOOKLET. Other pupils will use the same booklet later. Do not fold or bend your answer sheet.

Do not begin work until you are told to do so.
This test consists of several reading selections. Each selection there are some exercises.

Read each selection quickly and then answer the exercises. Four answers are given for each exercise, but only one of these answers is right. You are to choose the one that you think is better than the others. Then, on your answer sheet, find the row of answer spaces numbered one as the exercise. Fill in the answer space for the correct answer.

The sample exercise at the right shows you how to mark answers on the answer sheet.

Use this table to find where your grade is to begin and stop on this test.

<table>
<thead>
<tr>
<th>GRADE 3</th>
<th>BEGIN WITH Page 8, Exercise 1</th>
<th>STOP AFTER Exercise 60, Page 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRADE 4</td>
<td>Page 9, Exercise 12</td>
<td>Exercise 79, Page 15</td>
</tr>
<tr>
<td>GRADE 5</td>
<td>Page 10, Exercise 25</td>
<td>Exercise 98, Page 17</td>
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<tr>
<td>GRADE 6</td>
<td>Page 14, Exercise 61</td>
<td>Exercise 136, Page 21</td>
</tr>
<tr>
<td>GRADE 7</td>
<td>Page 16, Exercise 80</td>
<td>Exercise 157, Page 23</td>
</tr>
<tr>
<td>GRAD 8 AND 9</td>
<td>Page 18, Exercise 99</td>
<td>Exercise 178, Page 26</td>
</tr>
</tbody>
</table>

Make no marks in this booklet.
On Tuesday the mailman brought Paul a card from his grandmother. She said that she was sending something for his birthday. Every day Paul watched for the mailman, but nothing came. On Friday, a blue truck stopped at Paul's house. It said “U. S. Mail” on the side. A man brought a big box to the house. It had Paul's name on it, and he hoped that what he wanted was inside. But Paul did not open the box that day. There was a sign on it: “Do Not Open Until Saturday!”

1. How did Paul know that a gift was coming?
   1) Grandmother wrote to him.
   2) He just expected one on his birthday.
   3) He saw the mailman bring it.
   4) His mother told him he would get one.

2. Why did Paul watch for the mailman?
   1) He was looking for birthday cards.
   2) He had a letter to give the mailman.
   3) He wanted to ask about the package.
   4) He thought the mailman would bring the box.

3. What was Paul to do with the package?
   1) Open it right away.
   2) Let Mother keep it until Saturday.
   3) Open it and then wrap it up again.
   4) Put it away until Grandmother came.

4. Where did Paul’s grandmother live?
   1) Her home was next door.
   2) She lived with Paul's family.
   3) Her home was in another city.
   4) She lived by the post office.

5. What did the sign on the box mean?
   1) The box should be opened on Christmas.
   2) Paul could open the box on his birthday.
   3) The post office should not open the box.
   4) The gift was supposed to be a surprise.

6. What grade was Joel in?
   1) Third
   2) Fourth
   3) Eighth
   4) You can’t tell from this story.

7. Why was Joel scared?
   1) He was afraid to ride two on a bike.
   2) He had broken a safety rule.
   3) He was afraid he couldn’t pump Ed.
   4) Bud was much bigger than Joel.

8. Why did Joel answer “weakly” Bud’s first question?
   1) He was tired from the long ride.
   2) He didn’t know what Bud wanted.
   3) He wanted Bud to feel sorry for him.
   4) He was afraid of going before the safety jury.

9. Why did Joel pause before giving a fourth rule?
   1) He was having trouble remembering it.
   2) He was waiting for Bud to encourage him.
   3) He was making up a rule.
   4) It was the rule he had just broken.

10. Which of these rules did Joel remember?
    1) Signal with the left-arm.
    2) Ride on the right side of the street.
    3) Ride near the curb.
    4) Obey the speed limit.

11. Which of these best describes Bud?
    1) Kind and helpful
    2) Shy and timid
    3) Big and tough
    4) Mean and selfish

Joel was scared. Ed, his classmate in the third grade, had called, “Say, one of the pedals on my bike came off. Give me a ride to school.” And both boys had ridden three blocks to the school yard. But when Joel saw Bud watching as they rode up, he remembered. Bud was one of the eighth-grade boys on the safety jury that handed out punishment for breaking rules. Some of the kids had to leave their bikes at home because they hadn’t obeyed the laws.

As Joel slid off his bike, Bud said, “Hi, Joel. Always ride your bike to school?”

“Yes, Bud,” Joel answered weakly. “I live ten blocks from here.”

“Ever been before the safety jury?”

“No, sir.” Joel swallowed hard.

“I’ll tell you what let’s do, Joel.” Bud spoke more kindly. “Can you tell me four good safety rules?”

“Gee, sure I can, Bud.” Joel started eagerly. “One, signal all turns and stops. Two, ride near the curb. Three, never carry things in your arms. And four—Joel hesitated and grinned sheepishly—“don’t ride two on a bike.”

“Good boy,” said Bud. “Better keep those in mind, fella,” he said as he walked off.

“YES, SIR!” Joel answered.
76. 1) I could have spoke to him, but I was scared.
2) Those are the boys who chased Frank last week.
3) The ball bounced straight up and hit me on the nose.
4) (No mistakes)

77. 1) Were there only three eggs in the nests today?
2) That is the kind of fishing rod that I would like to buy.
3) The whole thing seemed like a waste of time to Louise and I.
4) (No mistakes)

78. 1) You'll find you can do it easily and quickly once you begin.
2) Nicholas, Steve, and Peter was already on the dock when we arrived.
3) The baby would fall asleep if you boys would be quieter.
4) (No mistakes)

79. 1) Dad is going to build a swing for Paul and me in our back yard.
2) Eric and his brothers like to sleep outside in a tent in the summer.
3) Before we went to the dude ranch in Arizona, Nancy and I had never rode horseback.
4) (No mistakes)

80. 1) You should be more careful. You might have received a really bad burn.
2) That wall is all that remains of the old Highberry mansion.
3) Look at the newspaper and find out what's playing at the movies tonight.
4) (No mistakes)

81. 1) The water was so cold that my feet become numb in five minutes.
2) George was sure he wouldn't win the contest, and he didn't.
3) The man stopped at the gate, opened it, and ran into the yard.
4) (No mistakes)

82. 1) My mother has gone shopping, but she ought to be home by twelve o'clock.
2) The people which live across the street pay me to mow their lawn.
3) I stood there a few minutes, watching an old man who was feeding the pigeons.
4) (No mistakes)

83. 1) We must have set there and talked for two hours.
2) Set this vase up on the shelf where it won't be knocked over.
3) Every time that he misbehaves he has to sit in the corner.
4) (No mistakes)

84. 1) They found a rusty old tin box in the cave.
2) I think I ought to buy an extra pair of socks.
3) Barbara's aunt gave her a emerald ring for her birthday.
4) (No mistakes)

85. 1) The boys are going to have a race between their two pet turtles.
2) The class couldn't understand how a fish could sleep with it's eyes open.
3) After Danny had broken two plates, his mother decided to wipe the dishes herself.
4) (No mistakes)

86. 1) Even though Charlotte disguised her voice, I knew it was she.
2) Since all of the canoes had been rented, we decided to take a rowboat.
3) Each actor in the play has their part memorized.
4) (No mistakes)
Test W-1: Map Reading

Directions: This is a test of your ability to read maps. It contains several maps, with some exercises about each one.

Four answers are given for each exercise, but only one of these answers is right. You are to choose the one answer that you think is better than the others. Then, on the answer sheet, find the row of answer spaces numbered the same as the exercise. Fill in the answer space for the best answer.

Use this table to find where your grade is to begin and stop on this test.

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<tr>
<td>Grade 5</td>
<td>Page 53, Exercise 12</td>
<td>Exercise 47, Page 56</td>
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<td>Grade 6</td>
<td>Page 55, Exercise 28</td>
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<tr>
<td>Grades 8 and 9</td>
<td>Page 57, Exercise 48</td>
<td>Exercise 89, Page 60</td>
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</table>

Make no marks in this booklet.
Test W-2: Reading Graphs and Tables

Directions: This is a test of your ability to read graphs and tables. After each graph or table there are several exercises. For each exercise, decide which answer is correct. Then mark the proper answer space on the answer sheet. Mark only one answer space for each exercise.

Use this table to find where your grade is to begin and stop on this test.

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<tr>
<td>GRADES 8 AND 9</td>
<td>Page 65, Exercise 47</td>
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 Presents Brought by Boys and Girls of Grade 3 for Christmas Basket for Sick Children

<table>
<thead>
<tr>
<th>Dolls</th>
<th>Balls</th>
<th>Books</th>
<th>Cars</th>
<th>Dishes</th>
<th>Games</th>
</tr>
</thead>
</table>

How many balls were brought for the basket for sick children?
1) 3  2) 4  3) 5  4) 6

Of which kind of present was the largest number brought?
1) Dolls  2) Balls  3) Cars  4) Books

How many more cars than games were brought?
1) 2  2) 3  3) 4  4) 5

The children brought the same number of which two kinds of presents?
1) Books and dishes 2) Dolls and balls 3) Cars and dishes 4) The drawing does not tell.

5. On which date does the first Saturday in the month come?
1) 1st  2) 2nd  3) 3rd  4) 4th

6. Which day is the last day of the month?
1) Wednesday  2) Thursday  3) Friday  4) Saturday

7. February 12 is Lincoln’s Birthday. What day is that?
1) The first Thursday 2) The first Friday 3) The second Tuesday 4) The third Tuesday

8. Hall School has a holiday on the 22nd of the month. School starts again on the Monday after the holiday. What date is that?
1) 4th  2) 11th  3) 18th  4) 25th

Go on to next page
9. About what was Amy's weight?
   1) 40 pounds  3) 50 pounds
   2) 45 pounds  4) 55 pounds

10. Which two children were nearest the same weight?
    1) Jack and Nan  3) Hal and Russ
    2) Amy and Mary  4) Hal and Jack

11. About how much would Hal and Russ weigh if they stood on the scales together?
    1) 75 pounds  3) 140 pounds
    2) 80 pounds  4) 160 pounds

12. About how many pounds more than Amy did Hal weigh?
    1) 10  2) 20  3) 30  4) 40

The Kramer family received a big cheese from Holland, which they shared with other families. The drawing below shows the sizes of the pieces.

13. Which two pieces made up exactly half of the cheese?
    1) Brown and Kramer  3) Pace and Brown
    2) Brown and Cook  4) Pace and Cook

14. Which piece was the same size as the combined pieces for Lane and Kerr?
    1) Pace  3) Brown
    2) Cook  4) Kramer

15. The Pace family got the same amount as which two families together?
    1) Lane and Kerr  3) Cook and Kerr
    2) Lane and Cook  4) Lane and Kramer

Number of Cans of Nuts Sold by Four Brownie Scout Troops in One Week

<table>
<thead>
<tr>
<th></th>
<th>Mon.</th>
<th>Tues.</th>
<th>Wed.</th>
<th>Thurs.</th>
<th>Fri.</th>
<th>Totals</th>
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</thead>
<tbody>
<tr>
<td>Troop No. 1</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>15</td>
<td>39</td>
</tr>
<tr>
<td>Troop No. 2</td>
<td>8</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>10</td>
<td>36</td>
</tr>
<tr>
<td>Troop No. 3</td>
<td>8</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>17</td>
<td>50</td>
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<tr>
<td>Troop No. 4</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>11</td>
<td>41</td>
</tr>
<tr>
<td>Totals</td>
<td>33</td>
<td>27</td>
<td>24</td>
<td>29</td>
<td>53</td>
<td>166</td>
</tr>
</tbody>
</table>

16. How many cans were sold by Troop No. 3 on Wednesday?
    1) 7
    2) 20
    3) 30
    4) 40

17. What was the largest number of cans of nuts sold on one day by any of the troops?
    1) 10
    2) 11
    3) 15
    4) 17

18. On which day did Troop No. 1 sell more cans of nuts than any other troop?
    1) Monday
    2) Tuesday
    3) Thursday
    4) Friday

19. Which troop sold the most cans of nuts during the week?
    1) No. 1
    2) No. 2
    3) No. 3
    4) No. 4

20. How many Brownie Scouts sold nuts that week?
    1) 4
    2) 53
    3) 166
    4) The figures do not tell.
Test W-3: Knowledge and Use of Reference Materials

Directions: This is a test of study skills such as looking up words, alphabetizing, using an index, and locating information.

Read the directions for each part carefully, and then mark your answers to the exercises on your answer sheet.

Use this table to find where your grade is to begin and stop on this test.

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Below is a word list which shows the correct spelling of the word meaning "weakness"?

2) frailty
3) farility
4) frailty

3. Which of these might be described as being "identical"?

1) A dog and a cat
2) A pony and a horse
3) Twin girls
4) A ball and a box

In each of the next three exercises, decide which word in the list has been left out of the sentence.

4. Everybody laughed when the beautiful black horse in the parade began to

1) cavort
2) purloin
3) recline
4) surmise

5. The ________ of Bill's speech pleased us.

1) brevity
2) chalice
3) frailty
4) surmise

6. The princess was ________ on a bed of rose petals.

1) cavorting
2) reclining
3) surmising
4) stripling

Vse this table to find where your grade is to begin and stop on this test.

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7. Which of these would most likely tell you the date on which Easter comes this year?
   1) A dictionary
   2) A calendar
   3) An arithmetic book
   4) A newspaper

8. Which of these will help you find the best route by car from Kansas City, Missouri, to Springfield, Missouri?
   1) A road map of Missouri
   2) A geography book
   3) A globe
   4) A history of Missouri

9. Which of these would tell you the right way to address a letter?
   1) A spelling book
   2) A language book
   3) A dictionary
   4) An arithmetic book

Make no marks in this booklet.

10. In which of these books would you look for the meaning of the word adversity?
    1) A spelling book
    2) A language book
    3) A dictionary
    4) A Child's Garden of Verses

11. Which of these books might tell you what is the best time of the year to plant peas, beans, and carrots?
    1) Hammond's Nature Atlas
    2) Flowers for the Home
    3) The Joy of Cooking
    4) The Home Garden

12. What would you do to find out which page in a children's magazine has the crossword puzzles?
    1) Look through the magazine, page by page
    2) Look on the cover
    3) Look in the table of contents
    4) Look on the back page

13. Which of these books would most likely tell you about the kind of clothes worn by the Pilgrims?
    1) Clothing of Early America
    2) Sewing for Fun
    3) Jacob's First Coat
    4) Letters of a Little Pilgrim

14. Under which library shelf label would you look for a book on making model airplanes?
    1) "Nature"
    2) "Health"
    3) "Aviation"
    4) "Hobbies"

In each of these exercises, you are to choose the word that would appear first if the four words were arranged in alphabetical (a-b-c) order.

15. 1) queer
    2) ram
    3) propose
    4) request

16. 1) buttress
    2) diagram
    3) call
    4) dacron

17. 1) while
    2) vow
    3) utility
    4) winter

18. 1) quarry
    2) razor
    3) ozone
    4) parry

19. 1) knight
    2) inn
    3) jackal
    4) horse

20. 1) night
    2) note
    3) needle
    4) mustard

21. 1) hike
    2) grow
    3) flower
    4) island

22. 1) toward
    2) today
    3) tomorrow
    4) together

23. 1) unfold
    2) unlock
    3) unless
    4) undo

24. 1) Foster, D. L.
    2) Evans, James J.
    3) Gailey, S. Edward
    4) Hurley, Mike

25. 1) Thomas, M. P.
    2) Van Wert, Charles
    3) Rickert, Anna
    4) Urie, Russell

26. 1) Klem, Ira
    2) Koch, O. D.
    3) Jenkins, N. P.
    4) Gipson, Rosemary

Go on to next page
Test A-1: Arithmetic Concepts

Directions: This is a test of how well you understand the number system and the terms and operations used in arithmetic.

Four answers are given for each exercise, but only one of these answers is right. You are to choose the one answer that you think is better than the others. Then, on the answer sheet, find the row of answer spaces numbered the same as the exercise. Fill in the answer space for the best answer.

Use this table to find where your grade is to begin and stop on this test.

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<td>GRADES 8 AND 9</td>
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Which of these numbers is the smallest?
1) 701  2) 591  3) 610  4) 579

Which of these pictures shows that 12 equals 1 ten and 2 ones?
1)  2)  3)  4)  

How would you read 627?
1) Sixty-two hundred seven  2) Six hundred twenty-seven  3) Six thousand twenty-seven  4) Six thousand two hundred seventy

A box was marked “2 dozen glasses.” How many glasses were in the box?
1) 16  2) 20  3) 24  4) 36

5. Which of these facts is shown by the picture above?
   1) 3 + 2 = 5  2) 8 - 3 = 5  3) 5 - 3 = 2  4) 5 + 3 = 8

6. At lunch there were 8 children in line ahead of Kay. In what place in the line was Kay?
   1) Ninth  2) Eighth  3) Seventh  4) Fifth

7. Which of these exercises has a sum of 7?
   1) 7 - 2 = 5  2) 4 + 3 = 7  3) 6 + 7 = 13  4) 9 - 2 = 7

Go on to next page
How much money is shown in the picture above?
1) 58¢  3) 78¢
2) 67¢  4) 83¢

What number is next larger than 30?
1) 29  3) 31
2) 40  4) 35

What time is it by this clock?
1) Quarter after nine
2) Quarter to three
3) Quarter to nine
4) Quarter after ten

What are the next three months after April?
1) June, August, September
2) May, July, August
3) June, July, August
4) May, June, July

John’s shoe is 7 inches long. How many inches less than 1 foot is the length of his shoe?
1) 2  3) 5
2) 3  4) 11

Which line in the picture above is closest to one inch in length?
1) a  2) b  3) c  4) d

Which of these is a correct way to write an amount of money?
1) 7$  2) $9.00  3) .84  4) $3.87¢

In counting by 4’s, Fred said, “2, 6, 10, 12, 14, 18.” Which number should he have left out?
1) 18  3) 12
2) 14  4) 6

16. Which of these numbers is the largest?
1) 7502  3) 7025
2) 7520  4) 7205

17. How would you write 32 tens and 7 ones in numerals?
1) 3207  2) 3271  3) 732  4) 327

18. Dale’s mother wanted to cook a beef roast for 1 hour and 20 minutes. For how many minutes should she set her oven timer?
1) 80  2) 70  3) 50  4) 40

19. What time is it by this clock?
1) Quarter after nine
2) Quarter to three
3) Quarter to nine
4) Quarter after ten

20. The picture above shows the boards John used to make a birdhouse. How many of the boards were triangles?
1) 2  2) 3  3) 4  4) 5

21. Which of these numbers is closest to 500?
1) 505  3) 510
2) 498  4) 495

22. Which of these statements about the values of coins is wrong?
1) 10 dimes = 1 half dollar
2) 20 nickels = 1 dollar
3) 25 pennies = 1 quarter
4) 4 quarters = 1 dollar

23. On July 9, Karen checked out a library book for 2 weeks. On what date will the book be due?
1) July 21  3) July 23
2) July 22  4) July 26
The SM Scale

Directions: This is not a test. This booklet lists a series of statements about your school. Read each one and decide whether you agree or disagree with the statement. If you agree, put a capital A in front of the statement. If you disagree, put a capital D in front of the statement.

This is a part of a project being done at many different schools all over the country. No one at your school will see your answers, they will be collected and taken away right away. So answer as frankly as you can. You will probably find that you agree with some of them and disagree with others.

Remember: Do not answer the way you think you should, but the way you really feel.

_____ 1. Compared to most school buildings I've seen, this building is nicer.

_____ 2. There are many more audio-visual materials available at this school.

_____ 3. There are too many rules and regulations at this school.

_____ 4. The people in this community want the schools to try out new educational methods and materials.

_____ 5. If there were more clubs here, this school would be a lot friendlier place.

_____ 6. All my teachers know me by name.

_____ 7. I look forward to Friday afternoons because I won't have to go to school for two days.

_____ 8. My school building is too large; it is too far to walk from one class to another.

_____ 9. Our library is not a very friendly place.

_____ 10. The principal of this school is very fair.

_____ 11. My parents feel the community is spending too much for education.
The SM Scale

___12. Most of my friends go to the same school that I do.
___13. Most of my teachers laugh at my mistakes in class.
___14. I'd rather go to this school than most.
___15. My school is too crowded.
___16. This school has helped me develop hobbies, skills, and interests I didn't have before.
___17. There are not enough janitors in my school to keep it clean.
___18. Teachers in my school get higher salaries than do teachers in nearby cities and counties.
___19. Most of the students here aren't very interested in how the school athletic teams do.
___20. Most teachers here help me feel comfortable and at ease in class.
___21. Often I'm afraid that I'll do something wrong at school.
___22. This school building is the nicest I have ever seen.
___23. There is too much emphasis on the "three R's" at this school and not enough opportunity for students to develop their own interests.
___24. The guidance counselor here is helpful. (Leave blank if there is no guidance counselor in your school)
___25. The parents of most of the students here are not very interested in the school.
___26. This school has just about the right number of students in it for me.
___27. Teaching is just another job to most teachers at this school.
___28. I would not change a single thing about my school, even if I could.
___29. This school building is old and run-down.
___30. Our homework assignments are fair and reasonable.
The SM Scale

31. There is too much supervision of students at this school.
32. This school district spends more money on education than most school districts do.
33. Sometimes I'd just as soon each lunch by myself, rather than with the other students here.
34. Most teachers at this school don't have any "teacher's pets".
35. If it were possible, I would transfer to another school.
36. If I were a teacher I would want to teach in a school like this one.
37. Often I do more work and do it better than someone else, but I don't get any better grade for it.
38. The principal of this school knows most of the students by name.
39. Few of the parents attend school plays, sports activities, open houses, etc.
40. The older children at this school are very friendly toward the younger ones.
42. I am very proud of my school.
43. Most of the classrooms in this school are drab and undecorated.
44. At this school we can take subjects like Typing, Shop and Music which are of special interest to us.
45. The cafeteria here is too noisy.
46. The people in the city (or county) I live in are very interested in having good schools.
47. I wish that I went to a school which has fewer students than this one.
48. Most of the teachers at my school are very friendly and understanding.
The SM Scale

49. I get scolded a lot at school.
50. My school is a comfortable one.
51. Sometimes the assignments we are given are not very clear.
52. The janitors in my school do a good job.
53. Most parents really aren't interested in how good our schooling is.
54. There is a lot more "school spirit" here than at most schools.
55. There is not a single teacher in my school who I could go to with a serious problem.
56. I am lucky that I get to attend this particular school.
57. This school building is just about the ugliest I have ever seen.
58. My teachers use a lot of books, references, and audio-visual materials to help me learn.
59. Students are likely to get severely punished here for small offenses.
60. The leaders of this community have provided school facilities equal to those anywhere.
61. I wish the other children at this school were friendlier to me.
62. The principal and teachers here are properly appreciative when a student has done something outstanding.
63. There is a lot of wasted time at this school.
64. My school building is the only one of its kind in the country.
65. The textbooks used in this school are pretty dull and uninteresting.
66. Things are done at this school in a neat, orderly way.
67. This school district doesn't spend much money on its schools.
The SM Scale

68. I have many good friends at this school.

69. Teachers do not seem to understand the needs and problems of students here.

70. Each morning I look forward to coming to school.

71. My school is often dirty and smelly.

72. Our library is well-stocked with good books and many reference materials.

73. The principal and assistant principal are too strict here.

74. The P.T.A. at this school is very active.

75. There is no place in this school for a student to be by himself to think through a problem.

76. Students here pretty much get the grades they deserve.

77. Many of my friends at this school would like to go to another school instead.

78. There are many things in this school building which need to be repaired.

79. The school work is too hard at my school.

80. The assistant principal knows the names of most of the students.

81. The community really supports our school.

82. I don't like most of the other students at this school.

83. Too many of my teachers are mean or unfriendly.

84. I am ashamed of my school.
ROCKLAND JUNIOR HIGH SCHOOL
PHONE SURVEY

NAME________________________________________ PHONE_____________________

ADDRESS____________________________________ GRADE OF STUDENT________

Hello ____________________ my name is ____________________
and I'm calling you on behalf of Rockland Junior High School to get your
opinion on how our new program can be improved. Would you help by
answering a few questions?

(1)____yes (2)____no

Thank you,

I'm going to ask you a series of statements about Rockland Junior High. You
decide whether you agree or disagree with each statement.

A/D 1. Compared to most school buildings you've seen, Rockland
Junior High is nicer.

A/D 2. There is too much emphasis on the academics (English, math,
science, history) at Rockland Junior High and not enough oppor-
tunity for students to develop their own interests.

A/D 3. There is too much supervision of students at Rockland Junior
High.

A/D 4. Most of the teachers at Rockland Junior High are very friendly
and understanding.

A/D 5. Your child has many good friends at Rockland Junior High.

A/D 6. Each morning your child looks forward to coming to school.

A/D 7. The Rockland community really supports the school.

You probably remember and are familiar with the ABCDF grading system used
in school. I'd like to get your opinion on certain school activities by asking
you to grade them on that same ABCDF scale. On that basis, what
grade would you give to the following questions?

1. How well do you think Rockland Junior High
   is teaching the basic academic subjects
   (English, math, science, history)?
   A B C D F ___not sure
Page 2, Parent Phone Survey

2. How well is your child's learning at Rockland Junior High meeting his present needs?  

3. How well is your child's learning at Rockland Junior High meeting his future needs?  

4. How well do you rate the total program at Rockland Junior High School?  

5. What kind of job are the teachers doing in Rockland Junior High School?  

6. What kind of job does the principal do at Rockland Junior High School?  

7. What do you think of the grading system used at Rockland Junior High to mark your child's work?  

8. What do you think about information you get concerning Rockland Junior High?  

9. Have you been in the Rockland Junior High?  

   ____yes ____no  

10. What do you think of it?  

11. How many times have you gone to Rockland Junior High this year?  

   ____several times ____once or twice ____not at all  

12. During this year, how many times have you talked with at least one of the Rockland Junior High teachers?  

   ____several times ____once or twice ____not at all
Page 3, Parent Phone Survey

13. During this year, how many times have you talked with the principal of Rockland Junior High?

_____ several times  _____ once or twice  _____ not at all

14. What experience or single incident has given you the most favorable feeling toward Rockland Junior High.

________________________________________________________________________

15. What experience or single incident has given you the most unfavorable feeling toward Rockland Junior High.

________________________________________________________________________

16. My last question is do you have any suggestions for improving the Rockland Junior High School?

________________________________________________________________________

Thank you very much for your cooperation. Good bye!
APPENDIX D
<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>more</td>
<td>3 to 6</td>
<td>once</td>
</tr>
<tr>
<td>than</td>
<td>times</td>
<td>or</td>
</tr>
<tr>
<td>6</td>
<td>twice</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Administered and graded standardized and/or teacher made tests.</td>
</tr>
<tr>
<td>2. Supervised in-school movement of students.</td>
</tr>
<tr>
<td>3. Ran A-V equipment.</td>
</tr>
<tr>
<td>4. Diagnozed student learning problems.</td>
</tr>
<tr>
<td>5. Administered routine first aid.</td>
</tr>
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<td>6. Inventoried books and/or supplies.</td>
</tr>
<tr>
<td>7. Conducted student conferences.</td>
</tr>
<tr>
<td>8. Supervised and assisted students in their independent learning activities.</td>
</tr>
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<td>9. Prescribed appropriate learning tasks, techniques, etc.</td>
</tr>
<tr>
<td>10. Provided inservice training or resource materials for other teachers.</td>
</tr>
<tr>
<td>11. Acted as class librarian.</td>
</tr>
<tr>
<td>12. Located lost or stolen articles.</td>
</tr>
<tr>
<td>I</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>more</td>
</tr>
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<td>3 to</td>
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<tr>
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<tr>
<td>I</td>
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<tr>
<td>---</td>
</tr>
<tr>
<td>more than 6</td>
</tr>
</tbody>
</table>

47. Organized (space, time, people, materials) for instruction.

48. Instructed from commercially prepared lesson plans or from plans supervised by another.

49. Ran errands.

50. Engaged in higher order instruction.

51. Evaluated program's progress.

52. Read to children.

53. Listened to children read.

54. Gave individual and/or group instruction.

55. Replenished supplies and materials.

56. Corrected papers.

57. Planned curriculum (either long range or short range).

58. Participated in hall duty, lunch duty or student dismissal.

59. Participated in evaluation of another's instructional performance.

60. Previewed and reviewed materials or media presentations.

61. Other

62. Other

63. Other
THE PURDUE TEACHER OPINIONNAIRE

Prepared by Ralph R. Bentley and Averno M. Rempe1

This instrument is designed to provide you the opportunity to express your opinions about your work as a teacher and various school problems in your particular school situation. There are no right or wrong responses, so do not hesitate to mark the statements frankly.

A separate answer sheet is furnished for your responses. Fill in the information requested on the answer sheet. You will notice that there is no place for your name. Please do not record your name. All responses will be strictly confidential and results will be reported by groups only. DO NOT OMIT ANY ITEMS.

DIRECTIONS FOR RECORDING RESPONSES ON ANSWER SHEET

Read each statement carefully. Then indicate whether you agree, probably agree, probably disagree, or disagree with each statement. Mark your answers on the separate answer sheet in the following manner:

<table>
<thead>
<tr>
<th>A</th>
<th>PA</th>
<th>PD</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PA</td>
<td>PD</td>
<td>D</td>
</tr>
<tr>
<td>If you <strong>agree</strong> with the statement, blacken the space</td>
<td>A</td>
<td>PA</td>
<td>PD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If you are somewhat uncertain, but <strong>probably agree</strong> with the statement, blacken the space</th>
<th>A</th>
<th>PD</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you are somewhat uncertain, but <strong>probably disagree</strong> with the statement, blacken the space</td>
<td>A</td>
<td>PA</td>
<td>PD</td>
</tr>
<tr>
<td>If you <strong>disagree</strong> with the statement, blacken the space</td>
<td>A</td>
<td>PA</td>
<td>PD</td>
</tr>
</tbody>
</table>

All marks should be heavy and completely fill the answer space. If you change a response, erase the first mark completely. Make no stray marks on the answer sheet. Please do not mark this booklet.
1. Details, "red tape," and required reports absorb too much of my time ........................................... A PA PD D

2. The work of individual faculty members is appreciated and commended by our principal .................................................. A PA PD D

3. Teachers feel free to criticize administrative policy at faculty meetings called by our principal .................................................. A PA PD D

4. The faculty feels that their suggestions pertaining to salaries are adequately transmitted by the administration to the board of education .................................................. A PA PD D

5. Our principal shows favoritism in his relations with the teachers in our school .................................................. A PA PD D

6. Teachers in this school are expected to do an unreasonable amount of record-keeping and clerical work .................................................. A PA PD D

7. My principal makes a real effort to maintain close contact with the faculty .................................................. A PA PD D

8. Community demands upon the teacher's time are unreasonable .................................................. A PA PD D

9. I am satisfied with the policies under which pay raises are granted .................................................. A PA PD D

10. My teaching load is greater than that of most of the other teachers in our school .................................................. A PA PD D

11. The extra-curricular load of the teachers in our school is unreasonable .................................................. A PA PD D

12. Our principal's leadership in faculty meetings challenges and stimulates our professional growth .................................................. A PA PD D

13. My teaching position gives me the social status in the community that I desire .................................................. A PA PD D

14. The number of hours a teacher must work is unreasonable .................................................. A PA PD D

15. Teaching enables me to enjoy many of the material and cultural things I like .................................................. A PA PD D

16. My school provides me with adequate classroom supplies and equipment .................................................. A PA PD D

17. Our school has a well-balanced curriculum .................................................. A PA PD D

18. There is a great deal of griping, arguing, taking sides, and feuding among our teachers .................................................. A PA PD D

19. Teaching gives me a great deal of personal satisfaction .................................................. A PA PD D

20. The curriculum of our school makes reasonable provision for student individual differences .................................................. A PA PD D

21. The procedures for obtaining materials and services are well defined and efficient .................................................. A PA PD D

22. Generally, teachers in our school do not take advantage of one another .................................................. A PA PD D

23. The teachers in our school cooperate with each other to achieve common, personal, and professional objectives .................................................. A PA PD D

Continue with item 24 on next page
24. Teaching enables me to make my greatest contribution to society

25. The curriculum of our school is in need of major revisions

26. I love to teach

27. If I could plan my career again, I would choose teaching

28. Experienced faculty members accept new and younger members as colleagues

29. I would recommend teaching as an occupation to students of high scholastic ability

30. If I could earn as much money in another occupation, I would stop teaching

31. The school schedule places my classes at a disadvantage

32. Within the limits of financial resources, the school tries to follow a generous policy regarding fringe benefits, professional travel, professional study, etc.

33. My principal makes my work easier and more pleasant

34. Keeping up professionally is too much of a burden

35. Our community makes its teachers feel as though they are a real part of the community

36. Salary policies are administered with fairness and justice

37. Teaching affords me the security I want in an occupation

38. My school principal understands and recognizes good teaching procedures

39. Teachers clearly understand the policies governing salary increases

40. My classes are used as a "dumping ground" for problem students

41. The lines and methods of communication between teachers and the principal in our school are well developed and maintained

42. My teaching load in this school is unreasonable

43. My principal shows a real interest in my department

44. Our principal promotes a sense of belonging among the teachers in our school

45. My heavy teaching load unduly restricts my nonprofessional activities

46. I find my contacts with students, for the most part, highly satisfying and rewarding

47. I feel that I am an important part of this school system

48. The competency of the teachers in our school compares favorably with that of teachers in other schools with which I am familiar

Continue with item 49 on next page
49. My school provides the teachers with adequate audio-visual aids and projection equipment ................................................. A PA PD D
50. I feel successful and competent in my present position .......................................................... A PA PD D
51. I enjoy working with student organizations, clubs, and societies ............................................ A PA PD D
52. Our teaching staff is congenial to work with ............................................................................ A PA PD D
53. My teaching associates are well prepared for their jobs .......................................................... A PA PD D
54. Our school faculty has a tendency to form into cliques ............................................................... A PA PD D
55. The teachers in our school work well together ........................................................................... A PA PD D
56. I am at a disadvantage professionally because other teachers are better prepared to teach than I am ............................................ A PA PD D
57. Our school provides adequate clerical services for the teachers ................................................. A PA PD D
58. As far as I know, the other teachers think I am a good teacher ................................................ A PA PD D
59. Library facilities and resources are adequate for the grade or subject area which I teach ...................................................... A PA PD D
60. The “stress and strain” resulting from teaching makes teaching undesirable for me............ A PA PD D
61. My principal is concerned with the problems of the faculty and handles these problems sympathetically ..................................... A PA PD D
62. I do not hesitate to discuss any school problem with my principal .......................................... A PA PD D
63. Teaching gives me the prestige I desire ...................................................................................... A PA PD D
64. My teaching job enables me to provide a satisfactory standard of living for my family ........ A PA PD D
65. The salary schedule in our school adequately recognizes teacher competency .................. A PA PD D
66. Most of the people in this community understand and appreciate good education ........ A PA PD D
67. In my judgment, this community is a good place to raise a family ........................................ A PA PD D
68. This community respects its teachers and treats them like professional persons ................ A PA PD D
69. My principal acts as though he is interested in me and my problems .................................. A PA PD D
70. My school principal supervises rather than “snoopervises” the teachers in our school ........ A PA PD D
71. It is difficult for teachers to gain acceptance by the people in this community ................ A PA PD D
72. Teachers’ meetings as now conducted by our principal waste the time and energy of the staff ................................................................ A PA PD D

Continue with item 73 on next page
73. My principal has a reasonable understanding of the problems connected with my teaching assignment ................................................................. A PA PD D
74. I feel that my work is judged fairly by my principal ................................................................. A PA PD D
75. Salaries paid in this school system compare favorably with salaries in other systems with which I am familiar ................................................................. A PA PD D
76. Most of the actions of students irritate me .............................................................................. A PA PD D
77. The cooperativeness of teachers in our school helps make my work more enjoyable .............. A PA PD D
78. My students regard me with respect and seem to have confidence in my professional ability .................................................................................. A PA PD D
79. The purposes and objectives of the school cannot be achieved by the present curriculum .................................................................................. A PA PD D
80. The teachers in our school have a desirable influence on the values and attitudes of their students ........................................................................... A PA PD D
81. This community expects its teachers to meet unreasonable personal standards .................... A PA PD D
82. My students appreciate the help I give them with their school work .................................... A PA PD D
83. To me there is no more challenging work than teaching ....................................................... A PA PD D
84. Other teachers in our school are appreciative of my work ..................................................... A PA PD D
85. As a teacher in this community, my nonprofessional activities outside of school are unduly restricted ........................................................................... A PA PD D
86. As a teacher, I think I am as competent as most other teachers ............................................ A PA PD D
87. The teachers with whom I work have high professional ethics ................................................ A PA PD D
88. Our school curriculum does a good job of preparing students to become enlightened and competent citizens ................................................................. A PA PD D
89. I really enjoy working with my students ................................................................................. A PA PD D
90. The teachers in our school show a great deal of initiative and creativity in their teaching assignments ........................................................................ A PA PD D
91. Teachers in our community feel free to discuss controversial issues in their classes ............ A PA PD D
92. My principal tries to make me feel comfortable when he visits my classes .......................... A PA PD D
93. My principal makes effective use of the individual teacher's capacity and talent ................ A PA PD D
94. The people in this community, generally, have a sincere and wholehearted interest in the school system ........................................................................ A PA PD D

Continue with item 95 on next page
95. Teachers feel free to go to the principal about problems of personal and group welfare

96. This community supports ethical procedures regarding the appointment and reappointment of members of the teaching staff

97. This community is willing to support a good program of education

98. Our community expects the teachers to participate in too many social activities

99. Community pressures prevent me from doing my best as a teacher

100. I am well satisfied with my present teaching position
APPENDIX F
APPENDIX E
PECK'S SENSE OF POWER SCALE

In this questionnaire you will find statements pertaining to possible characteristics and attitudes which a teacher like yourself may have.

For each statement indicate the extent to which you agree or disagree with the statement. In the blanks provided insert the number of comment which best describes how you feel about the statement.

Scoring Key
5 = Strongly Agree
4 = Agree
3 = Undecided
2 = Disagree
1 = Strongly Disagree

Please use one of the above numbers for each statement. It is important that we have a response from you for each item.

In this school, a teacher like myself...

1. Feels free to experiment with new teaching procedures without consulting the principal beforehand.

2. Finds ways to get the principal to actively try to obtain the needed materials for a new teaching approach which he, the teacher, has initiated.

3. Can determine what he will teach in the classroom.

4. Feels that he does not have to follow suggestions made by the principal.

5. Finds ways to obtain materials and equipment, at the school's expense, for use in a new teaching approach, even if the principal does not favor the new approaches.

6. Feels free to experiment with new teaching procedures even if the principal does not favor the new approaches.

7. Can persuade the principal to give whole-hearted support for new ideas which he, the teacher, has initiated.

8. Can decide what teaching methods he will use in his classroom.

9. Can get the principal to listen to a request to use a new teaching procedure on a trial basis.

10. Feels free to deviate from the prescribed curriculum if he believes it is inappropriate for the kind of student he has.
TABLE 48

SCALE FROM THE SENSE OF POWER (PECK) DATA FROM THE ROCKLAND JUNIOR HIGH SCHOOL

<table>
<thead>
<tr>
<th>Scale Type</th>
<th>Response Pattern by Numbers</th>
<th>Frequency</th>
<th>Error</th>
</tr>
</thead>
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<tr>
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N=30  N=28
TABLE 49

SCALE FROM THE SENSE OF POWER (PECK) DATA FOR SCHOOL "X"

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<tr>
<th>Response Pattern by Numbers</th>
<th>Frequency</th>
<th>Error</th>
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<td>Scale Type</td>
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<td>1</td>
<td>2</td>
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</table>

N=24 N=32
APPENDIX H
Question Ten

"What do you think of the Rockland Junior High School?"

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number of Responses Made Survey #1</th>
<th>Number of Responses Made Survey #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good school</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Good or nice school</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Nothing wrong with it</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Average school</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Works good as any seen</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Not bad</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Old but acceptable</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Physical facilities need to be improved</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Building is horrible, terrible</td>
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<td>2</td>
</tr>
</tbody>
</table>
**Question Fourteen**

"What experience or single incident has given you the most favorable feeling toward Rockland Junior High?"

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number of Responses Made Survey #1</th>
<th>Number of Responses Made Survey #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness of child</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Improved relationships between teacher and child</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Improved relationships between teacher and parents</td>
<td>10</td>
<td>14</td>
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<tr>
<td>Child more interested in school</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Improved methods of learning</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Success of child</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Better curriculum</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Child less of a problem</td>
<td>1</td>
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</tr>
<tr>
<td>None</td>
<td>7</td>
<td>12</td>
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</tbody>
</table>
Question Fifteen

"What experience or single incident has given you the most unfavorable feeling toward Rockland Junior High?"

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number of Responses Made Survey #1</th>
<th>Number of Responses Made Survey #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student and teacher relationship</td>
<td>9</td>
<td>1</td>
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<tr>
<td>School facilities</td>
<td>7</td>
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<tr>
<td>Dress code</td>
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<tr>
<td>Teacher-parent relationship</td>
<td>2</td>
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<tr>
<td>Discipline problem</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>School dances</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>School bus problems</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Students have to walk in straight line</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Extra curricula activities</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Inexperienced intern</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Student interest in school</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Milk and donut time taken away from school work</td>
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<td>1</td>
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<tr>
<td>Teacher not teaching class</td>
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<tr>
<td>Changing student to different room in middle of year</td>
<td>0</td>
<td>2</td>
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<tr>
<td>None</td>
<td>17</td>
<td>41</td>
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Question Sixteen

"Do you have suggestions for improving the Rockland Junior High?"

<table>
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<th>Categories</th>
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<tr>
<td>None</td>
<td>26</td>
<td>26</td>
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<tr>
<td>Cancel new program</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Improve upon physical facilities</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Provide more help for under-achiever</td>
<td>2</td>
<td>0</td>
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<tr>
<td>Band practice requires too much time</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Supervise curriculum</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Discontinue school dances</td>
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<td>0</td>
</tr>
<tr>
<td>More new teachers</td>
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<td>1</td>
</tr>
<tr>
<td>Solve bus problems</td>
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<td>0</td>
</tr>
<tr>
<td>Solve teacher problems</td>
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<td>0</td>
</tr>
<tr>
<td>Stricter discipline</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Better communications between teachers, parents and students</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Less classes in gym</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Resource period is too long</td>
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<td>0</td>
</tr>
<tr>
<td>More extra curricula activities</td>
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<td>2</td>
</tr>
<tr>
<td>Upgrade cafeteria</td>
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**Question Sixteen (Continued)**

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number of Responses Made Survey #1</th>
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</thead>
<tbody>
<tr>
<td>More selective comments on report cards</td>
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<td>1</td>
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<tr>
<td>Work children harder</td>
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<td>2</td>
</tr>
<tr>
<td>More stress on basic subjects</td>
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<td>1</td>
</tr>
<tr>
<td>Organize PTA</td>
<td>0</td>
<td>1</td>
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</tbody>
</table>