

ACTUAL AND IDEAL ROLES IN CURRICULUM PLANNING
AS PERCEIVED BY TEACHERS AND ADMINISTRATORS
OF SELECTED SCHOOLS

Thesis for the Degree of Ed. D.

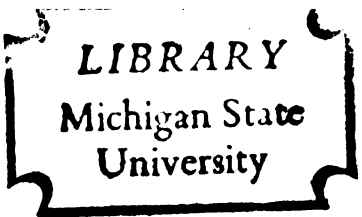
MICHIGAN STATE UNIVERSITY

Lynn C. Oberlin

1965



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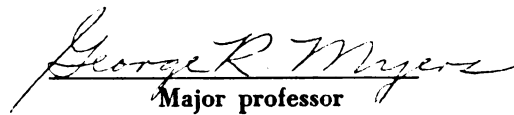
"Actual and Ideal Roles in Curriculum
Planning as Perceived by Teachers and
Administrators of Selected Schools"

presented by

Lynn C. Oberlin

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ABSTRACT

ACTUAL AND IDEAL ROLES IN CURRICULUM PLANNING AS PERCEIVED BY TEACHERS AND ADMINISTRATORS OF SELECTED SCHOOLS

by Lynn C. Oberlin

The purpose of this study was to determine if teachers differed from administrators in their perceptions of the "actual" and "ideal" roles of teachers, administrators, students, and the community in curriculum planning, and to determine if teachers and administrators perceived the "actual" roles of these groups as being different from the "ideal" roles.

The instrument used in this study was developed by using a preliminary questionnaire with a group of 100 teachers and administrators which was highly similar (in terms of the ratio of teachers to administrators and the size of the school districts) to the group used in the final study. Each of the 140 (70 "actual" and 70 "ideal") questions was examined by item analysis and 56 (28 "actual" and 28 "ideal") of them chosen to become the final form of the "Questionnaire on Curriculum Responsibilities."

The population for this study came from three areas of Michigan: (1) a county located in metropolitan Detroit, (2) a county in western Michigan, (3) and the upper peninsula. Schools within these areas were selected by size. A total of eleven districts were used. One-third

of the teachers and enough administrators to establish a one to ten ratio in each district were mailed questionnaires.

The questionnaires were scored as eight separate tests and the coefficients of reliability computed with the Kuder Richardson formula 20 ranged from .770 to .883.

From the data, the following conclusions about the population of this study were drawn:

1. Administrators perceived the "actual" roles of teachers and students in curriculum planning to be more extensive than teachers perceived these "actual" roles to be.
2. Administrators perceived the extent of the "actual" roles of administrators and the community in curriculum planning to be the same as teachers perceived the extent of these "actual" roles to be.
3. Administrators perceived the "ideal" roles of administrators, students, and the community in curriculum planning as being more extensive than teachers perceived these "ideal" roles to be.
4. Administrators perceived the extent of the "ideal" roles of teachers in curriculum planning to be the same as teachers perceived the extent of these "ideal" roles to be.
5. Administrators perceived and teachers perceived the "ideal" roles of teachers, students, and the community in curriculum planning as being more extensive than the "actual" roles of these groups.

6. Administrators perceived the "ideal" roles of administrators in curriculum planning as being more extensive than the "actual" roles but teachers perceived the "actual" roles of administrators in curriculum planning as being greater than the "ideal" roles.
7. Teachers differed by geographical areas in their perceptions of the roles of teachers and administrators in curriculum planning. Significant differences were found in the "actual" and "ideal" roles of teachers, and in the "ideal" and the differences between "actual" and "ideal" roles of administrators. No geographic pattern was discovered.
8. Teachers did not differ by geographical areas in their perceptions of the roles of students and the community in curriculum planning. This included "actual," "ideal," and the difference between "actual" and "ideal" roles.
9. Administrators did not differ by geographical areas in their perceptions of the roles of teachers, administrators, students, and the community in curriculum planning. This included "actual," "ideal," and the differences between "actual" and "ideal" roles.
10. Teachers differed by schools in their perceptions of the roles of the community in curriculum planning. This included "actual," "ideal," and the differences between "actual" and "ideal" roles.

1. The first step is to identify the problem or question that needs to be answered.

2. The second step is to gather relevant information and data.

3. The third step is to analyze the information and data to identify patterns and trends.

4. The fourth step is to develop a hypothesis or a proposed solution.

5. The fifth step is to test the hypothesis or solution through experiments or observations.

6. The sixth step is to evaluate the results of the tests and observations.

7. The seventh step is to draw conclusions based on the evaluation.

8. The eighth step is to communicate the findings and conclusions to others.

9. The ninth step is to reflect on the process and identify areas for improvement.

10. The tenth step is to apply the knowledge and skills gained to new situations.

11. The eleventh step is to continue to learn and grow through ongoing education and experience.

12. The twelfth step is to share knowledge and skills with others to help them learn and grow.

13. The thirteenth step is to stay up-to-date on the latest developments in the field.

14. The fourteenth step is to seek out new challenges and opportunities for growth.

15. The fifteenth step is to maintain a positive attitude and a willingness to learn.

16. The sixteenth step is to be open to feedback and criticism.

17. The seventeenth step is to be persistent and not give up easily.

18. The eighteenth step is to be creative and think outside the box.

19. The nineteenth step is to be a team player and work well with others.

20. The twentieth step is to be a lifelong learner and always seeking to improve.

21. The twenty-first step is to be a good communicator and able to explain complex concepts.

22. The twenty-second step is to be a good listener and able to understand others.

23. The twenty-third step is to be a good problem solver and able to find solutions to difficult problems.

24. The twenty-fourth step is to be a good decision maker and able to weigh the pros and cons of different options.

25. The twenty-fifth step is to be a good leader and able to inspire and motivate others.

26. The twenty-sixth step is to be a good collaborator and able to work effectively with others.

27. The twenty-seventh step is to be a good negotiator and able to resolve conflicts.

28. The twenty-eighth step is to be a good manager and able to oversee a team or project.

11. School size was not an important factor in the way in which teachers perceived the extent of the "actual" and "ideal" roles, or the differences between the "actual" and "ideal" roles of teachers, administrators, students, and the community in curriculum planning.

More studies are needed to help more clearly define and bring about a better understanding of roles in curriculum planning. With the agreement between teachers and administrators that teachers, students, and the community should have greater roles in curriculum planning, research is needed to find why greater roles have not been extended to these groups.

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By
Lynn C. Oberlin

A THESIS

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CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS USED

Many times the curriculum of the public schools has appeared to just happen. No one seemed to know who was responsible and as long as everything ran smoothly, generally no one cared. When the schools were under criticism, the curriculum became an important subject for discussion. At this time, the various roles played in curriculum planning were generally debated. Different people involved in the same situation often perceive the roles they actually played to be quite different. Their perceptions of the roles which others have played generally lacked agreement. When the discussion centered on what roles different groups should play in curriculum planning, no conclusions were usually reached. The circular pattern would generally become complete as people settled back to let the curriculum just happen and not really care whose job it was.

The Purpose of This Study

The purpose of this study was to determine if teachers differed from administrators in their perceptions of the roles of teachers, school administrators, students, and the

community in the process of curriculum planning, as these roles exist and as they should exist in certain selected schools. It was also part of the purpose of this study to determine if teachers and administrators perceived the extent of the roles of teachers, school administrators, students, and the community, as these roles exist, as being different than the way in which they perceived these roles should exist. This study also involved the construction of a questionnaire to measure the perceptions of teachers and administrators on the above mentioned items.

Limitations of This Study

This study was limited geographically in that the population was obtained from eleven schools in three areas of Michigan. The schools were not selected by random methods. Another limitation was the fact that all the various administrative positions were grouped together under the title of "administrators." This study was designed to be limited to the area of curriculum planning in the public schools.

The Need of This Study

In education people often have operated on certain assumptions. One of these assumptions often was that the staff (teachers and administrators) of a school all knew and agreed on the roles that various groups played in the process of curriculum planning. Another assumption was

1. The first of these is the fact that the Government has not been able to secure the necessary funds to carry out its policy of non-interference in the internal affairs of the Republic of China. This has been due to the fact that the Government has not been able to secure the necessary funds to carry out its policy of non-interference in the internal affairs of the Republic of China.

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that the roles these groups played are the ones which everyone, including the staff (teachers and administrators), believed they should have played. While these assumptions were being used as a basis for operation, teachers may actually have differed greatly from administrators in the way they perceived the roles of different groups in curriculum planning. Neither teachers nor administrators may have perceived the roles of the various groups as being ideal. If teachers differed from administrators in the way they perceived these roles should be, there may well be a situation in which teachers and administrators are working toward different goals while working under the assumption that they are working for a common goal.

This study may help to clarify some of the confusion. It should not only show how teachers and administrators differed in their perceptions of the extent of the roles which various groups have and should have played in the process of curriculum planning but it should also show what, if any, common perceptions were shared by teachers and administrators. It should likewise show which, if any, groups were perceived as having played the role in curriculum planning to the extent to which teachers or administrators feel that they should. This study will provide factual information where it has been lacking. It will show where common perceptions were, which may provide a place from which to start. Differences will be known and recognized.

1. The first part of the paper discusses the importance of understanding the underlying mechanisms of the observed phenomena. This is crucial for developing effective interventions and policies. The authors emphasize that a thorough understanding of the context and the factors influencing the outcome is essential for a successful outcome.

2. The second part of the paper presents a detailed analysis of the data collected from the study. The authors use a variety of statistical methods to analyze the data, including regression analysis and correlation analysis. The results of the analysis show a strong positive correlation between the variables studied, indicating that the intervention had a significant impact on the outcome.

3. The third part of the paper discusses the implications of the findings for practice and policy. The authors suggest that the results of the study can be used to inform the development of interventions and policies that aim to improve the outcome. They also discuss the limitations of the study and the need for further research to confirm the findings.

4. The fourth part of the paper concludes the study and provides a summary of the key findings. The authors state that the study has provided valuable insights into the mechanisms of the observed phenomena and that the results have important implications for practice and policy. They also mention that the study was limited by certain factors and that further research is needed to address these limitations.

5. The fifth part of the paper is a discussion of the broader context of the study. The authors discuss the relevance of the study to the field of research and the potential for future research. They also mention the importance of collaboration and the need for a multidisciplinary approach to research.

6. The sixth part of the paper is a conclusion. The authors summarize the key findings of the study and provide a final statement on the importance of understanding the underlying mechanisms of the observed phenomena. They also mention the need for further research and the potential for future research.

7. The seventh part of the paper is a list of references. The authors cite a variety of sources, including books, articles, and reports. The references are listed in alphabetical order and provide a comprehensive list of the sources used in the study.

8. The eighth part of the paper is an appendix. The appendix contains additional information related to the study, including data tables and figures. The appendix is organized into sections and provides a detailed look at the data used in the study.

9. The ninth part of the paper is a glossary. The glossary defines the key terms used in the study and provides a clear and concise explanation of their meaning. The glossary is organized alphabetically and is a useful reference for readers.

10. The tenth part of the paper is a list of figures. The list of figures provides a detailed description of each figure and its location in the paper. The figures are organized into sections and provide a visual representation of the data used in the study.

Definition of Terms

To clarify this study the following terms were operationally defined.

Teacher - A teacher is any employee of a school district who is required to possess a valid Michigan teaching certificate and who does not have authority over other certified employees. This would include such a person as a classroom teacher of subject or grade level, or a special teacher such as those who teach music or art.

Administrator - An administrator is any employee of a school district who is required to possess a valid Michigan teaching certificate and who does have authority over other certified employees. This would include such a person as a Superintendent, Principal, Curriculum Coordinator, Director of Instruction, or Supervisor.

Student - A student is any person who is attending and on the membership role of a school district.

Community - The community is made up of all the people who live within the boundaries of a school district.

School Program - The term "school program" was used interchangeably with the term "curriculum" and referred to the course of studies and all experiences involving students which were controlled by the school.

Curriculum - The term "curriculum" was used interchangeably with the term "school program" and referred to the course of study and all experiences involving students which were controlled by the school.

Extra-Curricular Activities - Extra-curricular activities referred to the part of the school program commonly non-credit or held outside of regular school hours. This included such school-wide activities as band, chorus, and safety patrol even if they used regular school time.

Actual - The term "actual" was used to refer to the roles of the various groups, as these roles were perceived to exist by teachers and administrators.

Ideal - The term "ideal" was used to refer to the roles of the various groups as teachers and administrators perceived these roles should exist.

Area E - Area E is a county located on the eastern side of the state of Michigan from which certain schools used in this study were selected. This county is within the metropolitan area of Detroit.

Area W - Area W is a county located on the western side of the state of Michigan from which certain schools used in this study were selected.

Area N - Area N included all of the Upper Peninsula of Michigan. Certain schools used in this study were selected from this area.

School Size 1 - School size 1 referred to a school district which enrolled from 6,000 to 11,999 students.

School Size 2 - School size 2 referred to a school district which enrolled from 3,000 to 5,999 students.

School Size 3 - School size 3 referred to a school district which enrolled from 1,200 to 2,999 students.

School Size 4 - School size 4 referred to a school district which enrolled from 300 to 1,199 students.

Schools E1, E2, E3, E4, W1, W2, W3, W4, N2, N3, and N4 - These symbols referred to individual school districts and were formed by combining the above defined area letters and school size numbers.

Hypotheses

During this study the following hypotheses were tested.

1. Administrators perceive the "actual" roles of teachers, administrators, students, and the community in curriculum planning to be greater than teachers perceive these "actual" roles to be.
2. Administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning to be greater than teachers perceive these "ideal" roles to be.
3. Teachers perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be.
4. Administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be.

Organization of This Study

The balance of this study was organized into four chapters.

Chapter II Review of Literature - In this chapter literature including both research and theory which relate to the same area as this study is reviewed.

Chapter III Population and Procedure - The development of the instrument used in this study is discussed in the third chapter. Methods used for selection of the population and a brief description of each school district used in this research is given. The procedures which were followed are reviewed.

Chapter IV Analysis of the Data - Data are reported in chapter IV under the four general areas of

1. The Roles of Teachers.
2. The Roles of Administrators.
3. The Roles of Students.
4. The Roles of the Community.

These areas refer to the various roles in curriculum study. Each of the hypotheses were tested in each of the above areas.

Chapter V Summary, Conclusions, and Implications - Material is summarized, conclusions and implications are drawn, and recommendations are made in the final chapter.

CHAPTER III

POPULATION AND PROCEDURE

An important part of any study is the selection of the instrument by means of which measurements are to be made. No suitable instrument existed to measure the teachers' and administrators' perceptions of the extent of the roles of teachers, school administrators, students, and the community in the process of curriculum planning, as these roles exist and as they should exist. A part of this study was the development of such an instrument.

Development of the Instrument

A series of statements about teachers, administrators, students, and people in the community in various curriculum roles was written. Many of these were similar with only the name of the group to which it applied changed. Seventy of these statements formed the basis for the "Questionnaire on Curriculum Responsibilities (preliminary form)." A copy of this questionnaire is in Appendix E of this study.

These seventy statements are divided among the following groups: Nineteen to the roles of teachers, nineteen to the roles of school administrators, sixteen to the roles of

the first of these is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The second is the fact that the system is not a static one, but a dynamic one, in which the various parts are constantly changing and evolving. The third is the fact that the system is not a closed one, but an open one, in which the various parts are constantly interacting with the environment. The fourth is the fact that the system is not a linear one, but a non-linear one, in which the various parts are constantly interacting with each other in a non-linear fashion. The fifth is the fact that the system is not a deterministic one, but a probabilistic one, in which the various parts are constantly interacting with each other in a probabilistic fashion.

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students, and sixteen to the roles of the people in the community. After each of these statements, the person responding was asked to check one of the following: Never, seldom, about $\frac{1}{2}$ the time, usually, or always.

Each of the seventy statements appeared in two sets. In Set I the respondent was instructed "Please answer the following statements as they apply to your present situation as an educator." In Set II the seventy statements were changed so as to include the word "should" and the respondent was instructed "Please answer the following statements as you feel they should be applied in your present situation." An introductory page defining terms used in the questionnaire was added.

The preliminary form of the "Questionnaire on Curriculum Responsibilities" was administered to 100 teachers and administrators. This group was highly similar to the one used in the final study. The teacher-administrator ratio and the size of the school districts were controlled.

The questionnaires were checked and scored by allowing four points for each "always" response, three points for each "usually" response, two points for each "about $\frac{1}{2}$ the time" response, one point for each "seldom" response, and no points for each "never" response. Separate scores were computed for the roles of teachers, administrators, students, and the people in the community for both Sets I and II. This meant a total of eight scores from each test.

Each of the 140 statements on the questionnaires was examined by item analysis using the method of summated

ratings. Of the 100 questionnaires, the 25 with the highest scores made up the high group and the 25 with the lowest scores made up the low group. The questionnaires were re-grouped for each of the eight sections and "t" scores were computed for each item. The general formula for computing this ratio is

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{S_H^2}{n_H} + \frac{S_L^2}{n_L}}}$$

where $\bar{X}_H$ = the mean score on a given statement for the high group

$\bar{X}_L$ = the mean score on a given statement for the low group

S_H^2 = the variance of responses of the high group to the statement

S_L^2 = the variance of the responses of the low group to the statement

n_H = the number in the high group

n_L = the number in the low group.¹

Since the number in both high and low groups was the same, the simpler computation formula was used. This formula is²

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}{n(n-1)}}$$

¹Allen L. Edwards, Techniques of Attitude Scale Construction, (New York: Appleton-Century-Crofts, 1957), pp. 152-53.

²Ibid., p. 153.

The "t" values on the 140 items ranged from 1.43 to 10.74. Selection of items for the final questionnaire was not just a matter of picking the highest questions, as each statement in slightly different form appeared in both Set I and Set II. This meant that any item selected for one set must be used in the other. Some items had high scores in one set and relatively low scores in the other. The length of the questionnaire also had to be reduced if it were to be mailed out and many returns received by mail. Certain items had been called ambiguous and skipped by many who had filled out the questionnaire. As this invalidated some returns, these items did not seem desirable for the final questionnaire. The final selection of items was based on the following:

1. A high "t" score on both Set I and Set II. (The lowest "t" score on an item for the final questionnaire was 4.67. This item had a higher "t" score on the other set.)
2. Items which many had complained of as being ambiguous and which many had left unanswered, were not considered for the final questionnaire.
3. Since the questionnaire was to be shortened, items chosen were distinctly different from each other.

From the original 140 items, 56 were chosen for the "Questionnaire on Curriculum Responsibilities (final form)." Seven of these statements appeared in each of the four groups in each set and the items in Set I were identical with those in Set II except for the rewording to include the word "should"

in the items for Set II. The directions remained the same as in the preliminary form and one item was added to the test vocabulary. A copy of the final form of the "Questionnaire on Curriculum Responsibilities" is in Appendix F of this paper.

Population of the Study

It was decided that this study would draw its population from three areas of the state of Michigan. The area called Area V is a single county located in the Metropolitan Detroit area which is in eastern Michigan. Area W is a single county located in western Michigan. Area N includes the entire upper peninsula of Michigan.

School districts within these three areas were selected by size. The method of grouping schools by size which is used in this study follows quite closely one used by the National Education Association for salary studies and teacher opinion studies. This system is based on student enrollment and is shown in Table 1.

Since many of the divisions in the plan used by the National Education Association do not exist in some of the areas used in this study, it was decided to use schools from the strata V, VI, VII, and VIII. These were renumbered and used in this study as school size 1 with 6,000 through 11,999 students, school size 2 with 3,000 through 5,999 students, school size 3 with 1,200 through 2,999 students, and school size 4 with 300 through 1,199 students. This information is shown in Table 2.

TABLE 1

NATIONAL EDUCATION ASSOCIATION
STRATIFICATION OF SCHOOL SYSTEMS^a

Stratum	Enrollment
I	100,000 and Over
II	50,000 - 99,999
III	25,000 - 49,999
IV	12,000 - 24,999
V	6,000 - 11,999
VI	3,000 - 5,999
VII	1,200 - 2,999
VIII	300 - 1,199
IX	50 - 299
X	1 - 50

^aLetter from Glen Robinson, Assistant Director, Research Division of the National Education Association, Washington, D. C., January 22, 1965. (A copy of this letter is in Appendix A of this study.)

TABLE 2

STRATIFICATION OF SCHOOL SYSTEMS
USED IN THIS STUDY

School Size Number	Enrollment
1	6,000 - 11,999
2	3,000 - 5,999
3	1,200 - 2,999
4	300 - 1,199

One school district for each school size classification was selected from each of the three areas with the exception that Area N contained no school district as large as school size number one. Eleven different school districts actually

participated in this study and will be identified by the area letter and school size number. For example, the district with from 3,000 through 5,999 students located in the county in western Michigan used in this study was referred to as school W2.

In selecting the actual districts, state equalized valuation per membership pupil and the estimated total expense per membership pupil, as well as district size was considered. School districts were selected so as to produce variety in the above mentioned items. A brief description of the school systems used in this study follows.

School district E1 is located just outside of the city limits of Detroit. During the 1964-65 school year, 1 high school, 2 junior high schools, and 7 elementary schools were operated with a total student enrollment of 9855 and a staff of 417 teachers.¹ The state equalized valuation was \$7,676 per membership pupil and the estimated total expense was \$464 per membership child. The total tax rate for all school purposes was 36.30 mills.²

School district E2 is located about ten miles from downtown Detroit. The district's 1 high school (grades 7-12) and 6 elementary schools had a student enrollment of 4361 and employed a staff of 195 teachers during the 1964-65 school

¹Michigan Education Directory and Buyer's Guide, 1964-65, (Lansing, Michigan: Michigan Education Directory, 1964). (Page numbers are not given for the descriptions of school districts as anonymity was guaranteed.)

²Stanley E. Hecker and Thomas J. Northey, Teacher Salary Study, 1964-65 (East Lansing, Michigan: Michigan Education Association, 1964). (Page numbers are not given for the description of school districts as anonymity was guaranteed.)

The state equalized valuation per membership student was \$24,913 and the estimated total expense per membership student was \$544. A total tax rate of 27.55 mills was collected for all school purposes.¹

School district W1 is a city school system located in a county in western Michigan. It is the only school system of its size within this county. During the 1964-65 school year, 1 high school, 1 junior high school, 1 school with a K-9 population, 1 school with a K-8 population and 9 elementary schools were operated with a total student enrollment of 9500 and a staff of 381 teachers.² The state equalized valuation was \$16,236 per membership student and the estimated total expense was \$552 per membership student. The total tax rate for all school purposes was 14.73 mills.³

School district W2 is a suburban system located near to district W1. District W2 was formed from the consolidation of 5 smaller school districts in 1959. This district is now the second largest in the county. The student population of 5,523 and the staff of 219 teachers were housed in 1 high school, 1 junior high school, 2 schools with K-8 student populations, and 5 elementary schools during the 1964-65 school year.⁴ The state equalized valuation per membership student was \$10,429 and the total estimated

¹Hecker, loc. cit.

²Michigan Education Directory and Buyer's Guide, 1964-1965.

³Hecker, op. cit.

⁴Michigan Education Directory and Buyer's Guide, 1964-1965.



expense per student was \$354. A total school tax of 24.08 mills was collected.¹

School district W3 is located in and around a small town which is about 7 miles from district W1. District W3 operated a full high school program this year for the first time. During the 1964-65 school year, 1 high school, 1 junior high school and 1 elementary school were operated with a total student enrollment of 2150 and a staff of 89 teachers.²

The state equalized valuation was \$4,393 per membership student and the total estimated cost per membership student was \$366. The tax rate for all school purposes was 26.53 mills.³

School district W4 is located next to district W1. District W4 operated a kindergarten through sixth grade program during the 1964-65 school year. The 2 elementary schools had a total enrollment of 550 students and a staff of 22 teachers.⁴ The state equalized valuation per membership student was \$21,313 and the total estimated expense was \$576 per membership student. A tax of 19.38 mills was collected for all school purposes.⁵

¹Hecker, loc. cit.

²Michigan Education Directory and Buyer's Guide, 1964-1965.

³Hecker, loc. cit.

⁴Michigan Education Directory and Buyer's Guide, 1964-1965.

⁵Hecker, loc. cit.

School district N2 is located in the southern part of the upper peninsula. The 1 high school, 1 junior high school, and 9 elementary schools of the district had a student enrollment of 4212 and a staff of 152 teachers during the 1964-65 school year.¹ The state equalized valuation was \$12,209 per membership student and the estimated total expense per membership pupil was \$386. The total tax rate for all school purposes was 14.71 mills.²

School district N3 is located in the northern part of the upper peninsula. During the 1964-65 school year, 1 high school with grades 7 through 12 and 3 elementary schools operated with a total student enrollment of 1906 and a staff of 81 teachers.³ The state equalized valuation per membership student was \$13,622 and the total estimated per pupil cost was \$451. A total school tax of 16.60 mills was collected.⁴

School district N4 is located in the western part of the upper peninsula. The 1 high school with grades 7 through 12 and 2 elementary schools operated with a total student enrollment of 930 and a staff of 41 teachers during the 1964-65 school year.⁵ The state equalized valuation was

¹Michigan Education Directory and Buyer's Guide, 1964-1965.

²Hecker, op. cit.

³Michigan Education Directory and Buyer's Guide, 1964-1965.

⁴Hecker, op. cit.

⁵Michigan Education Directory and Buyer's Guide, 1964-1965.

15,586 per membership student and the total estimated expense per membership pupil was \$419. The tax rate for all school purposes was 25.00 mills.¹

In the foregoing description of school districts, all tax rates were based on state equalized valuations. Some of the above statistical data is summarized in Table 3.

From the school districts described in this section, the population of this study was to include one-third of the teachers in each system plus enough administrators to establish a ten to one ratio.

Procedure Used in This Study

The superintendent of each district to be used was contacted and he was asked for permission to include his school district in this study. A copy of the letter sent is in Appendix B of this report. From the original eleven contacts, ten answered and gave their consent to be included in this study. One did not reply but it was later learned that the district just had been part of a consolidation and no longer would have been able to be used to represent the size of school district for which it was planned. Another letter was sent to a different district and the superintendent replied and granted permission for that district to participate.

The teachers and administrators to be used in this study were selected by the use of random numbers.² One third

¹Hacker, op. cit.

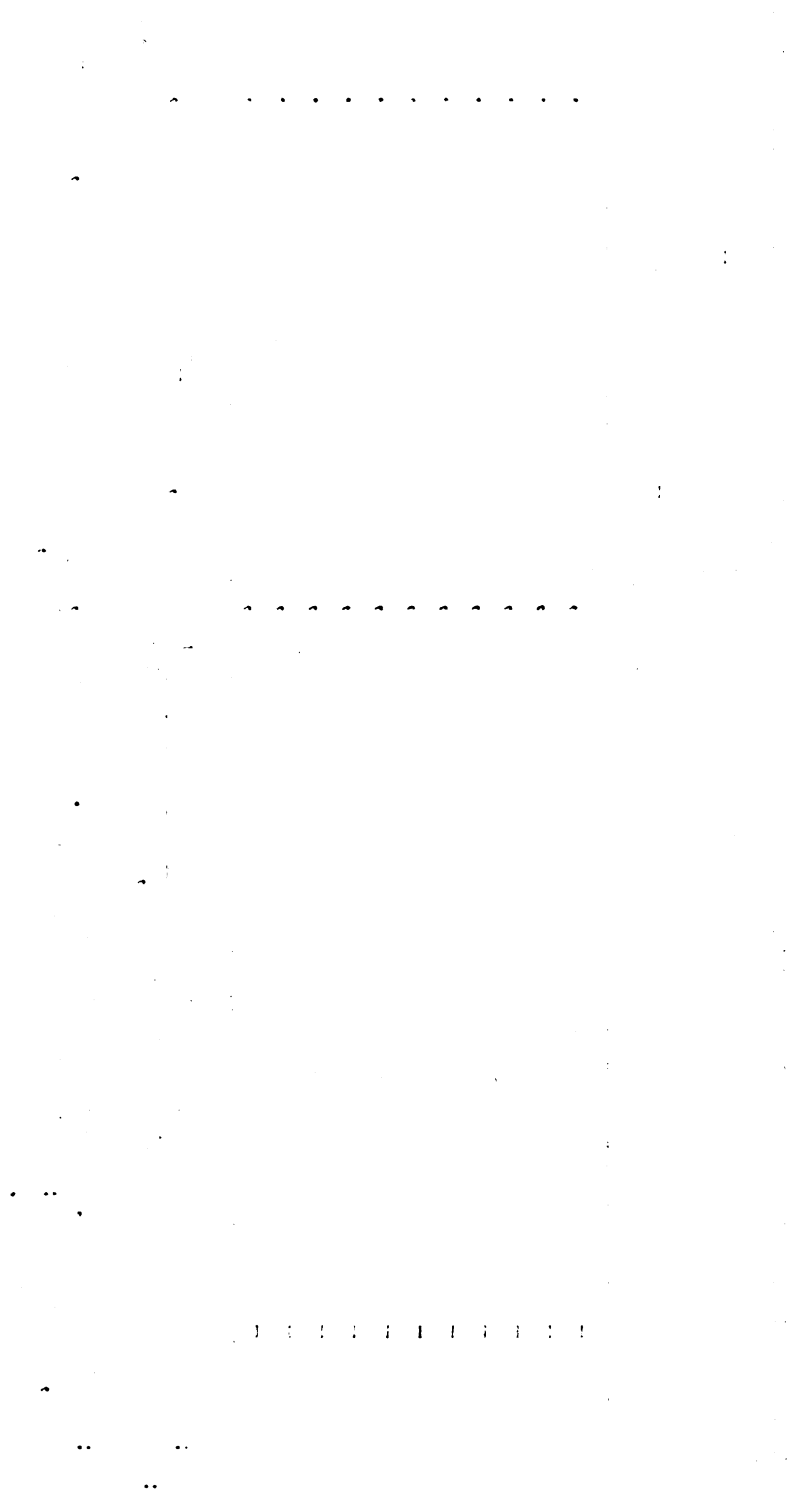
²Wilfrid J. Dixon and Frank J. Massey, Jr., Introduction to Statistical Analysis. (New York: McGraw-Hill, 1957) pp. 366-70.

TABLE 3
INFORMATION ABOUT SCHOOL DISTRICTS USED IN THIS STUDY

District	Grade Range	Enrollment	Number of Teachers	Status	Estimated Total Expenditure Per Student	Total School Millage
E1	K-12	2055	417	7,676	464	36.20
E2	K-12	4261	195	36,262	622	16.40
E3	K-12	2094	78	6,906	259	20.20
E4	K-9	1130	43	24,918	544	27.55
W1	K-12	9500	321	16,936	558	14.72
W2	K-12	5523	219	10,429	354	24.00
W3	K-12	2150	89	4,998	366	26.52
W4	K-6	550	22	21,913	526	19.33
N2	K-12	4212	152	12,209	386	14.71
N3	K-12	1906	31	13,692	451	16.60
N4	K-12	920	41	5,586	419	25.00

^a From: Michigan Education Directory and Survey's Guide, 1964-1965 (Lansing, Michigan: Michigan Education Directory, 1964) (with the exception of district E2.)

^b From: Stanley E. Hecker and Thomas J. Northery, Teacher Salary Study, 1964-1965 (East Lansing, Michigan: Michigan Education Association, 1964) (including all the figures for district E2.)



of the teachers in each school district were included. This number was obtained by counting those listed in the school directory. Since individual names were counted and not pro rated for those employed less than full time, these numbers may not always balance exactly with those used in the district descriptions. A total of 569 questionnaires was mailed to teachers. Those in Area E received 236, in Area W, 242 and in Area N, 91. The distribution by school districts was 130 to district E1, 65 to district E2, 26 to district E3, 15 to district E4, 135 to district W1, 73 to district W2, 27 to district W3, 7 to district W4, 50 to district N2, 27 to district N3, and 14 to district N4.

A total of 60 questionnaires was sent to school administrators. In Area E, 25 were sent, in Area W, 25, and in Area N, 10. The distribution by school districts was 13 to district E1, 7 to district E2, 3 to district E3, 2 to district E4, 14 to district W1, 7 to district W2, 3 to district W3, 1 to district W4, 5 to district N2, 3 to district N3, and 2 to district N4. This made a total of 629 questionnaires sent to teachers and administrators.

Each of the 629 items mailed out contained a copy of the "Questionnaire on Curriculum Responsibilities," a stamped and addressed envelope for its return, and a short letter to the teachers and administrators explaining this study and asking for their help. A copy of the "Questionnaire on Curriculum Responsibilities" and a copy of the letter sent to teachers and administrators are in

Appendices C and F of this study. To assure everyone that this study would be done in a manner in which they would remain anonymous, the only identifying information requested was the name of the school district and whether the person held the position of teacher or administrator. After replies stopped being received, a follow-up letter was sent to the superintendent of each school district. A copy of this letter is in Appendix D of this study. All questionnaires were sent out and replies received during the spring of 1965.

Analysis of the Data

Reliability procedures - After the questionnaires were scored, the coefficient of reliability was computed, by the use of Kuder Richardson formula 20, for each of the eight parts of the questionnaire.

Analysis of teachers' and administrators' perceptions - The following tests were carried out separately on data pertaining to the roles of teachers, administrators, students, and the community.

1. A "t" test was used to determine if teachers' and administrators' perceptions of the extent of the "actual" roles of the various groups were the same. (Hypothesis number 1)
2. Data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles

of the various groups were the same for all of the areas included in this study.

3. Data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "actual" roles of the various groups were the same for all of the areas included in this study.
4. Data were examined by schools and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles of the various groups were the same for all of the schools included in this study.
5. A "t" test was used to determine if teachers' and administrators' perceptions of the extent of the "ideal" roles of the various groups were the same. (Hypothesis number 2)
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7. Data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "ideal" roles of the various groups were the same for all of the areas included in this study.
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Organization of This Study

The balance of this study was organized into four chapters.

Chapter II Review of Literature - In this chapter literature including both research and theory which relate to the same area as this study is reviewed.

Chapter III Population and Procedure - The development of the instrument used in this study is discussed in the third chapter. Methods used for selection of the population and a brief description of each school district used in this research is given. The procedures which were followed are reviewed.

Chapter IV Analysis of the Data - Data are reported in chapter IV under the four general areas of

1. The Roles of Teachers.
2. The Roles of Administrators.
3. The Roles of Students.
4. The Roles of the Community.

These areas refer to the various roles in curriculum study. Each of the hypotheses were tested in each of the above areas.

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CHAPTER III

POPULATION AND PROCEDURE

An important part of any study is the selection of the instrument by means of which measurements are to be made. No suitable instrument existed to measure the teachers' and administrators' perceptions of the extent of the roles of teachers, school administrators, students, and the community in the process of curriculum planning, as these roles exist and as they should exist. A part of this study was the development of such an instrument.

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A series of statements about teachers, administrators, students, and people in the community in various curriculum roles was written. Many of these were similar with only the name of the group to which it applied changed. Seventy of these statements formed the basis for the "Questionnaire on Curriculum Responsibilities (preliminary form)." A copy of this questionnaire is in Appendix E of this study.

These seventy statements are divided among the following groups: Nineteen to the roles of teachers, nineteen to the roles of school administrators, sixteen to the roles of

students, and sixteen to the roles of the people in the community. After each of these statements, the person responding was asked to check one of the following: Never, seldom, about $\frac{1}{2}$ the time, usually, or always.

Each of the seventy statements appeared in two sets. In Set I the respondent was instructed "Please answer the following statements as they apply to your present situation as an educator." In Set II the seventy statements were changed so as to include the word "should" and the respondent was instructed "Please answer the following statements as you feel they should be applied in your present situation." An introductory page defining terms used in the questionnaire was added.

The preliminary form of the "Questionnaire on Curriculum Responsibilities" was administered to 100 teachers and administrators. This group was highly similar to the one used in the final study. The teacher-administrator ratio and the size of the school districts were controlled.

The questionnaires were checked and scored by allowing four points for each "always" response, three points for each "usually" response, two points for each "about $\frac{1}{2}$ the time" response, one point for each "seldom" response, and no points for each "never" response. Separate scores were computed for the roles of teachers, administrators, students, and the people in the community for both Sets I and II. This meant a total of eight scores from each test.

Each of the 140 statements on the questionnaires was examined by item analysis using the method of summated

ratings. Of the 100 questionnaires, the 25 with the highest scores made up the high group and the 25 with the lowest scores made up the low group. The questionnaires were re-grouped for each of the eight sections and "t" scores were computed for each item. The general formula for computing this ratio is

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{S_H^2}{n_H} + \frac{S_L^2}{n_L}}}$$

where $\bar{X}_H$ = the mean score on a given statement for the high group

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The "t" values on the 140 items ranged from 1.43 to 10.74. Selection of items for the final questionnaire was not just a matter of picking the highest questions, as each statement in slightly different form appeared in both Set I and Set II. This meant that any item selected for one set must be used in the other. Some items had high scores in one set and relatively low scores in the other. The length of the questionnaire also had to be reduced if it were to be mailed out and many returns received by mail. Certain items had been called ambiguous and skipped by many who had filled out the questionnaire. As this invalidated some returns, these items did not seem desirable for the final questionnaire. The final selection of items was based on the following:

1. A high "t" score on both Set I and Set II. (The lowest "t" score on an item for the final questionnaire was 4.67. This item had a higher "t" score on the other set.)
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From the original 140 items, 56 were chosen for the "Questionnaire on Curriculum Responsibilities (final form)." Seven of these statements appeared in each of the four groups in each set and the items in Set I were identical with those in Set II except for the rewording to include the word "should"

in the items for Set II. The directions remained the same as in the preliminary form and one item was added to the test vocabulary. A copy of the final form of the "Questionnaire on Curriculum Responsibilities" is in Appendix F of this paper.

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It was decided that this study would draw its population from three areas of the state of Michigan. The area called Area S is a single county located in the Metropolitan Detroit area which is in eastern Michigan. Area W is a single county located in western Michigan. Area N includes the entire upper peninsula of Michigan.

School districts within these three areas were selected by size. The method of grouping schools by size which is used in this study follows quite closely one used by the National Education Association for salary studies and teacher opinion studies. This system is based on student enrollment and is shown in Table 1.

Since many of the divisions in the plan used by the National Education Association do not exist in some of the areas used in this study, it was decided to use schools from the strata V, VI, VII, and VIII. These were renumbered and used in this study as school size 1 with 6,000 through 11,999 students, school size 2 with 3,000 through 5,999 students, school size 3 with 1,200 through 2,999 students, and school size 4 with 300 through 1,199 students. This information is shown in Table 2.

TABLE 1

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V	6,000 - 11,999
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VII	1,200 - 2,999
VIII	300 - 1,199
IX	50 - 299
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^aLetter from Glen Robinson, Assistant Director, Research Division of the National Education Association, Washington, D. C., January 22, 1965. (A copy of this letter is in Appendix A of this study.)

TABLE 2

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USED IN THIS STUDY

School Size Number	Enrollment
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One school district for each school size classification was selected from each of the three areas with the exception that Area W contained no school district as large as school size number one. Eleven different school districts actually

participated in this study and will be identified by the area letter and school size number. For example, the district with from 3,000 through 5,999 students located in the county in western Michigan used in this study was referred to as school W2.

In selecting the actual districts, state equalized valuation per membership pupil and the estimated total expense per membership pupil, as well as district size was considered. School districts were selected so as to produce variety in the above mentioned items. A brief description of the school systems used in this study follows.

School district E1 is located just outside of the city limits of Detroit. During the 1964-65 school year, 1 high school, 2 junior high schools, and 7 elementary schools were operated with a total student enrollment of 9855 and a staff of 417 teachers.¹ The state equalized valuation was \$7,676 per membership pupil and the estimated total expense was \$464 per membership child. The total tax rate for all school purposes was 36.30 mills.²

School district E2 is located about ten miles from downtown Detroit. The district's 1 high school (grades 7-12) and 6 elementary schools had a student enrollment of 4361 and employed a staff of 195 teachers during the 1964-65 school

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year. The state equalized valuation was \$36,263 per membership student and the estimated total expense was \$632 per membership student. A total tax rate of 16.40 mills was levied for all school purposes.¹ On one of the questionnaires returned from a teacher in this district, the teacher stated "I only hope you realize the economical condition of this community as compared to its political and educational condition. Here industry pays about 84% - 92% of its taxes. The people in general are of the low socio-economic group."

School district 13 is located in a small town about twenty-five miles from Detroit. During the 1964-65 school year the district operated 1 high school, 1 junior high school, and 2 elementary schools with a student enrollment of 2,094 and a staff of 73 teachers.² The state equalized valuation was \$6,926 per membership student and the estimated total expense was \$359 per membership student. During this year the total tax rate for all school purposes was 30.90 mills.³

School district 14 is located about 15 miles from Detroit. A kindergarten through ninth grade program was operated in 1 junior high school and 2 elementary schools during the 1964-65 school year. The total student enrollment was 1,130 and a staff of 43 teachers was employed.⁴

¹Ibid.

²Michigan Education Directory and Buyer's Guide, 1964-1965.

³Hecker, op. cit.

⁴Michigan Education Directory and Buyer's Guide, 1964-1965.

The state equalized valuation per membership student was \$24,918 and the estimated total expense per membership student was \$544. A total tax rate of 27.55 mills was collected for all school purposes.¹

School district W1 is a city school system located in a county in western Michigan. It is the only school system of its size within this county. During the 1964-65 school year, 1 high school, 1 junior high school, 1 school with a K-9 population, 1 school with a K-8 population and 9 elementary schools were operated with a total student enrollment of 9500 and a staff of 381 teachers.² The state equalized valuation was \$16,936 per membership student and the estimated total expense was \$558 per membership student. The total tax rate for all school purposes was 14.73 mills.³

School district W2 is a suburban system located near to district W1. District W2 was formed from the consolidation of 5 smaller school districts in 1959. This district is now the second largest in the county. The student population of 5,523 and the staff of 219 teachers were housed in 1 high school, 1 junior high school, 2 schools with K-8 student populations, and 5 elementary schools during the 1964-65 school year.⁴ The state equalized valuation per membership student was \$10,429 and the total estimated

¹Hecker, loc. cit.

²Michigan Education Directory and Buyer's Guide, 1964-1965.

³Hecker, op. cit.

⁴Michigan Education Directory and Buyer's Guide, 1964-1965.

expense per student was \$354. A total school tax of 24.08 mills was collected.¹

School district W3 is located in and around a small town which is about 7 miles from district W1. District W3 operated a full high school program this year for the first time. During the 1964-65 school year, 1 high school, 1 junior high school and 1 elementary school were operated with a total student enrollment of 2150 and a staff of 69 teachers.²

The state equalized valuation was \$4,893 per membership student and the total estimated cost per membership student was \$366. The tax rate for all school purposes was 26.53 mills.³

School district W4 is located next to district W1. District W4 operated a kindergarten through sixth grade program during the 1964-65 school year. The 2 elementary schools had a total enrollment of 550 students and a staff of 22 teachers.⁴ The state equalized valuation per membership student was \$21,013 and the total estimated expense was \$576 per membership student. A tax of 19.33 mills was collected for all school purposes.⁵

¹Hecker, loc. cit.

²Michigan Education Directory and Buyer's Guide, 1964-1965.

³Hecker, loc. cit.

⁴Michigan Education Directory and Buyer's Guide, 1964-1965.

⁵Hecker, loc. cit.

1. The first step in the process of creating a new product is to identify a market need.

2. Once a market need is identified, the next step is to develop a concept for the product.

3. The third step is to create a prototype of the product, which allows the designer to test the concept and make any necessary adjustments.

4. After the prototype is created, the next step is to conduct a feasibility study to determine if the product is viable for mass production.

5. Once the feasibility study is complete, the next step is to develop a business plan for the product, which includes details on marketing, distribution, and financial projections.

6. The final step in the process is to launch the product into the market, which involves creating a marketing campaign and establishing distribution channels.

7. After the product is launched, the designer must monitor its performance in the market and make any necessary adjustments to the product or marketing strategy.

8. The final step in the process is to evaluate the success of the product and determine if it should be continued or discontinued.

9. The final step in the process is to evaluate the success of the product and determine if it should be continued or discontinued.

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23. The final step in the process is to evaluate the success of the product and determine if it should be continued or discontinued.

School district N2 is located in the southern part of the upper peninsula. The 1 high school, 1 junior high school, and 9 elementary schools of the district had a student enrollment of 4212 and a staff of 152 teachers during the 1964-65 school year.¹ The state equalized valuation was \$12,209 per membership student and the estimated total expense per membership pupil was \$386. The total tax rate for all school purposes was 14.71 mills.²

School district N3 is located in the northern part of the upper peninsula. During the 1964-65 school year, 1 high school with grades 7 through 12 and 3 elementary schools operated with a total student enrollment of 1906 and a staff of 81 teachers.³ The state equalized valuation per membership student was \$13,692 and the total estimated per pupil cost was \$451. A total school tax of 16.60 mills was collected.⁴

School district N4 is located in the western part of the upper peninsula. The 1 high school with grades 7 through 12 and 2 elementary schools operated with a total student enrollment of 980 and a staff of 41 teachers during the 1964-65 school year.⁵ The state equalized valuation was

¹Michigan Education Directory and Buyer's Guide, 1964-1965.

²Hecker, op. cit.

³Michigan Education Directory and Buyer's Guide, 1964-1965.

⁴Hecker, op. cit.

⁵Michigan Education Directory and Buyer's Guide, 1964-1965.

1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to understand the current market landscape and identifying gaps or unmet needs.

2. Once a market need is identified, the next step is to develop a concept. This involves brainstorming ideas and creating a preliminary design or prototype.

3. The third step is to conduct a feasibility study. This involves evaluating the technical, financial, and market viability of the concept.

4. The fourth step is to develop a business plan. This involves outlining the business model, marketing strategy, and financial projections.

5. The fifth step is to secure funding. This involves identifying potential investors or lenders and presenting the business plan to them.

6. The sixth step is to develop a prototype. This involves creating a physical or digital representation of the product to test its functionality and design.

7. The seventh step is to conduct a pilot test. This involves testing the product with a small group of users to gather feedback and identify any issues.

8. The eighth step is to launch the product. This involves marketing the product and making it available to the target market.

9. The ninth step is to monitor the product's performance. This involves tracking sales, customer feedback, and market trends to assess the product's success.

10. The tenth step is to iterate and improve. This involves using the feedback from the pilot test and market performance to refine the product and make improvements.

11. The eleventh step is to scale the product. This involves expanding the product's reach to new markets and increasing production volume.

12. The twelfth step is to maintain the product. This involves ongoing marketing, customer support, and product updates to ensure the product remains relevant and competitive.

13. The thirteenth step is to evaluate the product's overall success. This involves analyzing the product's performance against the initial goals and objectives.

14. The fourteenth step is to plan for the future. This involves identifying opportunities for future products and improvements based on the current product's performance.

15. The fifteenth step is to celebrate the product's success. This involves acknowledging the team's efforts and the product's achievement in the market.

16. The sixteenth step is to document the product's development process. This involves creating a record of the steps taken from concept to launch to inform future product development.

17. The seventeenth step is to share the product's story. This involves communicating the product's journey and the team's experiences to the public and industry.

18. The eighteenth step is to seek feedback from the community. This involves engaging with users and stakeholders to gather additional feedback and insights.

19. The nineteenth step is to continue to innovate. This involves staying up-to-date with market trends and exploring new ideas for future products.

20. The twentieth step is to maintain a long-term vision. This involves setting goals for the future and ensuring the product remains aligned with the company's overall mission and vision.

21. The twenty-first step is to foster a culture of innovation. This involves encouraging creativity and experimentation within the organization to drive future product development.

22. The twenty-second step is to build a strong brand. This involves creating a unique identity for the product and the company to stand out in the market.

23. The twenty-third step is to establish a strong customer base. This involves implementing effective marketing strategies to attract and retain customers.

24. The twenty-fourth step is to provide excellent customer service. This involves ensuring that customers have a positive experience with the product and the company.

25. The twenty-fifth step is to stay competitive. This involves continuously monitoring the market and adapting the product to stay ahead of competitors.

\$5.586 per membership student and the total estimated expense per membership pupil was \$419. The tax rate for all school purposes was 25.00 mills.¹

In the foregoing description of school districts, all tax rates were based on state equalized valuations. Some of the above statistical data is summarized in Table 3.

From the school districts described in this section, the population of this study was to include one-third of the teachers in each system plus enough administrators to establish a ten to one ratio.

Procedure Used in This Study

The superintendent of each district to be used was contacted and he was asked for permission to include his school district in this study. A copy of the letter sent is in Appendix B of this report. From the original eleven contacts, ten answered and gave their consent to be included in this study. One did not reply but it was later learned that the district just had been part of a consolidation and no longer would have been able to be used to represent the size of school district for which it was planned. Another letter was sent to a different district and the superintendent replied and granted permission for that district to participate.

The teachers and administrators to be used in this study were selected by the use of random numbers.² One third

¹Hecker, op. cit.

²Wilfrid J. Dixon and Frank J. Massey, Jr., Introduction to Statistical Analysis. (New York: McGraw-Hill, 1957)

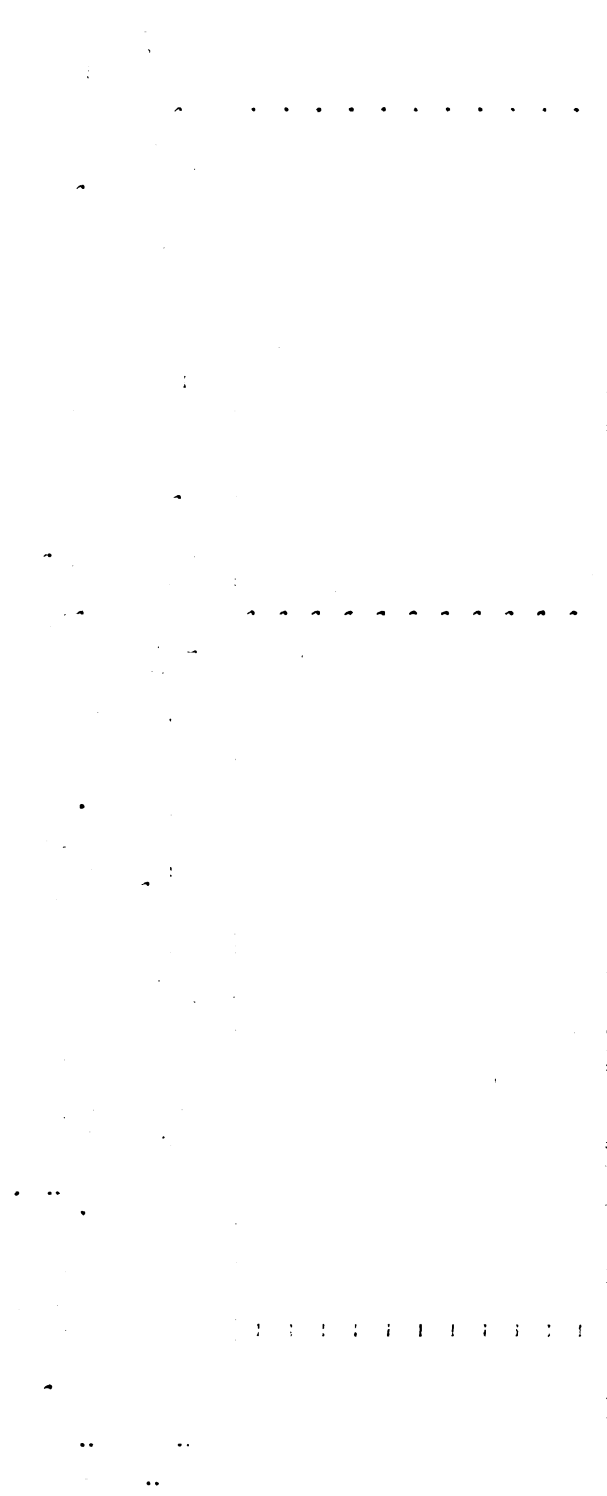
TABLE 3

INFORMATION ABOUT SCHOOL DISTRICTS USED IN THIS STUDY

District	Graded Range	Enrollment	Number of Teachers	State Equalized Valuation Per Member-School Student	Estimated Total Expense Per Student	Total School Millage
B1	K-12	2255	417	7,676	484	36.20
B2	K-12	4321	195	37,262	622	16.40
B3	K-12	2094	72	6,386	359	30.20
B4	K-9	1130	43	24,313	546	27.55
W1	K-12	9500	321	16,926	558	14.73
W2	K-12	5523	219	10,429	354	24.03
W3	K-12	2150	89	4,398	366	26.52
W4	K-6	550	22	21,313	526	19.33
N2	K-12	4212	152	12,209	336	14.71
N3	K-12	1906	61	13,692	451	16.60
N4	K-12	920	41	5,586	419	25.03

^a From: Michigan Education Directory and Survey's Guide, 1964-1965 (Lansing, Michigan: Michigan Education Directory, 1964) (With the exception of district #2.)

^b From: Stanley E. Hecker and Thomas J. Northery, Teacher Salary Study, 1964-1965 (East Lansing, Michigan: Michigan Education Association, 1964) (Including all the figures for district #2.)



of the teachers in each school district were included. This number was obtained by counting those listed in the school directory. Since individual names were counted and not pro rated for those employed less than full time, these numbers may not always balance exactly with those used in the district descriptions. A total of 569 questionnaires was mailed to teachers. Those in Area E received 236, in Area W, 242 and in Area N, 91. The distribution by school districts was 130 to district E1, 65 to district E2, 26 to district E3, 15 to district E4, 135 to district W1, 73 to district W2, 27 to district W3, 7 to district W4, 50 to district N2, 27 to district N3, and 14 to district N4.

A total of 60 questionnaires was sent to school administrators. In Area E, 25 were sent, in Area W, 25, and in Area N, 10. The distribution by school districts was 13 to district E1, 7 to district E2, 3 to district E3, 2 to district E4, 14 to district W1, 7 to district W2, 3 to district W3, 1 to district W4, 5 to district N2, 3 to district N3, and 2 to district N4. This made a total of 629 questionnaires sent to teachers and administrators.

Each of the 629 items mailed out contained a copy of the "Questionnaire on Curriculum Responsibilities," a stamped and addressed envelope for its return, and a short letter to the teachers and administrators explaining this study and asking for their help. A copy of the "Questionnaire on Curriculum Responsibilities" and a copy of the letter sent to teachers and administrators are in

Appendices C and E of this study. To assure everyone that this study would be done in a manner in which they would remain anonymous, the only identifying information requested was the name of the school district and whether the person held the position of teacher or administrator. After replies stopped being received, a follow-up letter was sent to the superintendent of each school district. A copy of this letter is in Appendix D of this study. All questionnaires were sent out and replies received during the spring of 1965.

Analysis of the Data

Reliability procedures - After the questionnaires were scored, the coefficient of reliability was computed, by the use of Kuder Richardson formula 20, for each of the eight parts of the questionnaire.

Analysis of teachers' and administrators' perceptions - The following tests were carried out separately on data pertaining to the roles of teachers, administrators, students, and the community.

1. A "t" test was used to determine if teachers' and administrators' perceptions of the extent of the "actual" roles of the various groups were the same. (Hypothesis number 1)
2. Data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles

of the various groups were the same for all of the areas included in this study.

3. Data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "actual" roles of the various groups were the same for all of the areas included in this study.
4. Data were examined by schools and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles of the various groups were the same for all of the schools included in this study.
5. A "t" test was used to determine if teachers' and administrators' perceptions of the extent of the "ideal" roles of the various groups were the same. (Hypothesis number 2)
6. Data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "ideal" roles of the various groups were the same for all of the areas included in this study.
7. Data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "ideal" roles of the various groups were the same for all of the areas included in this study.
8. Data were examined by schools and an analysis of variance was used to determine if the teachers'

perceptions of the extent of the "ideal" roles of the various groups were the same for all of the schools included in this study.

9. A "t" test was used to determine if teachers perceived the extent of the "actual" roles of the various groups to be the same as they perceived the extent of the "ideal" roles to be for these groups. This test was performed by using the sum of the differences of each teacher's perceptions. (Hypothesis number 3)
10. Data concerning the differences between the teachers' perceptions of the extent of the "actual" roles of the various groups and their perceptions of the extent of the "ideal" roles of these groups were examined by areas. An analysis of variance was used to determine if these differences were the same for all areas included in this study.
11. Data concerning the differences between the teachers' perceptions of the extent of the "actual" roles of the various groups and their perceptions of the extent of the "ideal" roles of these groups were examined by schools. An analysis of variance was used to determine if these differences were the same for all schools included in this study.

of " $F_{.95}$ " and " $F_{.99}$ " to check significance at the five and one per cent levels.¹

When the analysis of variance showed that a significant difference or differences existed, individual comparisons were made with the use of Studentized Ranges. The within groups mean square was multiplied by one-half the sum of the reciprocals of the number of items included in each of the two means being compared. The square root of this product was multiplied by the number supplied from the Studentized Ranges. The results were compared with the difference between the two means to determine if they were significantly different from each other. The Studentized Ranges are sometimes identified by the letter "q." The procedure outlined here is very similar to that explained by Dixon and Massey.²

¹Ibid., pp. 152-55.

²Ibid., pp. 152-55.

CHAPTER IV

ANALYSIS OF THE DATA

Of the 629 questionnaires mailed to teachers and administrators, 367 were completed and returned. These were from 323 teachers and 45 administrators. Since a greater proportion of administrators than teachers replied, the ten to one ratio was not maintained.

The questionnaires were scored as eight separate tests of seven items each. These sections referred to the roles of teachers, administrators, students, and the community. Each of these four roles was represented in both set one and set two. As each of the seven items in each section was scored from zero to four points, the highest possible score was twenty-eight and the lowest was zero.

The coefficient of reliability for each of the eight sections was computed with the use of the Kuder Richardson formula 20. This formula is

$$r = \frac{n}{n-1} \left[1 - \frac{\sum s_i^2}{s_t^2} \right]$$

where n = the number of items in the test

$\sum s_i^2$ = the sum of the item variances

s_t^2 = the test variance.

The Roles of Teachers

The first seven items of set one made up the section which was used to measure the perceptions which teachers and administrators had of the "actual" roles of teachers. Item and test variances were computed and are shown in Table 4. This information was used with the Kuder Richardson formula 20 and the coefficient of reliability for the test of the "actual" roles of teachers was .863. This was considered satisfactory.

TABLE 4

TEST AND ITEM VARIANCES FOR THE TEST
OF THE "ACTUAL" ROLES OF TEACHERS

Item	Variance
1	.926
2	.896
3	1.213
4	1.365
5	1.254
6	.983
7	1.203
Test	30.17

The first seven items of set two made up the section which was used to measure the perceptions which teachers and administrators had of the "ideal" roles of teachers. Item and test variances were computed and are shown in Table 5. This information was used with the Kuder Richardson formula 20 and the coefficient of reliability

for the test of the "ideal" roles of teachers was .770. This was considered satisfactory.

The teachers' average score for the test on the "actual" roles of teachers was 13.63 and the administrators' average score on the same test was 17.42. The difference between these scores was checked by the use of the "t" test and "t" was found to equal 5.42. (See Chapter 3.) Since this was greater than the value of 2.58, the table value of " $t_{.005}$," the difference between teachers' perceptions and administrators' perceptions was highly significant at and beyond the one per cent level. The hypothesis that administrators perceive the "actual" roles of teachers, administrators, students, and the community to be greater than teachers perceive these "actual" roles to be, was accepted as it applied to the roles of teachers.

TABLE 5

TEST AND ITEM VARIANCES FOR THE TEST
OF THE "IDEAL" ROLES OF TEACHERS

Item	Variance
1	.732
2	.402
3	.512
4	1.179
5	.763
6	.757
7	.397
Test	15.49

The data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles of teachers were the same for all of the areas included in this study. Averages of teachers' scores by areas and by school districts are given in Table 6. The analysis of variance is shown in Table 7.

TABLE 6

MEANS OF TEACHERS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF TEACHERS

Unit	Questionnaires Sent	Participants (Respondents)	Mean
School 11	130	57	16.23
School 12	65	36	11.50
School 13	36	7	13.29
School 14	15	3	13.33
School 11	135	94	12.29
School 12	73	53	13.42
School 13	27	10	10.20
School 14	7	4	17.25
School 12	50	22	14.69
School 13	27	13	16.62
School 14	14	8	13.75
Area E	236	109	14.56
Area W	242	161	12.65
Area N	91	53	15.02
All	569	323	13.63

TABLE 7

ANALYSIS OF VARIANCE BY AREAS OF TEACHERS' SCORES
FOR THE TEST OF THE "ACTUAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	349.43	174.72	5.94
Within Groups	320	9414.36	29.42	"F _{.95} " = 3.00
Total	322	9763.72		"F _{.99} " = 4.61

The "F" ratio was found to be 5.94 which was greater than 4.61, the table value of " $F_{.99}$." (See Chapter 3.) This showed that a difference or differences existed between some of the area means at both the five per cent and the one per cent levels of significance. Individual comparisons of the means were made by the use of Studentized Ranges and it was found that the means of area E (14.56) and area N (15.02) were greater than the mean of area W (12.65) at the one per cent level of significance. (See Chapter 3.) The mean of area E was not significantly different from the mean of area N at either the one per cent or the five per cent level. This showed that the teachers used in this study in area E and area N perceived the teachers' "actual" roles in curriculum planning to be greater than the teachers in area W perceived them to be.

The data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "actual" roles of teachers were the same for all areas included in this study. Averages of administrators' scores by areas and by school districts are given in Table 3. The analysis of variance is shown in Table 9. Since the "F" ratio of 1.38 was smaller than 3.23, the table value of " $F_{.95}$," no significant differences existed between any of the area means which represented the administrators' perceptions of the extent of the roles of teachers.

The data were examined by schools and an analysis of variance was used to determine if the teachers' perceptions

of the extent of the roles of teachers were the same for all of the schools in this study. Averages of teachers' scores by school districts are listed in Table 6.

TABLE 8

MEANS OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF TEACHERS

Unit	Questionnaires Sent	Participants (Respondents)	Mean
School E1	13	6	16.67
School E2	7	4	20.75
School E3	3	2	12.00
School E4	2	2	18.50
School W1	14	15	16.53
School W2	7	5	18.00
School E3	3	2	15.00
School W4	1	1	16.00
School A2	5	3	19.00
School E3	3	3	18.33
School E4	2	2	22.00
Area E	25	14	17.43
Area W	25	23	16.70
Area A	10	8	19.50
All	60	45	17.42

TABLE 9

ANALYSIS OF VARIANCE BY AREAS OF
ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	46.68	23.34	1.38
Within Groups	42	710.30	16.91	"F".95" = 3.23
Total	44	756.98		

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The analysis of variance is shown in Table 10. As the "F" ratio of 0.43 was less than 1.83, the table value of " $F_{.95}$," no significant differences were found between any of the school district means which represented the teachers' perceptions of the roles of teachers.

TABLE 10
ANALYSIS OF VARIANCE BY SCHOOLS
OF TEACHERS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	1123.41	11.23	0.43
Within Groups	312	2573.38	27.47	" $F_{.95}$ " = 1.83
Total	322	2763.79		

A "t" test was used to determine if teachers' and administrators' perceptions of the extent of the "ideal" roles of teachers were the same. The mean of the teachers' scores on the test of the "ideal" roles of teachers was 19.99 and the administrators' mean on the same test was 19.76. The "t" ratio was 0.42 which was less than 1.96, the table value of " $t_{.975}$," so no significant difference was found. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning to be greater than teachers perceive these "ideal" roles to be was not proven as it applied to the roles of teachers.

An analysis of variance was used to determine if the teachers' perceptions of the extent of the "ideal" roles of teachers were the same for all of the areas included in this study. Averages of teachers' scores by areas and by school districts are given in Table 11. The analysis of variance is shown in Table 12.

TABLE 11

MEANS OF TEACHERS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF TEACHERS

Unit	Participants	Mean
School #1	57	20.75
School #2	36	19.99
School #3	7	23.29
School #4	9	20.33
School #1	94	19.37
School #2	53	19.34
School #3	10	19.20
School #4	4	22.50
School #3	32	19.94
School #3	13	21.77
School #4	8	20.38
Area E	109	20.60
Area W	161	19.43
Area N	53	20.45
All	322	19.99

TABLE 12

ANALYSIS OF VARIANCE BY AREAS
OF TEACHERS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	102.17	51.09	3.21
Within Groups	320	5094.90	15.92	"F _{.95} " = 3.00
Total	322	5196.07		"F" = 4.61

The "F" ratio was found to be 3.21 which is greater than 3.00, the table value of " $F_{.05}$," but less than 4.61, the table value of " $F_{.01}$," so significant difference or differences existed at the five per cent level of significance but not at the one per cent level. Individual comparisons were made by the use of Studentized Ranges and the mean of area E (20.60) was significantly different than the mean of area W (19.43) at the five per cent level. The means of area E (20.60) and area N (20.45) were not significantly different and neither were the means of area N (20.45) and area W (19.43). Teachers involved in this study from area E perceived the "ideal" roles of teachers to be greater than the teachers of area W. Other differences were not significant.

Data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "ideal" roles of teachers were the same for all of the areas included in this study. Averages of administrators' scores by areas and school districts are given in Table 13. The analysis of variance is shown in Table 14. The "F" ratio of 0.63 was less than 3.23, the table value of " $F_{.05}$," so there were no significant differences between any of the area means which represented the administrators' perceptions of the extent of the "ideal" roles of teachers.

An analysis of variance was used to determine if the teachers' perceptions of the extent of the "ideal" roles of teachers were the same for all of the schools included

in this study. Averages of teachers' scores by school districts is given in Table 11. The analysis of variance is shown in Table 15. As the "F" ratio of 1.53 was less than 1.83, the table value of " $F_{.05}$," there were no significant differences between any of the school means which represent the teachers' perceptions of the "ideal" roles of teachers.

TABLE 13

MEANS OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF TEACHERS

Unit	Participants	Mean
School #1	6	19.50
School #2	4	21.50
School #3	3	19.00
School #4	2	21.00
School #1	15	18.67
School #2	5	21.40
School #3	3	20.00
School #4	1	15.00
School #2	3	19.00
School #3	3	21.67
School #4	5	21.00
Area A	14	20.21
Area B	23	19.22
Area C	8	20.50
All	45	19.76

A "t" test was used to determine if teachers perceived the extent of the "actual" roles of teachers to be the same as they perceived the extent of the "ideal" roles of teachers. This test was performed by using the sum of the differences between each teacher's perception of the "ideal" and "actual" roles of teachers. This was done by subtracting the score for "actual" roles from the score for "ideal"

roles. A negative score was possible if a teacher perceived the "actual" role to be greater than the "ideal" role. The mean difference between teachers' perceptions of the "ideal" and "actual" role of teachers was 6.31. The "t" ratio was 19.30 which was greater than 2.58, the table value of "t_{.995}," so this difference was highly significant at and above the one per cent level of significance. The hypothesis that teachers perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of those groups to be, was accepted as it applied to the roles of teachers.

TABLE 14

ANALYSIS OF VARIANCE BY AREAS
OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	14.04	7.02	0.63
Within Groups	42	470.27	11.20	"F _{.95} " = 3.23
Total	44	484.31		

Data concerning the differences between the teachers' perceptions of the extent of the "actual" roles of teachers and their perceptions of the "ideal" roles of teachers were examined by areas. Averages of the differences between

the teachers' "actual" and "ideal" scores are given in Table 16. An analysis of variance was used to determine if these differences were the same for all of the areas included in this study. The analysis of variance is given in Table 17. As the "F" ratio of 1.23 was less than 3.00, the table value of " $F_{.95}$," there were no significant differences between any of the area means which represented the differences in the teachers' perceptions and the "actual" and "ideal" roles of teachers.

TABLE 15

ANALYSIS OF VARIANCE BY SCHOOLS
OF TEACHERS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	242.91	24.29	1.53
Within Groups	312	4954.06	15.88	" $F_{.95}$ " = 1.23
Total	322	5196.97		

Data concerning the differences between the teachers' perceptions of the extent of the "actual" roles of teachers and their perceptions of the extent of the "ideal" roles of teachers were examined by schools. Averages of these differences by schools are given in Table 16. An analysis of variance was used to determine if these differences were the same for all schools included in this study.

This analysis of variance is shown in Table 18. Since the "F" ratio of 1.62 was less than 1.83, the table value of "F_{.95}," there were no significant differences between any of the school means which represented the differences in the teachers' perceptions of the "actual" and "ideal" roles of teachers.

TABLE 16

MEANS OF THE DIFFERENCES BETWEEN TEACHERS' SCORES
ON THE TEST OF THE "ACTUAL" AND THE TEST
OF THE "IDEAL" ROLES OF TEACHERS
("IDEAL" - "ACTUAL" = DIFFERENCE)

Unit	Participants	Mean
School E1	57	4.53
School E2	36	8.39
School E3	7	5.00
School E4	9	7.00
School W1	94	7.09
School W2	53	5.92
School W3	10	9.00
School W4	4	5.25
School N2	32	5.25
School N3	13	5.15
School N4	8	6.63
Area E	109	6.04
Area W	161	6.78
Area N	53	5.43
All	323	6.31

• The first part of the paper discusses the importance of the research and the objectives of the study. It also provides a brief overview of the methodology used in the study.

• The second part of the paper discusses the results of the study and the findings. It also provides a detailed analysis of the data and the conclusions drawn from the study.

• The third part of the paper discusses the implications of the study and the recommendations for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The fourth part of the paper discusses the limitations of the study and the potential for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The fifth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The sixth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The seventh part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The eighth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The ninth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The tenth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The eleventh part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The twelfth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The thirteenth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The fourteenth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The fifteenth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

• The sixteenth part of the paper discusses the conclusions of the study and the implications for future research. It also provides a summary of the key findings and the overall conclusions of the study.

TABLE 17

ANALYSIS OF VARIANCE BY AREAS OF THE DIFFERENCES
IN TEACHERS' SCORES FOR THE TESTS OF THE "ACTUAL"
AND "IDEAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	83.84	41.92	1.23
Within Groups	320	11024.82	34.45	"F _{.95} " = 3.00
Total	322	11108.66		

TABLE 18

ANALYSIS OF VARIANCE BY SCHOOLS OF THE DIFFERENCES
IN TEACHERS' SCORES FOR THE TESTS OF THE "ACTUAL"
AND "IDEAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	548.56	54.86	1.62
Within Groups	312	10560.10	33.85	"F _{.95} " = 1.83
Total	322	11108.66		

A "t" test was used to determine if administrators perceived the extent of the "actual" roles of teachers to be the same as they perceived the extent of the "ideal" roles of teachers. This test was performed by using the sum of the differences of each administrators' perceptions.
($\text{"ideal"} - \text{"actual"} = \text{difference}$) The mean of these dif-

ferences for the administrators was 2.33. The "t" ratio was found to be 4.73 which is greater than 2.69, the table value of " $t_{.995}$," so this difference was highly significant at and above the one per cent level of significance. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be, was accepted as it applied to the roles of teachers.

Data concerning the differences between the administrators' perceptions of the extent of the "actual" roles of teachers and their perceptions of the "ideal" roles of teachers were examined by areas. Averages of the differences between administrators' "actual" and "ideal" scores are given in Table 19. An analysis of variance was used to determine if these differences were the same for all of the areas included in this study. This analysis of variance is shown in Table 20. As the "F" ratio of 0.81 was less than 3.23, the table value of " $F_{.95}$," there were no significant differences between any of the area means which represented differences in the administrators' perceptions of the "actual" and "ideal" roles of teachers.

TABLE 19

MEANS OF THE DIFFERENCES BETWEEN
ADMINISTRATORS' SCORES ON THE TEST OF THE "ACTUAL"
AND THE TEST OF THE "IDEAL" ROLES OF TEACHERS
("IDEAL" - "ACTUAL" = DIFFERENCE)

Unit	Participants	Mean
School E1	6	2.83
School E2	4	.75
School E3	2	7.00
School E4	2	2.50
School W1	15	2.13
School W2	5	3.40
School W3	2	5.00
School W4	1	-1.00
School N2	3	0.00
School N3	3	3.33
School N4	2	-1.00
Area E	14	2.79
Area W	23	2.52
Area N	8	1.00
All	45	2.33

TABLE 20

ANALYSIS OF VARIANCE BY AREAS OF THE DIFFERENCES
IN ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" AND "IDEAL" ROLES OF TEACHERS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	17.90	8.95	.81
Within Groups	42	464.10	11.05	"F _{.95} " = 3.23
Total	44	482.00		

1. The first part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

2. The second part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

3. The third part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

4. The fourth part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

5. The fifth part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

6. The sixth part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

7. The seventh part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

8. The eighth part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

9. The ninth part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the distribution of the public lands of the State of California.

The Roles of Administrators

Items eight through fourteen of set one made up the section of the questionnaire which was used to measure the perceptions which teachers and administrators had of the "actual" roles of administrators. Item and test variances were computed and are shown in Table 21.

TABLE 21

TEST AND ITEM VARIANCES FOR THE TEST OF THE "ACTUAL" ROLES OF ADMINISTRATORS

Item	Variance
8	0.414
9	1.065
10	.476
11	1.272
12	.774
13	.952
14	.620
Test	17.99

This information was used with the Kuder Richardson formula 20 and the coefficient of reliability for the test of the "actual" roles of administrators was .805. This was considered satisfactory.

Items eight through fourteen of set two made up the section of the questionnaire which was used to measure the perceptions which teachers and administrators had of the "ideal" roles of administrators. Item and test variances

The first part of the paper discusses the importance of understanding the underlying structure of the data. This is particularly relevant in the context of machine learning, where the ability to identify patterns and relationships in the data is crucial for making accurate predictions. The second part of the paper focuses on the development of a new algorithm for solving the problem of finding the optimal solution to a given set of constraints. This algorithm is based on a combination of linear programming and heuristic search techniques, and is designed to be both efficient and effective. The third part of the paper presents the results of a series of experiments conducted to evaluate the performance of the new algorithm. These results show that the algorithm is able to find the optimal solution to a wide range of problems, and that it is significantly faster than existing methods. Finally, the paper concludes with a discussion of the implications of these findings for the field of machine learning, and suggests some directions for future research.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	3																																																													

were computed and are shown in Table 22. This information was used with the Kuder Richardson formula 20 and the coefficient of reliability for the test of the "ideal" roles of administrators was .838. This was considered satisfactory.

TABLE 22

TEST AND ITEM VARIANCES FOR THE TEST
OF THE "IDEAL" ROLES OF ADMINISTRATORS

Item	Variance
8	0.536
9	.998
10	.598
11	1.320
12	.870
13	.924
14	.992
Test	22.13

A "t" test was used to determine if teachers' and administrators' perceptions of the extent of the "actual" roles of administrators were the same. The teachers' average score for the test of the "actual" roles of administrators was 21.37 and the administrators' average score on the same test was 21.56. The "t" ratio was found to be 0.35. Since this was less than 1.96, the table value of "t_{.975}," there was no significant difference between the teachers' and administrators' perceptions of the "actual" roles of administrators. The hypothesis that administrators perceive the "actual" roles of teachers, administrators, students, and

the community in curriculum planning to be greater than teachers perceive these "actual" roles to be, was not proven as it applied to the roles of administrators.

The data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the "actual" roles of administrators were the same for all of the areas included in this study. Averages of teachers' scores by areas and by school districts are given in Table 23. The analysis of variance is shown in Table 24. The "F" ratio was found to be 2.42 which was less than 3.00, the table value of " $F_{.95}$," so there were no significant differences between any of the area means which represented the teachers' perceptions of the "actual" roles of administrators.

The data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "actual" roles of administrators were the same for all of the areas included in this study. Averages of administrators' scores are given in Table 25. The analysis of variance is shown in Table 26. Since the "F" ratio of 0.33 was less than 3.23, the table value of " $F_{.95}$," no significant differences were found between any of the area means which represented the administrators' perceptions of the "actual" roles of administrators.

Data were examined by schools and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles of administrators were the same for all of the school districts used in this study.

TABLE 23

MEANS OF TEACHERS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF ADMINISTRATORS

Unit	Participants	Mean
School E1	57	19.89
School E2	36	21.00
School E3	7	24.00
School E4	9	21.78
School W1	94	22.35
School W2	53	21.02
School W3	10	20.80
School W4	4	24.25
School N2	32	20.66
School N3	13	21.69
School N4	8	23.25
Area E	109	20.68
Area W	161	21.86
Area N	53	21.30
All	323	21.37

TABLE 24

ANALYSIS OF VARIANCE BY AREAS OF TEACHERS' SCORES
FOR THE TEST OF THE "ACTUAL" ROLES OF ADMINISTRATORS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	91.50	45.75	2.42
Within Groups	320	6044.92	18.89	"F _{.95} " = 3.00
Total	322	6136.42		

Averages of teachers' scores by school districts are listed in Table 23. The analysis of variance is shown in Table 27. Since the "F" ratio of 1.93 is greater than 1.83, the table

TABLE 25

MEANS OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF ADMINISTRATORS

Unit	Participants	Mean
School E1	6	20.67
School E2	4	21.50
School E3	2	18.50
School E4	2	24.00
School W1	15	21.73
School W2	5	22.00
School W3	2	19.50
School W4	1	22.00
School N2	3	22.33
School N3	3	21.33
School N4	2	23.50
Area E	14	21.07
Area W	23	21.61
Area N	8	22.25
All	45	21.56

TABLE 26

ANALYSIS OF VARIANCE BY AREAS
OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLE OF ADMINISTRATORS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	7.20	3.60	0.33
Within Groups	42	455.91	10.86	"F _{.95} " = 3.23
Total	44	463.11		

value of "F_{.95}," but less than 2.32, the table value of "F_{.99}," a difference or differences existed between some of the school means at the five per cent level of significance

the following table. The first column shows the number of cases in each age group, and the second column shows the percentage of cases in each age group.

Age Group	Number of Cases	Percentage of Cases
0-4	10	10.0%
5-9	20	20.0%
10-14	30	30.0%
15-19	40	40.0%
20-24	50	50.0%
25-29	60	60.0%
30-34	70	70.0%
35-39	80	80.0%
40-44	90	90.0%
45-49	100	100.0%
50-54	110	110.0%
55-59	120	120.0%
60-64	130	130.0%
65-69	140	140.0%
70-74	150	150.0%
75-79	160	160.0%
80-84	170	170.0%
85-89	180	180.0%
90-94	190	190.0%
95-99	200	200.0%
100+	210	210.0%

The following table shows the number of cases in each age group, and the percentage of cases in each age group. The first column shows the number of cases in each age group, and the second column shows the percentage of cases in each age group.

Age Group	Number of Cases	Percentage of Cases
0-4	10	10.0%
5-9	20	20.0%
10-14	30	30.0%
15-19	40	40.0%
20-24	50	50.0%
25-29	60	60.0%
30-34	70	70.0%
35-39	80	80.0%
40-44	90	90.0%
45-49	100	100.0%
50-54	110	110.0%
55-59	120	120.0%
60-64	130	130.0%
65-69	140	140.0%
70-74	150	150.0%
75-79	160	160.0%
80-84	170	170.0%
85-89	180	180.0%
90-94	190	190.0%
95-99	200	200.0%
100+	210	210.0%

The following table shows the number of cases in each age group, and the percentage of cases in each age group. The first column shows the number of cases in each age group, and the second column shows the percentage of cases in each age group.

TABLE 27

ANALYSIS OF VARIANCE BY SCHOOLS OF TEACHERS' SCORES
FOR THE TEST OF THE "ACTUAL" ROLES OF ADMINISTRATORS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	358.26	35.83	1.93
Within Groups	312	5778.16	18.52	"F _{.95} " = 1.83
Total	322	6136.42		"F _{.99} " = 2.32

but not at the one per cent level. Individual comparisons of the means were made with the use of Studentized Ranges and it was found that the means of school district W1 (22.35) and school district E3 (24.00) were greater than the mean of school district E1 (19.89). No other differences existed at the five per cent level of significance. This showed that the teachers in schools W1 and E3 perceived the administrators' "actual" roles in curriculum planning to be greater than the teachers in school E1 perceived these "actual" roles to be.

The teachers' average score for the test of the "ideal" roles of administrators was 20.55 and the administrators' average score for the same test was 23.29. The difference between these scores was checked by the use of the "t" test and "t" was found to be 4.47. Since this was greater than 2.58, the table value of "t_{.995}," the difference between the teachers' perceptions and the administrators' perceptions

was highly significant at and above the one per cent level of significance. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning to be greater than teachers perceive these "ideal" roles to be, was accepted as it applied to the roles of administrators.

Data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the "ideal" roles of administrators were the same for all of the areas included in this study. Averages of teachers' scores by areas and school districts are given in Table 28. The analysis of variance is shown in Table 29. Since the "F" ratio of 3.69 was greater than 3.00, the table value of " $F_{.95}$," and less than 4.61, the table value of " $F_{.99}$," a difference or differences existed between some of the area means at the five per cent level of significance but not at the one per cent level. Individual comparisons of the means were made by the use of Studentized Ranges and it was found that the mean of area N (22.00) was greater than the mean of area E (19.85) at the five per cent level of significance. No other significant differences existed. This showed that the teachers used in this study in Area N perceived the administrators' "ideal" roles as being greater than the teachers of area E perceived them to be.

The data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "ideal" roles of administrators were the same for all of the areas included in this

TABLE 28

MEANS OF TEACHERS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF ADMINISTRATORS

Unit	Participants	Mean
School E1	57	19.47
School E2	36	20.06
School E3	7	22.86
School E4	9	19.11
School W1	94	20.96
School W2	53	19.85
School W3	10	19.90
School W4	4	22.00
School N2	32	21.59
School N3	13	22.85
School N4	8	22.25
Area E	109	19.85
Area W	161	20.55
Area N	53	22.00
All	323	20.55

TABLE 29

ANALYSIS OF VARIANCE BY AREAS OF TEACHERS' SCORES
FOR THE TEST OF THE "IDEAL" ROLES OF ADMINISTRATORS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	164.35	82.18	3.69
Within Groups	320	7137.45	22.30	"F. _{.95} " = 3.00
Total	322	7301.80		"F. _{.99} " = 4.61

study. Averages of administrators' scores by areas and school districts are given in Table 30. The analysis of variance is shown in Table 31. As the "F" ratio of 1.50 was less than 3.23, the table value of "F._{.95}," there were

1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to determine what consumers are looking for and what gaps exist in the current market.

2. Once a market need has been identified, the next step is to develop a concept. This involves brainstorming ideas and creating a rough sketch of the product.

3. The third step is to create a prototype. This is a physical model of the product that can be used to test the concept and gather feedback from potential customers.

4. After the prototype has been created, the next step is to conduct a feasibility study. This involves evaluating the technical, financial, and market viability of the product.

5. If the feasibility study is positive, the next step is to develop a business plan. This document outlines the company's goals, strategies, and financial projections.

6. The final step in the process is to launch the product. This involves marketing the product to the target market and distributing it to customers.

1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to determine what consumers are looking for and what gaps exist in the current market.

2. Once a market need has been identified, the next step is to develop a concept. This involves brainstorming ideas and creating a rough sketch of the product.

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4. After the prototype has been created, the next step is to conduct a feasibility study. This involves evaluating the technical, financial, and market viability of the product.

5. If the feasibility study is positive, the next step is to develop a business plan. This document outlines the company's goals, strategies, and financial projections.

6. The final step in the process is to launch the product. This involves marketing the product to the target market and distributing it to customers.

TABLE 30

MEANS OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF ADMINISTRATORS

Unit	Participants	Mean
School E1	6	22.33
School E2	4	21.75
School E3	2	18.50
School E4	2	27.00
School W1	15	22.73
School W2	5	25.00
School W3	2	23.00
School W4	1	25.00
School N2	3	27.00
School N3	3	23.00
School N4	2	24.50
Area E	14	22.29
Area W	23	23.35
Area N	8	24.88
All	45	23.29

no significant differences between any of the area means which represented the administrators' perceptions of the "ideal" roles of administrators.

Data were examined by schools and an analysis of variance was used to determine if the teachers perceived the extent of the "ideal" roles of administrators to be the same for all of the schools included in this study. Averages of teachers' scores by school districts are given in Table 28. The analysis of variance is shown in Table 32. Since the "F" ratio of 1.39 was less than 1.83, the table value of "F_{.95}," there were no significant differences in any of the school means which represented the teachers' perceptions of the "ideal" roles of administrators.

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TABLE 31

ANALYSIS OF VARIANCE BY AREAS
OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF ADMINISTRATORS

Source	Degrees of Freedom	Sums of Squares	Mean Square	"F" Ratio
Between Means	2	34.29	17.50	1.50
Within Groups	42	488.95	11.64	"F _{.95} " = 3.23
Total	44	523.24		

TABLE 32

ANALYSIS OF VARIANCE BY SCHOOLS
OF TEACHERS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF ADMINISTRATORS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	311.52	31.15	1.39
Within Groups	312	6990.28	22.40	"F _{.95} " = 1.83
Total	322	7301.80		

A "t" test was used to determine if teachers perceived the extent of the "actual" roles of administrators to be the same as they perceived the extent of the "ideal" roles of administrators to be. The teachers' score for the test of the "actual" roles of administrators was 21.37 and for the test of the "ideal" roles of administrators it was 20.55.

This "t" test was performed by using the sum of the differences of each teacher's perceptions and the "t" ratio was found to be 3.11. As this was greater than 2.58, the table value of " $t_{.995}$," a highly significant difference was found to exist at and above the one per cent level of significance. The hypothesis that teachers perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles to be, was not proven as it applied to the roles of administrators. Even though a significant difference existed, this difference was in the reverse of the way in which it was stated in the hypothesis. Teachers perceived the "actual" role of administrators as being greater than the "ideal" role of administrators.

Data concerning the differences between teachers' perceptions of the extent of the "actual" roles of administrators and their perceptions of the extent of the "ideal" roles of administrators were examined by areas. Averages of the differences in teachers' scores are given in Table 33. An analysis of variance was used to determine if these differences were the same for all areas included in this study. This analysis of variances is shown in Table 34. The "F" ratio of 3.62 was greater than 3.00, the table value of " $F_{.95}$," and less than 4.61, the table value of " $F_{.99}$," so a difference or differences existed at the five per cent level of significance but not at the one per cent level. Individual comparisons of the means were made by the use of Studentized Ranges and it was found that the mean of

TABLE 33

MEANS OF THE DIFFERENCES BETWEEN TEACHERS' SCORES
ON THE TEST OF THE "ACTUAL" AND THE TEST
OF THE "IDEAL" ROLES OF ADMINISTRATORS
("IDEAL" - "ACTUAL" = DIFFERENCE)

Unit	Participants	Mean
School E1	57	-0.42
School E2	36	- .94
School E3	7	-1.14
School E4	9	-2.67
School W1	94	-1.39
School W2	53	-1.17
School W3	10	- .90
School W4	4	-2.25
School N2	32	.94
School N3	13	1.15
School N4	8	-1.00
Area E	109	- .83
Area W	161	-1.31
Area N	53	.70
All	323	-0.82

TABLE 34

ANALYSIS OF VARIANCE BY AREAS
OF THE DIFFERENCES IN TEACHERS' SCORES
FOR THE TESTS OF THE "ACTUAL" AND "IDEAL"
ROLES OF ADMINISTRATORS

Source	Degrees of Freedom	Sum of Square	Mean Square	"F" Ratio
Between Means	2	160.89	80.45	3.62
Within Groups	320	7117.33	22.24	"F _{.95} " = 3.00
Total	322	7278.22		"F _{.99} " = 4.61

area N (0.70) was greater than the mean of area W (-1.31) at the five per cent level of significance. No other significant

differences were found. This showed that the teachers used in this study from area N perceived the administrators' "ideal" roles as being greater than the administrators' "actual" roles and the teachers from area W perceived the administrators' "actual" roles as being greater than the administrators' "ideal" roles.

The data concerning the differences between the teachers' perceptions of the extent of the "actual" roles of administrators and their perceptions of the extent of the "ideal" roles of administrators were examined by schools. Average differences in teachers' scores are given by school districts in Table 33. An analysis of variance was used to determine if these differences were the same for all of the schools included in this study. This analysis of variance is shown in Table 35. Since the "F" ratio of 1.05 was less than 1.83, the table value of " $F_{.95}$," there were no significant differences between any of the school means which represented the differences in teachers' perceptions of the "actual" and "ideal" roles of administrators.

A "t" test was used to determine if administrators perceived the extent of the "actual" roles of administrators to be the same as they perceived the extent of the "ideal" roles of administrators to be. The administrators' average score for the test of the "actual" roles of administrators was 21.56 and their average score for the test of the "ideal" roles of administrators was 23.29. This "t" test was performed by using the sum of the differences of each administrator's perceptions. The "t" ratio was found to be 3.84 and

TABLE 35

ANALYSIS OF VARIANCE BY SCHOOLS
OF THE DIFFERENCES IN TEACHERS' SCORE
FOR THE TESTS OF THE "ACTUAL" AND "IDEAL"
ROLES OF ADMINISTRATORS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	236.46	23.65	1.05
Within Groups	312	7041.76	22.57	"F _{.95} " = 1.83
Total	322	7278.22		

since this was greater than 2.69, the table value of "t_{.995}," this difference was highly significant at and above the one per cent level of significance. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be, was accepted as it applied to the roles of administrators.

Data concerning the differences between the administrators' perceptions of the extent of the "actual" roles of administrators and their perceptions of the extent of the "ideal" roles of administrators were examined by areas. Averages of these differences in administrators' scores are given by areas and school districts in Table 36. An analysis of variance was used to determine if these differences were the same for all of the areas included in this

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TABLE 36

MEANS OF THE DIFFERENCES BETWEEN
ADMINISTRATORS' SCORES ON THE TEST
OF THE "ACTUAL" AND THE TEST OF THE "IDEAL"
ROLES OF ADMINISTRATORS
("IDEAL" - "ACTUAL" = DIFFERENCE)

Unit	Participants	Mean
School E1	6	1.67
School E2	4	.25
School E3	2	.00
School E4	2	3.00
School W1	15	1.00
School W2	5	3.00
School W3	2	3.50
School W4	1	3.00
School N2	3	4.67
School N3	3	1.67
School N4	2	1.00
Area E	14	1.21
Area W	23	1.74
Area N	8	2.63
All	45	1.73

study. This analysis of variance is shown in Table 37.

Since the "F" ratio of 0.55 was less than 3.23, the table

TABLE 37

ANALYSIS OF VARIANCE BY AREAS
OF THE DIFFERENCES IN ADMINISTRATORS' SCORES
FOR THE TEST OF THE "ACTUAL" AND "IDEAL"
ROLES OF ADMINISTRATORS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	10.14	5.07	0.55
Within Groups	42	390.66	9.30	"F _{.95} " = 3.23
Total	44	400.80		

value of " $F_{.95}$," there were no significant differences between any of the area means which represented the differences in the administrators' perceptions of the "actual" and "ideal" roles of administrators.

The Roles of Students

Items fifteen through twenty-one of set one made up the section of the questionnaire which was used to measure the perceptions which teachers and administrators had of the "actual" roles of students. Item and test variances were computed and are shown in Table 38. This information was used with the Kuder Richardson formula 20 and the coefficient of reliability for the test of the "actual" roles of students was .866. This was considered satisfactory.

TABLE 38

TEST AND ITEM VARIANCES FOR THE TEST OF THE "ACTUAL" ROLES OF STUDENTS

Item	Variance
15	.543
16	.543
17	.616
18	.832
19	.468
20	.992
21	.638
Test	17.93

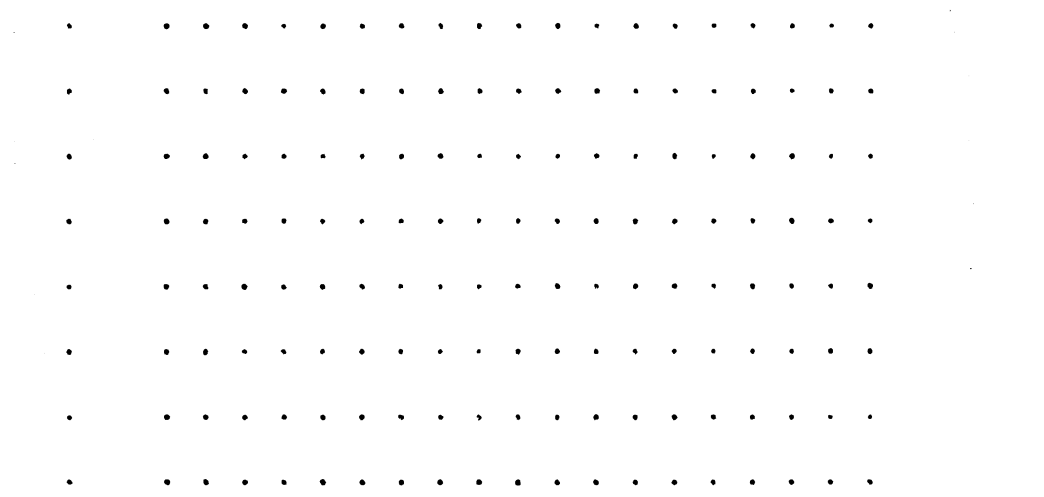
Items fifteen through twenty-one of set two made up the section of the questionnaire which was used to measure the perceptions which teachers and administrators had of the "ideal" roles of students. Item and test variances were computed and are shown in Table 39. This information was used with the Kuder Richardson formula 20 and the coefficient of reliability for the test of the "ideal" roles of students was .870. This was considered satisfactory.

TABLE 39

TEST AND ITEM VARIANCES FOR THE TEST
OF THE "IDEAL" ROLES OF STUDENTS

Item	Variance
15	1.195
16	1.026
17	1.273
18	1.268
19	.954
20	.895
21	1.251
Test	30.90

The teachers' average score for the test of the "actual" roles of students was 6.11 and the administrators' average score for the same test was 8.11. The difference between these scores was checked by the use of the "t" test and the "t" ratio was found to be 3.45. As this was greater than 2.58, the table value of " $t_{.995}$," the difference was highly significant at and above the one per cent level of significance.



The hypothesis that administrators perceive the "actual" roles of teachers, administrators, students and the community in curriculum planning to be greater than teachers perceive these "actual" roles to be, was accepted as it applied to the roles of students.

Data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles of students were the same for all of the areas used in this study. Averages of teachers' scores by areas and school districts are given in Table 40. The analysis of variance is shown in Table 41. The "F" ratio of 0.68 was less than 3.00, the table value of " $F_{.95}$," so there were no significant differences between any of the area means which represented the teachers' perceptions of the "actual" roles of students.

TABLE 40

MEANS OF TEACHERS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF STUDENTS

Unit	Participants	Mean
School E1	57	7.14
School E2	36	5.69
School E3	7	6.00
School E4	9	5.89
School W1	94	5.05
School W2	53	7.58
School W3	10	5.20
School W4	4	4.00
School N2	32	6.00
School N3	13	4.69
School N4	8	8.50
Area E	109	6.49
Area W	161	5.87
Area N	53	6.06
All	323	6.11

TABLE 41

ANALYSIS OF VARIANCE BY AREAS OF TEACHERS' SCORES
FOR THE TEST OF THE "ACTUAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	24.89	12.45	0.68
Within Groups	320	5842.32	18.26	"F _{.95} " = 3.00
Total	322	5867.21		

The data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "actual" roles of students were the same for all of the areas used in this study. Averages of administrators' scores by areas and by school districts are given in Table 42. The analysis of variance is shown in Table 43. Since the "F" ratio of 0.56 was less than 3.23, the table value of "F_{.95}," there were no significant differences between any of the area means which represented the administrators' perceptions of the "actual" roles of students.

The data were examined by schools and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles of students were the same for all of the schools included in this study. Averages of teachers' scores by school districts are given in Table 40. The analysis of variance is shown in Table 44. As the "F"

1. The first step in the process of identifying a problem is to recognize that a problem exists.

2. The second step is to define the problem in terms of its symptoms and causes.

3. The third step is to identify the stakeholders who are affected by the problem.

4. The fourth step is to gather information about the problem and its causes.

5. The fifth step is to analyze the information and identify the root causes of the problem.

6. The sixth step is to develop a plan of action to address the problem.

7. The seventh step is to implement the plan of action.

8. The eighth step is to monitor the progress of the plan of action.

9. The ninth step is to evaluate the results of the plan of action.

10. The tenth step is to make adjustments to the plan of action as needed.

11. The eleventh step is to communicate the results of the plan of action to the stakeholders.

12. The twelfth step is to document the results of the plan of action.

13. The thirteenth step is to review the process and make improvements.

14. The fourteenth step is to share the results of the plan of action with the wider community.

15. The fifteenth step is to continue to monitor the progress of the plan of action.

16. The sixteenth step is to evaluate the results of the plan of action.

17. The seventeenth step is to make adjustments to the plan of action as needed.

ratio of 2.20 was greater than 1.83, the table value of " $F_{.95}$," but less than 2.32, the table value of " $F_{.99}$," a difference or differences existed between some of the school means at the five per cent level of significance, but not at the one per cent level. Individual comparisons of the means were made with the use of Studentized Ranges and it was found that the means of school district E1 (7.14) and school district W2 (7.58) were greater than the mean of school district W1 (5.05) at the five per cent level of significance. There were no other significant differences. This showed that the teachers used in this study from school district E1 and school district W2 perceived the "actual" roles of students as being greater than the teachers of school district W1 perceived these "actual" roles to be.

TABLE 42

MEANS OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF STUDENTS

Unit	Participants	Mean
School E1	6	7.83
School E2	4	9.50
School E3	2	8.50
School E4	2	6.00
School W1	15	8.13
School W2	5	9.60
School W3	2	3.00
School W4	1	1.00
School N2	3	7.67
School N3	3	8.67
School N4	2	12.50
Area E	14	8.14
Area W	23	7.70
Area N	8	9.25
All	45	8.11

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial matters. The text notes that without reliable records, it is difficult to track progress, identify trends, and make informed decisions.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It mentions the use of surveys, interviews, and focus groups to gather qualitative information, as well as statistical software and data visualization techniques for quantitative analysis. The importance of ensuring the reliability and validity of the data is stressed throughout this section.

3. The third part of the document describes the process of interpreting the results of the research. It highlights the need to consider the context of the data and to be cautious about drawing conclusions. The text suggests that researchers should look for patterns and anomalies, and should be open to revising their hypotheses as more information is gathered.

4. The fourth part of the document discusses the challenges and limitations of the research process. It acknowledges that there are always potential biases and errors in data collection and analysis. The text encourages researchers to be aware of these limitations and to take steps to minimize their impact on the results.

5. The fifth part of the document provides a summary of the findings and conclusions of the study. It reiterates the key points made throughout the document and offers suggestions for future research. The text concludes by emphasizing the value of the research and the importance of continuing to explore these issues in the future.

TABLE 43

ANALYSIS OF VARIANCE BY AREAS
OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	14.35	7.18	0.56
Within Groups	42	540.09	12.86	"F _{.95} " = 3.23
Total	44	554.44		

TABLE 44

ANALYSIS OF VARIANCE BY SCHOOLS
OF TEACHERS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	385.83	38.58	2.20
Within Groups	312	5481.38	17.57	"F _{.95} " = 1.83
Total	322	5867.21		"F _{.99} " = 2.32

A "t" test was used to determine if teachers' and administrators' perceptions of the extent of the "ideal" roles of students were the same. The teachers' average score for the test of the "ideal" roles of students was 11.97 and the administrators' average score for the same

test was 14.24. The "t" ratio was found to be 2.44. Since this was greater than 1.96, the table value of " $t_{.975}$," but less than 2.58, the table value of " $t_{.995}$," these average scores were significantly different at the five per cent level of significance but not at the one per cent level. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning to be greater than teachers perceive these "ideal" roles to be, was accepted as it applied to the roles of students.

Data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "ideal" roles of students were the same for all of the areas included in this study. Averages of teachers' scores by areas and school districts are given in Table 45. The analysis of variance is shown in Table 46. Since the "F" ratio of 0.64 was less than 3.00, the table value of " $F_{.95}$," there were no significant differences between any of the area means which represented the teachers' perceptions of the "ideal" roles of students.

The data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "ideal" roles of students were the same for all of the areas included in this study. Averages of administrators' scores by areas and school districts are given in Table 47. The analysis of variance is shown in Table 48. As the "F" ratio of 0.38 was less than 3.23, the table value of " $F_{.95}$," there were no signifi-

TABLE 45

MEANS OF TEACHERS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF STUDENTS

Unit	Participants	Mean
School E1	57	11.72
School E2	36	12.61
School E3	7	15.86
School E4	9	11.89
School W1	94	11.37
School W2	53	12.04
School W3	10	12.90
School W4	4	9.00
School N2	32	12.69
School N3	13	11.15
School N4	8	13.00
Area E	109	12.29
Area W	161	11.63
Area N	53	12.36
All	323	11.97

TABLE 46

ANALYSIS OF VARIANCE BY AREAS OF TEACHERS' SCORES
FOR THE TEST OF THE "IDEAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	38.31	19.16	0.64
Within Groups	320	9566.44	29.90	"F _{.95} " = 3.00
Total	322	9604.75		

cant differences between any of the area means which represented the administrators' perceptions of the "ideal" role of students.

TABLE 47

MEANS OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF STUDENTS

Unit	Participants	Mean
School E1	6	11.33
School E2	4	17.75
School E3	2	13.50
School E4	2	9.00
School W1	15	13.67
School W2	5	23.40
School W3	2	10.00
School W4	1	1.00
School N2	3	12.33
School N3	3	14.00
School N4	2	17.50
Area E	14	13.14
Area W	23	14.91
Area N	8	14.25
All	45	14.24

TABLE 48

ANALYSIS OF VARIANCE BY AREAS
OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	27.27	13.64	0.38
Within Groups	42	1505.04	35.83	"F _{.95} " = 3.23
Total	44	1532.31		

Data were examined by schools and an analysis of variance was used to determine if the teachers perceived the extent of the "ideal" roles of students to be the same for

all of the schools included in this study. Averages of teachers' scores are given in Table 45. The analysis of variance is shown in Table 49. The "F" ratio of 0.78 was less than 1.83, the table value of " $F_{.95}$," so there were no significant differences between any of the school means which represented the teachers' perceptions of the "ideal" roles of students.

A "t" test was used to determine if teachers perceived the extent of the "actual" roles of students to be the same as they perceived the extent of the "ideal" roles of students to be. The teachers' average score for the test of the "actual" roles of students was 6.11 and for the test of the "ideal" roles of students, it was 11.97. This "t" test was performed by using the sum of the differences of each teachers' perceptions and the "t" ratio was found to be 20.28. As this was greater than 2.58, the table value of " $t_{.995}$," a highly significant difference was found to exist at and above the one per cent level of significance. The hypothesis that teachers perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be, was accepted as it applied to students.

Data concerning the differences between the teachers' perceptions of the extent of the "actual" roles of students and their perceptions of the extent of the "ideal" roles of students were examined by areas. Averages of these differences in teachers' scores are given in Table 50. An

TABLE 49

ANALYSIS OF VARIANCE BY SCHOOLS OF TEACHERS' SCORES
FOR THE TEST OF THE "IDEAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	235.58	23.56	0.78
Within Groups	312	9369.17	30.03	"F _{.95} " = 1.83
Total	322	9604.75		

TABLE 50

MEANS OF THE DIFFERENCES BETWEEN TEACHERS' SCORES
ON THE TEST OF THE "ACTUAL" AND THE
TEST OF THE "IDEAL" ROLES OF STUDENTS
("IDEAL" - "ACTUAL" = DIFFERENCE)

Unit	Participants	Mean
School E1	57	4.58
School E2	36	6.92
School E3	7	9.86
School E4	9	6.00
School W1	94	6.32
School W2	53	4.45
School W3	10	7.70
School W4	4	5.00
School N2	32	6.69
School N3	13	6.46
School N4	8	4.50
Area E	109	5.81
Area W	161	5.76
Area N	53	6.30
All	323	5.86

analysis of variance was used to determine if these differences were the same for all of the schools used in this study. This analysis of variance is shown in Table 52.

TABLE 51

ANALYSIS OF VARIANCE BY AREAS OF THE DIFFERENCES
IN TEACHERS' SCORES FOR THE TESTS
OF THE "ACTUAL" AND "IDEAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	12.34	6.17	0.23
Within Groups	320	8677.67	27.12	"F _{.95} " = 3.00
Total	322	8690.01		

TABLE 52

ANALYSIS OF VARIANCE BY SCHOOLS OF THE DIFFERENCES
IN TEACHERS' SCORES FOR THE TESTS
OF THE "ACTUAL" AND "IDEAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	448.75	44.88	1.70
Within Groups	312	8241.26	26.41	"F _{.95} " = 1.83
Total	322	8690.01		

Since the "F" ratio of 1.70 was less than 1.83, the table value of "F_{.95}," there were no significant differences between any of the school means which represented the differences in teachers' perceptions of the "actual" and "ideal" roles of students.

1. The first part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...
 2. The second part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...

3. The third part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...
 4. The fourth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...

5. The fifth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...
 6. The sixth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...

7. The seventh part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...
 8. The eighth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...

9. The ninth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...
 10. The tenth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...

11. The eleventh part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...
 12. The twelfth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...

13. The thirteenth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...
 14. The fourteenth part of the document is a list of the names of the members of the committee, which is headed by the Chairman, Mr. J. H. ...

A "t" test was used to determine if administrators perceived the extent of the "actual" roles of students to be the same as they perceived the extent of the "ideal" roles of students to be. The administrators' average score for the test of the "actual" roles of students was 8.11 and for the test of the "ideal" roles of students, it was 14.24. This "t" test was performed by using the sum of the differences of each administrator's perceptions. The "t" ratio was found to be 8.66 and since this was greater than 2.69, the table value of " $t_{.995}$," this difference was highly significant at and above the one per cent level of significance. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be, was accepted as it applied to the roles of students.

Data concerning the differences between the administrators' perceptions of the extent of the "actual" roles of students and their perceptions of the extent of the "ideal" roles of students were examined by areas. Averages of these differences in administrators' scores are given in Table 53. An analysis of variance was used to determine if these differences were the same for all of the areas included in this study. This analysis of variance is shown in Table 54. Since the "F" ratio of 1.24 was less than 3.23, the table value of " $F_{.95}$," there were no significant differences between any of the area means which represented the differences in the administrators' perceptions of the "actual" and "ideal" roles of students.

TABLE 53

MEANS OF THE DIFFERENCES BETWEEN
ADMINISTRATORS' SCORES ON THE TEST
OF THE "ACTUAL" AND THE TEST OF THE "IDEAL"
ROLES OF STUDENTS
("IDEAL" - "ACTUAL" = DIFFERENCE)

Unit	Participants	Mean
School E1	6	3.50
School E2	4	8.25
School E3	2	5.00
School E4	2	3.00
School W1	15	5.53
School W2	5	13.80
School W3	2	7.00
School W4	1	0.00
School N2	3	4.67
School N3	3	5.33
School N4	2	5.00
Area E	14	5.00
Area W	23	7.21
Area N	8	5.00
All	45	6.13

TABLE 54

ANALYSIS OF VARIANCE BY AREAS OF THE DIFFERENCES
IN ADMINISTRATORS' SCORES FOR THE TESTS OF THE
"ACTUAL" AND "IDEAL" ROLES OF STUDENTS

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	55.29	27.65	1.24
Within Groups	42	937.91	22.33	"F _{.95} " = 3.23
Total	44	993.20		

The Roles of the Community

Items twenty-two through twenty-eight of set one made up the section of the questionnaires which was used to measure the perceptions which teachers and administrators had of the "actual" roles of the community. Item and test variances were computed and are shown in Table 55. This information was used with the Kuder Richardson formula 20 and the coefficient of reliability for the test of the "actual" roles of the community was .879. This was considered satisfactory.

Items twenty-two through twenty-eight of set two made up the section of the questionnaire which was used to measure the perceptions which teachers and administrators had of the "ideal" roles of the community. Item and test variances were computed and are given in Table 56. This information was used with the Kuder Richardson formula 20 and the coefficient of reliability for the test of the "ideal" roles of the community was .883. This was considered satisfactory.

A "t" Test was used to determine if teachers' and administrators' perceptions of the extent of the "actual" roles of the community were the same. The teachers' average score for the test of the "actual" roles of the community was 7.70 and the administrators' average score for the same test was 8.78. The "t" ratio was found to be 1.80. Since this was less than 1.96, the table value of ".975," there was no significant difference between

TABLE 55

TEST AND ITEM VARIANCES FOR THE TEST
OF THE "ACTUAL" ROLES OF THE COMMUNITY

Item	Variance
22	.876
23	.839
24	1.105
25	.739
26	.658
27	.510
28	.997
Test	23.19

TABLE 56

TEST AND ITEM VARIANCES FOR THE TEST
OF THE "IDEAL" ROLES OF THE COMMUNITY

Item	Variance
22	1.354
23	1.348
24	1.535
25	.920
26	1.070
27	.738
28	1.279
Test	33.96

the teachers' and administrators' perceptions of the "actual" roles of the community. The hypothesis that administrators perceive the "actual" roles of teachers, administrators, students, and the community in curriculum planning to be

greater than teachers perceive these "actual" roles to be was not proven as it applied to the roles of the community.

The data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles of the community were the same for all of the areas included in this study. Averages of teachers' scores by areas and school districts are given in Table 57. The analysis of variance is shown in Table 58. The "F" ratio was found to be 0.45 which was less than 3.00, the table value of " $F_{.95}$," so there were no significant differences between any of the area means which represented the teachers' perceptions of the "actual" roles of the community.

The data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "actual" roles of the community were the same for all of the areas included in this study. Averages of administrators' scores are given in Table 59. The analysis of variance is shown in Table 60. Since the "F" ratio of 1.41 was less than 3.23, the table value of " $F_{.95}$," no significant differences were found between any of the area means which represented the administrators' perceptions of the "actual" roles of the community.

Data were examined by schools and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "actual" roles of the community were the same for all of the school districts used in this study. Averages of teachers' scores by school districts

TABLE 57

MEANS OF TEACHERS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF THE COMMUNITY

Unit	Participants	Mean
School E1	57	8.30
School E2	36	6.00
School E3	7	8.14
School E4	9	9.11
School W1	94	6.81
School W2	53	8.92
School W3	10	8.50
School W4	4	5.25
School N2	32	10.75
School N3	13	3.85
School N4	8	5.63
Area E	109	7.60
Area W	161	7.57
Area N	53	8.28
All	323	7.70

TABLE 58

ANALYSIS OF VARIANCE BY AREAS OF TEACHERS' SCORES
FOR THE TEST OF THE "ACTUAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	21.85	10.93	0.45
Within Groups	320	7850.42	24.53	"F _{.95} " = 3.00
Total	322	7872.27		

are given in Table 57. The analysis of variance is shown in Table 61. Since the "F" ratio of 3.79 was greater than 2.32, the table value of "F_{.99}," a difference or differences existed between some of the school means at both the five per cent and the one per cent levels of significance.

TABLE 59

MEANS OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF THE COMMUNITY

Unit	Participants	Mean
School E1	6	6.83
School E2	4	9.00
School E3	2	6.50
School E4	2	7.00
School W1	15	9.47
School W2	5	9.80
School W3	2	8.50
School W4	1	7.00
School N2	3	12.00
School N3	3	5.33
School N4	2	12.00
Area E	14	7.43
Area W	23	9.35
Area N	8	9.50
All	45	8.78

TABLE 60

ANALYSIS OF VARIANCE BY AREAS
OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	37.13	18.57	1.41
Within Groups	42	554.65	13.21	"F _{.95} " = 3.23
Total	44	591.78		

Individual comparisons of the means were made with the use of Studentized Ranges. It was found that there were twelve differences which were significant at the five per cent level of significance and that six of these were also highly

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income. The document also mentions the need for regular audits to verify the accuracy of the records.

In the second part, the focus is on the classification of expenses. It provides a detailed list of categories, such as salaries, rent, utilities, and materials. Each category is further broken down into sub-categories to allow for more granular tracking. The document also includes a table with columns for the category, amount, and date, which is used to record the data.

The third part of the document discusses the calculation of net income. It explains how to subtract total expenses from total revenue to arrive at the net income. The document also mentions the importance of keeping track of taxes and other deductions that may apply to the business.

Finally, the document concludes with a summary of the key points discussed. It reiterates the importance of accurate record-keeping and regular audits, and encourages the reader to follow the guidelines provided to ensure the success of their business.

The following table shows the results of the calculations for the first quarter of the year. The total revenue was \$10,000, and the total expenses were \$6,000, resulting in a net income of \$4,000. The table also shows the breakdown of expenses by category, with salaries being the largest expense at \$2,000.

Category	Amount	Date
Salaries	\$2,000	01/01/2020
Rent	\$1,000	01/01/2020
Utilities	\$500	01/01/2020
Materials	\$1,500	01/01/2020
Other	\$1,000	01/01/2020
Total	\$6,000	

The second part of the document discusses the calculation of net income for the second quarter. It follows the same process as the first quarter, with total revenue of \$12,000 and total expenses of \$7,000, resulting in a net income of \$5,000. The table also shows the breakdown of expenses by category, with salaries being the largest expense at \$2,500.

Category	Amount	Date
Salaries	\$2,500	02/01/2020
Rent	\$1,000	02/01/2020
Utilities	\$500	02/01/2020
Materials	\$1,500	02/01/2020
Other	\$1,500	02/01/2020
Total	\$7,000	

The third part of the document discusses the calculation of net income for the third quarter. It follows the same process as the first and second quarters, with total revenue of \$11,000 and total expenses of \$6,500, resulting in a net income of \$4,500. The table also shows the breakdown of expenses by category, with salaries being the largest expense at \$2,000.

Category	Amount	Date
Salaries	\$2,000	03/01/2020
Rent	\$1,000	03/01/2020
Utilities	\$500	03/01/2020
Materials	\$1,500	03/01/2020
Other	\$1,500	03/01/2020
Total	\$6,500	

The final part of the document provides a summary of the net income for each quarter. The first quarter net income was \$4,000, the second quarter net income was \$5,000, and the third quarter net income was \$4,500. The document also mentions the importance of keeping track of these figures over time to identify trends and make informed decisions about the business.

TABLE 61

ANALYSIS OF VARIANCE BY SCHOOLS OF TEACHERS' SCORES
FOR THE TEST OF THE "ACTUAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	853.52	85.35	3.79
Within Groups	312	7018.75	22.50	"F _{.95} " = 1.83
Total	322	7872.27		"F _{.99} " = 2.32

significant at the one per cent level. These differences are shown in Table 62. This showed that there were many differences in the way teachers in the different school districts used in this study perceived the extent of the "actual" roles of the community in curriculum planning.

The teachers' average score for the test of the "ideal" roles of the community was 11.35 and the administrators' average score on the same test was 13.62. The difference between these scores was checked by the use of the "t" test and the "t" ratio was found to be 2.66. Since this was greater than 2.58, the table value of "t_{.995}," the difference between the teachers' perceptions and the administrators' perceptions was highly significant at and above the one per cent level of significance. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning to be greater than teachers perceive these "ideal" roles to be was accepted as it applied to the roles of the community.

• *Chlorophyll a* (Chl a) is the primary photosynthetic pigment in all photosynthetic organisms. It is a green pigment that absorbs light energy in the blue and red regions of the visible spectrum. Chl a is found in the thylakoid membranes of chloroplasts in plants and in the plasma membrane of cyanobacteria and algae. It plays a central role in the light reactions of photosynthesis, where it captures light energy and transfers it to the reaction center, leading to the photolysis of water and the reduction of NADP+ to NADPH.

TABLE 62

DIFFERENCES BETWEEN SCHOOL MEANS
OF THE TEACHERS' SCORES FOR THE TEST
OF THE "ACTUAL" ROLES OF THE COMMUNITY
(SIGNIFICANT AT THE FIVE PER CENT LEVEL)

School--	Is Greater Than	--School
N2 (10.75)		E1 (8.30) W1 (6.81) ^a E2 (6.00) ^a N4 (5.63) N3 (3.85) ^a
W2 (8.92)		W1 (6.81) E2 (6.00) ^a N3 (3.85) ^a
E1 (8.30)		E2 (6.00) N3 (3.85) ^a
E4 (9.11)		N3 (3.85)
W3 (8.50)		N3 (3.85)

^aAlso highly significant at the one per cent level

Data were examined by areas and an analysis of variance was used to determine if the teachers' perceptions of the extent of the "ideal" roles of the community were the same for all of the areas included in this study. Averages of teachers' scores are given in Table 63. The analysis of variance is shown in Table 64. Since the "F" ratio of 1.23 was less than 3.00, the table value of "F_{.95}," there were no significant differences between any of the area means which represented the teachers' perceptions of the "ideal" roles of the community.

TABLE 63

MEANS OF TEACHERS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF THE COMMUNITY

Unit	Participants	Mean
School E1	57	10.89
School E2	36	12.00
School E3	7	15.57
School E4	9	8.44
School W1	94	11.89
School W2	53	9.53
School W3	10	10.60
School W4	4	9.75
School N2	32	14.28
School N3	13	8.62
School N4	8	11.25
Area E	109	11.36
Area W	161	10.98
Area N	53	12.43
All	323	11.35

TABLE 64

ANALYSIS OF VARIANCE BY AREAS OF TEACHERS' SCORES
FOR THE TEST OF THE "IDEAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	84.15	42.08	1.23
Within Groups	320	10941.01	34.19	"F _{.95} " = 3.00
Total	322	11025.16		

The data were examined by areas and an analysis of variance was used to determine if the administrators' perceptions of the extent of the "ideal" roles of the community were the same for all of the areas included in this study.

Averages of administrators' scores by areas and school districts are given in Table 65. The analysis of variance is shown in Table 66. As the "F" ratio of 1.32 was less than 3.23, the table value of " $F_{.95}$," there were no significant differences between any of the area means which represented the administrators' perceptions of the "ideal" roles of the community.

Data were examined by schools and an analysis of variance was used to determine if the teachers perceived the extent of the "ideal" roles of the community to be the same for all of the schools included in this study. Averages of teachers' scores by school districts are given in Table 63. The analysis of variance is shown in Table 67. Since the "F" ratio of 2.51 was greater than 2.31, the table value of " $F_{.99}$," a difference or differences existed between some of the school means at both the five per cent and the one per cent levels of significance. Individual comparisons of the means were made with the use of Studentized Ranges. It was found that there were seven differences which were significant at the five per cent level of significance and that two of these were also highly significant at the one per cent level. These differences are given in Table 68. This showed that there were differences in the way teachers in the different school districts used in this study perceived the extent of the "ideal" roles of the community.

A "t" test was used to determine if teachers perceived the extent of the "actual" roles of the community to be the same as they perceived the extent of the "ideal"

TABLE 65

MEANS OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF THE COMMUNITY

Unit	Participants	Mean
School E1	6	12.17
School E2	4	17.75
School E3	2	14.50
School E4	2	7.50
School W1	15	13.47
School W2	5	16.80
School W3	2	18.50
School W4	1	13.00
School N2	3	9.67
School N3	3	8.33
School N4	2	17.50
Area E	14	13.43
Area W	23	14.61
Area N	8	11.13
All	45	13.62

TABLE 66

ANALYSIS OF VARIANCE BY AREAS
OF ADMINISTRATORS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	72.80	36.40	1.32
Within Groups	42	1159.78	27.61	"F _{.95} " = 3.23
Total	44	1232.58		

roles of the community to be. The teachers' average score for the test of the "actual" roles of the community was 7.70 and for the test of the "ideal" roles of the community,

TABLE 67

ANALYSIS OF VARIANCE BY SCHOOLS OF TEACHERS' SCORES
FOR THE TEST OF THE "IDEAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	819.51	81.95	2.51
Within Groups	312	10205.65	32.71	"F _{.95} " = 1.83
Total	322	11025.16		"F _{.99} " = 2.32

it was 11.35. This "t" test was performed by using the sum of the differences of each teacher's perceptions. The "t" ratio was found to be 10.80. As this was greater than 2.58, the table value of "t_{.995}," a highly significant difference was found to exist at and above the one per cent level of significance. The hypothesis that teachers perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be, was accepted as it applied to the roles of the community.

Data concerning the differences between teachers' perceptions of the extent of the "actual" roles of the community and their perceptions of the extent of the "ideal" roles of the community were examined by areas. Averages of the differences in teachers' scores are given in Table 69. An analysis of variance was used to determine if these differences were the same for all of the areas included in

TABLE 68

DIFFERENCES BETWEEN SCHOOL MEANS
OF THE TEACHERS' SCORES FOR THE TEST
OF THE "IDEAL" ROLES OF THE COMMUNITY
(SIGNIFICANT AT THE FIVE PER CENT LEVEL)

School--	Is Greater Than	--School
N2 (14.28)		W2 (9.53) ^a E1 (10.89) E4 (8.44) N3 (8.62) ^a
E3 (15.57)		E4 (8.44) W2 (9.53)
W1 (11.89)		W2 (9.53)

^aAlso highly significant at the one per cent level

TABLE 69

MEANS OF THE DIFFERENCES BETWEEN
TEACHERS' SCORES ON THE TEST
OF THE "ACTUAL" AND THE TEST
OF THE "IDEAL" ROLES OF THE COMMUNITY
("IDEAL" - "ACTUAL" = DIFFERENCE)

Unit	Participants	Mean
School E1	57	2.60
School E2	36	6.00
School E3	7	7.43
School E4	9	-.67
School W1	94	5.09
School W2	53	.60
School W3	10	2.10
School W4	4	4.50
School N2	32	3.53
School N3	13	4.77
School N4	8	5.63
Area E	109	3.76
Area W	161	3.41
Area N	53	4.15
All	323	3.65

this study. This analysis of variance is shown in Table 70.

The "F" ratio of 0.32 was less than 3.00, the table value of

TABLE 70

ANALYSIS OF VARIANCE BY AREAS OF THE DIFFERENCES
IN TEACHERS' SCORES FOR THE TESTS OF THE "ACTUAL"
AND "IDEAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	23.94	11.97	0.32
Within Groups	320	11871.53	37.10	"F _{.95} " = 3.00
Total	322	11895.47		

"F_{.95}," so there were no significant differences between any of the area means which represented the differences in teachers' perceptions of the "actual" and "ideal" roles of the community.

The data concerning the differences between the teachers' perceptions of the extent of the "actual" roles of the community and their perceptions of the extent of the "ideal" roles of the community were examined by schools. Average differences in teachers' scores are given in Table 69. An analysis of variance was used to determine if these differences were the same for all of the schools included in this study. This analysis of variance is shown in Table 71. Since the "F" ratio of 4.13 was greater than 2.32, the table value of "F_{.99}," a difference or differences existed between some of the school means at both the five per cent and the one per cent levels of significance. Individual comparisons of the means were made with the

use of Studentized Ranges. It was found that there were twelve differences which were significant at the five per cent level of significance and that five of these were also highly significant at the one per cent level. These differences are given in Table 72. This showed that there were many differences in the way teachers in the different school districts used in this study differed in their perceptions of the extent of the "actual" and "ideal" roles of the community in curriculum planning.

A "t" test was used to determine if administrators perceived the extent of the "actual" roles of the community to be the same as they perceived the extent of the "ideal" roles of the community. The administrators' average score for the test of the "actual" roles of the community was 8.78 and their average score for the test of the "ideal" role of the community was 13.62. This "t" test was performed by using the sum of the differences of each administrator's perceptions. The "t" ratio was found to be 7.25 and since this was greater than 2.69, the table value of $t_{.995}$, this difference was highly significant at and above the one per cent level of significance. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be, was accepted as it applied to the roles of the community.

Data concerning the differences between the administrators' perceptions of the extent of the "actual" roles of

TABLE 71

ANALYSIS OF VARIANCE BY SCHOOLS OF THE DIFFERENCES
IN TEACHERS' SCORES FOR THE TESTS OF THE "ACTUAL"
AND "IDEAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	10	1289.99	129.00	4.13
Within Groups	312	9735.17	31.20	"F _{.95} " = 1.83
Total	322	11025.16		"F _{.99} " = 2.32

TABLE 72

DIFFERENCES BETWEEN SCHOOL MEANS OF THE DIFFERENCES
IN TEACHERS' SCORES FOR THE TESTS OF THE "ACTUAL"
AND "IDEAL" ROLES OF THE COMMUNITY
(SIGNIFICANT AT THE FIVE PER CENT LEVEL)

School--	Is Greater Than	--School
E3 (7.43)		W2 (0.60) ^a E4 (-0.67)
E2 (6.00)		W2 (0.60) ^a E1 (2.60) E4 (-0.67) ^a
N4 (5.63)		W2 (0.60) E4 (-0.67)
W1 (5.09)		E1 (2.60) W2 (0.60) ^a E4 (-0.67) ^a
N3 (4.77)		W2 (0.60)
N2 (3.53)		W2 (0.60)

^aAlso highly significant at the one per cent level

the community and their perceptions of the extent of the "ideal" roles of the community were examined by areas. Averages of these differences in administrators' scores are given in Table 73. An analysis of variance was used to determine if these differences were the same for all of the areas included in this study. This analysis of variance is shown in Table 74. Since the "F" ratio of 2.86 was less than 3.23, the table value of " $F_{.95}$," there were no significant differences between any of the area means which represented the differences between administrators' perceptions of the "actual" and "ideal" roles of the community.

TABLE 73

MEANS OF THE DIFFERENCES
 BETWEEN ADMINISTRATORS' SCORES ON THE TEST
 OF THE "ACTUAL" AND THE TEST OF THE "IDEAL"
 ROLES OF THE COMMUNITY
 ("IDEAL" - "ACTUAL" = DIFFERENCE)

Unit	Participants	Mean
School E1	6	5.33
School E2	4	8.75
School E3	2	8.00
School E4	2	.50
School W1	15	4.00
School W2	5	7.00
School W3	2	10.00
School W4	1	6.00
School N2	3	- 2.33
School N3	3	3.00
School N4	2	5.50
Area E	14	6.00
Area W	23	5.26
Area N	8	1.63
All	45	4.84

TABLE 74

ANALYSIS OF VARIANCE BY AREAS OF THE DIFFERENCES
 IN ADMINISTRATORS' SCORES FOR THE TEST OF THE "ACTUAL"
 AND THE "IDEAL" ROLES OF THE COMMUNITY

Source	Degrees of Freedom	Sum of Squares	Mean Square	"F" Ratio
Between Means	2	105.61	52.81	2.86
Within Groups	42	776.30	18.48	"F _{.95} " = 3.23
Total	44	881.91		

Summary

The four hypotheses were tested with the following results.

1. The hypothesis that administrators perceive the "actual" roles of teachers, administrators, students, and the community in curriculum planning to be greater than teachers perceive these "actual" roles to be, was accepted at the one per cent level as it applied to the roles of teachers and students. It was not proven as it applied to the roles of administrators and the community, as differences in these categories were not significant.
2. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning to be greater than teachers perceive these "ideal" roles to be, was accepted at the one per cent level as it applied to the roles of administrators and the community, and at the five per cent level as it applied to the roles of students. It was not proven for the roles of teachers as the difference in this category was not significant.
3. The hypothesis that teachers perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be, was accepted at the one per

cent level as it applied to the roles of teachers, students, and the community. It was not proven as it applied to the roles of administrators. At the one per cent level of significance, teachers perceived the "actual" roles of administrators as being greater than they perceived the administrators' "ideal" roles should be.

4. The hypothesis that administrators perceive the "ideal" roles of teachers, administrators, students, and the community in curriculum planning as being greater than they perceive the "actual" roles of these groups to be, was accepted at the one per cent level for all of the groups.

Teachers' scores were examined by areas and a difference or differences between areas were found to exist in the following:

1. The "actual" roles of teachers (one per cent level).
2. The "ideal" roles of teachers (five per cent level).
3. The "ideal" roles of administrators (five per cent level).
4. The differences between the "actual" and "ideal" roles of administrators (five per cent level).

Administrators' scores were examined by areas and no significant differences were found. This may have been partly due to the smaller number of administrators used in this study.

Teachers' scores were examined by schools and a difference or differences between schools were found to exist in the following:

1. The first part of the paper is devoted to the study of the

2. properties of the function $f(x)$ defined by the

3. equation $f(x) = \int_0^x f(t) dt$ for $x \in [0, 1]$.

4. In the second part we shall consider the case of

5. the function $f(x)$ defined by the equation

6. $f(x) = \int_0^x f(t) dt + x$ for $x \in [0, 1]$.

7. In the third part we shall consider the case of

8. the function $f(x)$ defined by the equation

9. $f(x) = \int_0^x f(t) dt + x^2$ for $x \in [0, 1]$.

10. In the fourth part we shall consider the case of

11. the function $f(x)$ defined by the equation

12. $f(x) = \int_0^x f(t) dt + x^3$ for $x \in [0, 1]$.

13. In the fifth part we shall consider the case of

14. the function $f(x)$ defined by the equation

15. $f(x) = \int_0^x f(t) dt + x^4$ for $x \in [0, 1]$.

16. In the sixth part we shall consider the case of

17. the function $f(x)$ defined by the equation

18. $f(x) = \int_0^x f(t) dt + x^5$ for $x \in [0, 1]$.

19. In the seventh part we shall consider the case of

20. the function $f(x)$ defined by the equation

21. $f(x) = \int_0^x f(t) dt + x^6$ for $x \in [0, 1]$.

22.

23. In the eighth part we shall consider the case of

24. the function $f(x)$ defined by the equation

25. $f(x) = \int_0^x f(t) dt + x^7$ for $x \in [0, 1]$.

26. In the ninth part we shall consider the case of

27. the function $f(x)$ defined by the equation

28. $f(x) = \int_0^x f(t) dt + x^8$ for $x \in [0, 1]$.

29.

30. In the tenth part we shall consider the case of

31. the function $f(x)$ defined by the equation

32. $f(x) = \int_0^x f(t) dt + x^9$ for $x \in [0, 1]$.

1. The "actual" roles of administrators (five per cent level).
2. The "actual" roles of students (five per cent level).
3. The "actual" roles of the community (one per cent level).
4. The "ideal" roles of the community (one per cent level).
5. The differences between the "actual" and "ideal" roles of the community (one per cent level).

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Summary

The purpose of this study was to determine if teachers differed from administrators in their perceptions of the extent of the "actual" and "ideal" roles of teachers, administrators, students, and the community in curriculum planning, and to determine if teachers and administrators perceived the "actual" roles of these groups as being different from the "ideal" roles.

Most authorities agreed that all who are concerned with the outcomes of curriculum development should take part in the process of curriculum planning. Much of the literature concerned with the theory of curriculum planning told how to involve teachers, students, and the community more in the curriculum process. None of the literature dealt directly with the purpose of this study. The fact that teachers differed from administrators in their perceptions of their own and others' roles was shown in related research studies.

The instrument used in this study was developed by using a preliminary questionnaire with a group of 100

teachers and administrators which was highly similar (in terms of the ratio of teachers to administrators and the size of the school districts) to the group used in the final study. Each of the 140 questions (70 "actual" and 70 "ideal") was examined by item analysis and 56 (28 "actual" and 28 "ideal") of them chosen to become the final form of the "Questionnaire on Curriculum Responsibilities."

The population for this study came from three areas of Michigan. Area E was a county located in metropolitan Detroit, area W, a county from western Michigan, and area N included the entire upper peninsula. Schools within these areas were selected by size with one school for each group: (1) enrollment of 6,000-11,999, (2) enrollment of 3,000-5,999, (3) enrollment of 1,200-2,999, (4) enrollment of 300-1,999. As area N contained no school system of size number one, a total of eleven districts was used. One-third of the teachers and enough administrators to establish a one to ten ratio in each district were mailed questionnaires. A total of 569 were mailed to teachers and 60 to administrators. Of these, 323 were completed and returned by teachers and 45 by administrators.

The questionnaires were scored as eight separate tests and the coefficients of reliability computed with the Kuder Richardson formula 20 ranged from .770 to .883.

Administrators were found to have perceived the "actual" roles of teachers as being greater than teachers perceived these "actual" roles to be (significant at the one per cent level). Teachers from area E and area N

perceived these "actual" roles of teachers as being greater than the teachers from area W perceived them to be (significant at the one per cent level). There were no significant differences in the administrators' perceptions by areas or the teachers' perceptions by schools of the "actual" roles of teachers.

Administrators did not perceive the extent of the "ideal" roles of teachers to be significantly different than teachers perceived the extent of these "ideal" roles. The teachers of area E perceived the "ideal" roles of teachers to be greater than the teachers of area W perceived them to be (significant at the five per cent level). There were no significant differences in the administrators' perceptions by areas or the teachers' perceptions by schools of the "ideal" roles of teachers.

Teachers perceived and administrators perceived the "ideal" roles of teachers as being greater than the "actual" roles of teachers (significant at the one per cent level). There were no significant differences in the differences of perceptions between the "actual" and "ideal" roles of teachers for the teachers of different areas, the teachers of different schools, or the administrators of different areas.

Administrators did not perceive the extent of the "actual" roles of administrators significantly different than teachers perceived the extent of these "actual" roles. There were no significant differences in the teachers' perceptions by areas or the administrators' perceptions by areas. The teachers in schools W1 and E3 perceived the

administrators' "actual" roles to be greater than the teachers of school E perceived these "actual" roles to be (significant at the five per cent level).

Administrators perceived the "ideal" roles of administrators as being greater than teachers perceived them to be (significant at the one per cent level). The teachers of area N perceived the administrators' "ideal" roles as being greater than the teachers of area E perceived them to be (significant at the five per cent level). There were no significant differences in the administrators' perceptions by areas or the teachers' perceptions by schools of the "ideal" roles of administrators.

The teachers perceived the administrators' "actual" roles to be greater than the administrators' "ideal" roles (significant at the one per cent level). Administrators perceived the administrators' "ideal" roles to be greater than they perceived the "actual" roles to be (significant at the one per cent level). The teachers of area N perceived the difference in "actual" and "ideal" roles of administrators differently than the teachers of area W. Teachers of area N perceived the administrators' "ideal" roles as being greater than the "actual" roles and the teachers of area W perceived the "actual" roles as being greater than the "ideal" roles. (The difference between the teachers' perceptions in area N and area W was significant at the five per cent level.) The differences in the perceptions of the "actual" and "ideal" roles of administrators were not significantly different for the teachers by schools or for the administrators by areas.

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Administrators perceived the "actual" roles of students as being greater than teachers perceived these "actual" roles to be (significant at the one per cent level). There were no significant differences in the teachers' or the administrators' perceptions by areas of the "actual" roles of students. The teachers in schools E1 and W2 perceived the "actual" roles of students to be greater than the teachers in school W1 perceived these "actual" roles to be (significant at the five per cent level).

Administrators perceived the "ideal" roles of students to be greater than teachers perceived these "ideal" roles to be (significant at the five per cent level). There were no significant differences in the teachers' or administrators' perceptions by areas or in the teachers' perceptions by schools of the "ideal" roles of students.

Administrators perceived and teachers perceived the "ideal" roles of students as being greater than the "actual" roles of students (significant at the one per cent level). The differences in the perceptions of the "actual" and "ideal" roles of students were not significantly different for the teachers or administrators by areas or for the teachers by schools.

Administrators did not perceive the extent of the "actual" roles of the community significantly different than teachers perceived the extent of these "actual" roles. There were no significant differences in teachers' or administrators' perceptions by areas of the "actual" roles of the community. Twelve significant differences were found

in the teachers' perceptions by schools (significant at the five per cent level). Six of these differences were also significant at the one per cent level. These differences are shown in Table 62 on page 95.

Administrators perceived the "ideal" roles of the community as being greater than teachers perceived these "ideal" roles to be (significant at the one per cent level). There were no significant differences in the teachers' or administrators' perceptions by areas of the "ideal" roles of the community. Seven significant differences were found in the teachers' perceptions by schools (significant at the five per cent level). Two of these differences were also significant at the one per cent level. These differences are shown in Table 68 on page 100.

Administrators perceived and teachers perceived the "ideal" roles of the community as being greater than the "actual" roles of the community, (significant at the one per cent level). There were no significant differences in teachers' or administrators' perceptions by areas of the differences between the "actual" and "ideal" roles of the community. Twelve significant differences were found in the teachers' perceptions by schools (significant at the five per cent level). Five of these differences were also significant at the one per cent level. These differences are shown in Table 72 on page 103.

This study was limited geographically in that the population was obtained from eleven schools in three areas of Michigan. The schools were not selected by random methods

Another limitation was the fact that all the various administrative positions were grouped together under the title of "administrators." This study was designed to be limited to the area of curriculum planning in the public schools.

Conclusions

From the data, the following conclusions about the population of this study were drawn:

1. Administrators perceived the "actual" roles of teachers and students in curriculum planning to be more extensive than teachers perceived these "actual" roles to be.
2. Administrators perceived the extent of the "actual" roles of administrators and the community in curriculum planning to be the same as teachers perceived the extent of these "actual" roles to be.
3. Administrators perceived the "ideal" roles of administrators, students, and the community in curriculum planning as being more extensive than teachers perceived these "ideal" roles to be.
4. Administrators perceived the extent of the "ideal" roles of teachers in curriculum planning to be the same as teachers perceived the extent of these "ideal" roles to be.
5. Administrators perceived and teachers perceived the "ideal" roles of teachers, students, and the community in curriculum planning as being more extensive than the "actual" roles of these groups.

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6. Administrators perceived the "ideal" roles of administrators in curriculum planning as being more extensive than the "actual" roles but teachers perceived the "actual" roles of administrators in curriculum planning as being greater than the "ideal" roles.
7. Teachers differed by geographical areas in their perceptions of the roles of teachers and administrators in curriculum planning. Significant differences were found in the "actual" and "ideal" roles of teachers, and in the "ideal" and the differences between "actual" and "ideal" roles of administrators. No geographic pattern was discovered.
8. Teachers did not differ by geographical areas in their perceptions of the roles of students and the community in curriculum planning. This included "actual," "ideal," and the difference between "actual" and "ideal" roles.
9. Administrators did not differ by geographical areas in their perceptions of the roles of teachers, administrators, students, and the community in curriculum planning. This included "actual," "ideal," and the differences between "actual" and "ideal" roles.
10. Teachers differed by schools in their perceptions of the roles of the community in curriculum planning. This included "actual," "ideal," and the differences between "actual" and "ideal" roles.

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11. School size was not an important factor in the way in which teachers perceived the extent of the "actual" and "ideal" roles, or the differences between the "actual" and "ideal" roles of teachers, administrators, students, and the community in curriculum planning.

Implications

While there were many differences in teachers' and administrators' perceptions of roles in curriculum planning, there was some agreement. Both groups perceived that teachers, students, and the community should have greater roles than they do at present. This bit of common ground may provide a starting place and opportunities for greater participation in curriculum planning should be extended to these groups.

In this study, the most serious disagreement found between teachers and administrators has to do with the administrators' "ideal" roles in curriculum planning. Teachers and administrators agreed on the "actual" roles of administrators but teachers perceived that the "ideal" roles should be less than the "actual" roles, while administrators perceived their "ideal" roles as being greater than the "actual" roles are. This conflict may be one of the reasons why cooperative curriculum planning has not fared better than it has. The administrator, while urging teachers to become more active in curriculum planning, feels that his part should also be greater. Teachers, who perceive

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the administrator's present role as being already too great, lose interest because of this conflict. More studies on administrators' roles in curriculum planning are needed. From such studies, a better understanding of the administrators' roles by both teachers and administrators may result.

Since teachers and administrators believe that teachers should have greater roles in curriculum planning, the pre-service and in-service education of teachers should include more preparation in this area. Some work in curriculum planning should be included at the undergraduate level. This should not only stress the teachers' expanded roles but should also show the need for cooperative planning among teachers, administrators, students, and people from the community. At the graduate level teachers should be encouraged to assume leadership in actual curriculum studies.

In the training of administrators, time should be taken to examine the administrators' roles. Administrators should be given more training in curriculum planning. By more clearly understanding the process, they can help to more clearly define their own roles and to see the roles of others.

The research started in this study needs to be expanded. Similar studies should be made with teachers and administrators of other states. Schools of different sizes than the ones used in this research should be studied. Studies should be made which include the perceptions of students and members of the community regarding roles in curriculum planning.

With the agreement between teachers and administrators that teachers, students, and the community should have greater roles in curriculum planning, research is needed to find why greater roles have not been extended to these groups.

This study has provided information in an area where it is needed and it has also pointed out the need for more research in order to bring about a better understanding of the roles of teachers, administrators, students, and the community in curriculum planning.

BIBLIOGRAPHY

Books

- Arkin, Herbert and Colton, Raymond R. Statistical Methods. New York: Barnes and Noble, 1960.
- Campbell, William Giles. Form and Style in Thesis Writing. Boston: Houghton-Mifflin, 1954.
- Dixon, Wilfrid J. and Massey, Frank J. Jr. Introduction to Statistical Analysis. New York: McGraw-Hill, 1957.
- Doll, Ronald C. Curriculum Improvement: Decision-Making and Process. Boston: Allyn and Bacon, 1964.
- Edwards, Allen L. Techniques of Attitude Scale Construction. New York: Appleton-Century-Crofts, 1957.
- Fraser, Dorothy M. Deciding What to Teach. Washington, D. C.: National Education Association, 1963.
- Hecker, Stanley E., and Northey, Thomas J. Teacher Salary Schedule Study, 1964-65. East Lansing, Michigan: Michigan Education Association, 1964.
- Hillway, Tyrus. Introduction to Research. Boston: Houghton-Mifflin, 1956.
- Krug, Edward A. Curriculum Planning. New York: Harper and Brothers, 1957.
- Michigan Department of Public Instruction; The Joint Committee on Conference and Curriculum Planning. Evaluating the Inservice Education Program of Your Community School. A Self-Survey Instrument. 1957.
- Michigan Education Directory and Buyer's Guide, 1964-65. Lansing, Michigan: Michigan Education Directory, 1964.
- Mitchum, Paul M. The High School Principal and Staff Plan for Program Improvement. New York: Bureau of Publications, Teachers College, Columbia University, 1958.

Saylor, J. Galen and Alexander, William M. Curriculum Planning. New York: Rinehart, 1954.

Sharp, George. Curriculum Development as Re-education of the Teacher. New York: Bureau of Publications, Teachers College; Columbia University, 1951

Shuster, Albert H. and Ploghoft, Milton E. The Emerging Elementary Curriculum. Columbus, Ohio: Charles E. Merrill Books, 1963.

Smith, B. Othanel, Stanley, William O., and Shores, J. Harlan. Fundamentals of Curriculum Development. Yonkers-on-Hudson, New York: World Book Company, 1957.

Thornton, James W. and Wright, John R. Secondary School Curriculum. Columbus, Ohio: Charles E. Merrill Books, 1963.

Trump, J. Lloyd and Baynham, Dorsey. Focus on Change, Guide to Better Schools. Chicago: Rand-McNally, 1961.

Turbian, Kate L. A Manual for Writers of Term Papers, Theses and Dissertations. Chicago: The University of Chicago Press, 1955.

Walker, Helen M. and Lev, Joseph. Statistical Inference. New York: Holt, Rinehart and Winston, 1953.

Wiles, Kimball. The Changing Curriculum of the American High School. Englewood Cliffs, N. J.: Prentice-Hall, 1963.

Articles

Ahrens, Maurice R. "Parents and Staff Cooperate in System Wide Improvement," Educational Leadership, XI (March, 1954), 337-42.

Allen, James E. Jr. "The Big City School-Problems and Prospects--School Personnel and Educational Policy," PTA, LIX (June, 1965), 12-14.

Bidwell, Charles E. "The Administrative Role and Satisfaction in Teaching," The Journal of Educational Sociology, XXIX (September, 1955), 41-47.

Brickell, Henry M. "State Organization for Educational Change: A Case Study and a Proposal," Innovation in Education, ed. Mathew B. Mills. New York: Bureau of Publications, Teachers College, Columbia University, 1964, pp. 491-531.

- Getzels, J. W. and Guba, E. G. "The Structure of Roles and Role Conflict in the Teaching Situation," The Journal of Educational Sociology, XXIX (September, 1955), 30-40.
- Hass, C. Glen. "Role of the Director of Instruction," Educational Leadership, XVIII (November, 1960), 101-103+.
- Kearney, Nolan C. and Cook, Walter L. "Curriculum," Encyclopedia of Educational Research, ed. Chester W. Harris. New York: The Macmillan Company, 1960, pp. 358-365.
- Keller, Robert J. "Secondary Education--Organization and Administration," Encyclopedia of Educational Research, ed. Chester W. Harris. New York: The Macmillan Company, 1960, pp. 1241-1259.
- Mackenzie, Gordon N. "Curricular Change: Participants, Power, and Processes," Innovation in Education, ed. Matthew B. Miles, New York: Bureau of Publications, Teachers College, Columbia University, 1964, pp. 399-424.
- Miles, Matthew B. "Human Relations in Cooperative Research," Research for Curriculum Improvement, 1957 Yearbook of the Association for Supervision and Curriculum Development, Washington, D. C.: Association for Supervision and Curriculum Development, 1957, pp. 187-227.
- Misner, Paul J. "Citizens and Teachers Plan the Curriculum," National Parent-Teacher, L (May, 1956), 26-27.
- Raths, Louis E. "What is Teaching," Educational Leadership, XIII (October, 1955), 146-149.
- Romine, Stephen. "The School Administrator and the Secondary School Curriculum," The Bulletin of the National Association of Secondary-School Principals, XXXII (November, 1948), 25-28.
- Urlick, Ronald and Frymier, Jack R. "Personalities, Teachers and Curriculum Change," Educational Leadership, XXI (November, 1963), 107-111.
- Van Til, William. "Curriculum Improvement: Who Participates?" Educational Leadership, XI (March, 1954), 335-37.
- Weber, Julia. "Child Development Implications for Curriculum Building," Educational Leadership, XI (March, 1954), 343-46.

1

Unpublished Material

- Carter, Paul D. "Perceptions of Classroom Teachers and School Administrators Concerning Curriculum Development in a Suburban School System." Unpublished Ed.D. dissertation, Wayne State University, 1955.
- Doyle, Louis Andrew. "A Study of the Expectancies Which Elementary Teachers, School Administrators, Board Members and Parents Have of the Elementary Teachers' Roles." Unpublished Ed.D. dissertation, Michigan State University, 1956.
- Hamm, Russell L. "Core Curriculum as Conceived by Junior High School Teachers of Core and by Junior High School Principals of Schools that have Core Programs in the State of Minnesota." Unpublished Ed.D. dissertation, Indiana University, 1960.
- Holden, Ruby Mae. "Relationships Between Perceived Leadership, Perceptions of the Ideal, and Group Productivity in Small Classroom Groups." Unpublished Ph.D. dissertation, University of Illinois, 1954.
- Rombouts, Jack Robert. "The Role of the Committee Technique in School Administration as Expressed by Teachers in 25 High School Districts of the Upper Peninsula." Unpublished Ed.D. dissertation, Michigan State University, 1959.
- Thorin, Frederick D. "A Study to Determine the Accuracy with which Selected Secondary School Principals Perceive the Role Expectations held for Them by their Staff and Superintendent." Unpublished Ed.D. dissertation, Wayne State University, 1961.

APPENDIX A

Letter from Glen Robinson, Assistant Director,
Research Division, N. E. A.

January 22, 1965

Mr. Lynn Oberlin
1096 Hendrick Road
Muskegon, Michigan 49441

Dear Mr. Oberlin:

Dr. Edelfelt has asked me to reply to your letter regarding the stratification and grouping of school systems used by the NEA Research Division in its studies. As I am sure you know, there is no single stratification procedure that is appropriate for all types of educational studies, so we use different types of school system stratification, depending upon the nature of the study.

Perhaps the method of stratification to which you refer is that which we use in our salary studies and teachers opinion studies. This stratification is based upon the number of pupils enrolled in the school system. The strata are as follows:

<u>Stratum</u>	<u>Enrollment</u>
I	100,000 and Over
II	50,000 - 99,999
III	25,000 - 49,999
IV	12,000 - 24,999
V	6,000 - 11,999
VI	3,000 - 5,999
VII	1,200 - 2,999
VIII	300 - 1,199
IX	50 - 299
X	1 - 50

These strata are modifications of those used by the Government Division of the U. S. Bureau of the Census in their surveys of school systems. The Census stratification is also based upon the number of pupils enrolled. The strata are as follows:

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Enrollment size group:

25,000	or	more
12,000	-	24,999
6,000	-	11,999
3,000	-	5,999
1,200	-	2,999
600	-	1,199
300	-	599
150	-	299
50	-	149
15	-	49
1	-	14

You will notice that the strata used by the Research Division are compatible with that used by the Census Bureau.

Cordially yours,

Glen Robinson
Assistant Director
Research Division

APPENDIX B

Letter Asking Superintendent's Permission

March 4, 1965

. . ., Supt.
. . . Public Schools
. . .
. . ., Michigan

Dear Sir:

I am a public school teacher and am also working on a dissertation to complete a doctoral degree from Michigan State University. As a part of my dissertation, I will administer (by mail) the enclosed questionnaire on curriculum responsibilities to some teachers and administrators of certain school districts. With your permission, I would like to send the enclosed material to some of the staff of the . . . Public Schools. I would send to about one-third of the teachers and enough administrators to establish a one to ten ratio. The group to receive this material would be chosen by random methods. All individuals participating will remain anonymous and school districts will not be identified by name in my dissertation.

If I have your permission to include the staff of the . . . Public Schools in my study, I will need a list of the entire faculty including the following information:

1. Name
2. Position (teacher, principal, counselor, etc.)
3. School address (could be listed by buildings with building addresses)

I can easily work from a published school or county directory which contains the above information.

Sincerely,

Lynn Oberlin
1096 Hendrick Road
Muskegon, Michigan

APPENDIX C

Letter to Participants

Dear Fellow Teachers and Administrators:

I am a junior high school teacher in the Mona Shores School District of Muskegon County. Presently I am also working on a dissertation to complete a doctoral degree from Michigan State University.

You have been selected as one of the teachers to represent your school district in a study of the roles which various groups play, and should play, in developing the school program. Your cooperation is needed in order to make this project a success. Will you please complete the enclosed questionnaire and return it in the stamped envelope.

This study is being conducted with the consent and cooperation of your school superintendent.

Sincerely,

Lynn Oberlin

P. S. If you wish a copy of the findings of this study, please enclose, on a separate paper, your name and school address. If you prefer, this may be mailed in a separate envelope.

APPENDIX D
Follow-up Letter

April 15, 1965

. . ., Supt.
. . . Public Schools
. . .
. . ., Michigan

Dear Sir:

I wish to thank the teachers and administrators of the . . . Public Schools who have returned the "Questionnaire on Curriculum Responsibilities" which I mailed to them on March 20. Some have not returned the questionnaire yet and as I wish to include as much information as possible from the . . . Public Schools, I will continue to accept and include their questionnaires in my study.

Extra questionnaires are available in case some of the original ones were lost.

Sincerely,

Lynn Oberlin
1096 Hendrick Road
Muskegon, Michigan

APPENDIX E

QUESTIONNAIRE ON CURRICULUM RESPONSIBILITIES (preliminary form)

This test is anonymous but the following information is needed.

1. _____
(School district in which you are employed)
2. Present position Teacher _____ Administrator _____

VOCABULARY OF THE TEST

ADMINISTRATORS: Persons such as Superintendents, Principals, Curriculum Coordinators, Directors of Instruction, and Supervisors.

TEACHERS: Classroom teachers of subject or grade level and special teachers such as music, art, etc.

SCHOOL PROGRAM: The curriculum, course of studies, and all experiences controlled by the school.

EXTRA-CURRICULAR ACTIVITIES: The part of the school program commonly non-credit or outside of school hours. (This would include such school-wide activities as band, chorus, and safety patrol even if they used regular school time.)

SET I is to be answered according to the conditions which exist in your present situation.

SET II is to be answered according to the way you think things should be in your present situation.

(preliminary form)

Please answer the following statements as they apply to your present situation as an educator.

SET I

	NEVER	SELDOM	ABOUT ½ THE TIME	USUALLY	ALWAYS
1. Teachers have a part in planning the content of the school program. _____					
2. Teachers have a part in planning the methods to be used in the school program. _____					
3. Teachers have a part in making decisions relative to the content of the school program. _____					
4. Teachers have a part in making decisions relative to the methods to be used in the school program. _____					
5. Teachers have the opportunity to initiate changes in the school program. _____					
6. Ideas suggested by teachers receive consideration. _____					
7. Teachers work on committees to improve the school program. _____					
8. Teachers make the final decision as to what the content of the school program will be. _____					
9. Teachers make the final decision as to what methods will be used in the school program. _____					
10. Groups which work on the school programs are organized by teachers. _____					
11. Teachers discuss the school program with the community. _____					
12. Teachers discuss the school program with the students. _____					
13. Teachers discuss the school program with administrators. _____					

(preliminary form)

	NEVER	SELDOM	ABOUT ½ THE TIME	USUALLY	ALWAYS
14. Teachers are the leaders in working and planning for the school program.					
15. Teachers help to plan extra curricular activities for the school.					
16. Teachers decide what the extra curricular program of the school is to be.					
17. The school program is evaluated in terms of what teachers think of it.					
18. The school program is evaluated by teachers.					
19. Teachers select the people who work on the school program.					
20. Administrators have a part in planning the content of the school program.					
21. Administrators have a part in planning the methods to be used in the school program.					
22. Administrators have a part in making decisions relative to the content of the school program.					
23. Administrators have a part in making decisions relative to the methods to be used in the school program.					
24. Administrators have the opportunity to initiate changes in the school program.					
25. Ideas suggested by administrators receive consideration.					
26. Administrators work on committees to improve the school program.					

(preliminary form)

	NEVER	SELDOM	ABOUT ½ THE TIME	USUALLY	ALWAYS
27. Administrators make the final decision as to what the content of the school program will be. _____					
28. Administrators make the final decision as to what methods will be used in the school program. _____					
29. Groups which work on the school program are organized by administrators. _____					
30. Administrators discuss the school program with the community. _____					
31. Administrators discuss the school program with the students. _____					
32. Administrators discuss the school program with teachers. _____					
33. Administrators are the leaders in working and planning for the school program. _____					
34. Administrators help to plan extra-curricular activities for the school. _____					
35. Administrators decide what the extra curricular program of the school is to be. _____					
36. The school program is evaluated in terms of what administrators think of it. _____					
37. The school program is evaluated by administrators. _____					
38. Administrators select the people who work on the school program. _____					
39. Students have a part in planning the content of the school program. _____					

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(preliminary form)

	NEVER	SELDOM	ABOUT 1/2 THE TIME	USUALLY	ALWAYS
40. Students have a part in planning the methods to be used in the school program. _____					
41. Students have a part in making decisions relative to the content of the school program. _____					
42. Students have a part in making decisions relative to the methods to be used in the school program. _____					
43. Students have the opportunity to initiate changes in the school program. _____					
44. Ideas suggested by students receive consideration. _____					
45. Students work on committees to improve the school program. _____					
46. Students make the final decision as to what the content of the school program will be. _____					
47. Students make the final decision as to what methods will be used in the school program. _____					
48. Groups which work on the school programs are organized by students. _____					
49. Students are the leaders in working and planning for the school program. _____					
50. Students help to plan extra curricular activities for the school. _____					
51. Students decide what the extra curricular program of the school is to be. _____					
52. The school program is evaluated in terms of what students think of it. _____					

	NEVER	SELDOM	ABOUT 1/2 THE TIME	USUALLY	ALWAYS
53. The school program is evaluated by students. _____					
54. Students select the people who work on the school program. _____					
55. People in the community have a part in planning the content of the school program. _____					
56. People in the community have a part in planning the methods to be used in the school program. _____					
57. People in the community have a part in making decisions relative to the content of the school program. _____					
58. People in the community have a part in making decisions relative to the methods to be used in the school program. _____					
59. People in the community have the opportunity to initiate changes in the school program. _____					
60. Ideas suggested by people in the community receive consideration. _____					
61. People in the community work on committees to improve the school program. _____					
62. People in the community make the final decision as to what the content of the school program will be. _____					
63. People in the community make the final decision as to what methods will be used in the school program. _____					
64. Groups which work on the school program are organized by people in the community. _____					

(preliminary form)

	NEVER	SELDOM	ABOUT ½ THE TIME	USUALLY	ALWAYS
65. People in the community are the leaders in working and planning for the school program. _____					
66. People in the community help to plan extra curricular activities for the school. _____					
67. People in the community decide what the extra curricular program of the school is to be. _____					
68. The school program is evaluated in terms of what the people in the community think of it. _____					
69. The school program is evaluated by the people in the community. _____					
70. The people in the community select the people who work on the school program. _____					

* * * * *

SET II

Please answer the following statements as you feel they should be applied in your present position.

1. Teachers should have a part in planning the content of the school program. _____

2. Teachers should have a part in planning the methods to be used in the school program. _____

3. Teachers should have a part in making decisions relative to the content of the school program. _____

(preliminary form)

	NEVER	SELDOM	ABOUT ½ THE TIME	USUALLY	ALWAYS
4. Teachers should have a part in making decisions relative to the methods to be used in the school program. _____					
5. Teachers should have the opportunity to initiate changes in the school program. _____					
6. Ideas suggested by teachers should receive consideration. _____					
7. Teachers should work on committees to improve the school program. _____					
8. Teachers should make the final decision as to what the content of the school program will be. _____					
9. Teachers should make the final decision as to what methods will be used in the school program. _____					
10. Groups which work on the school program should be organized by teachers. _____					
11. Teachers should discuss the school program with the community. _____					
12. Teachers should discuss the school program with the students. _____					
13. Teachers should discuss the school program with administrators. _____					
14. Teachers should be the leaders in working and planning for the school program. _____					
15. Teachers should help to plan extra curricular activities for the school. _____					
16. Teachers should decide what the extra curricular program of the school is to be. _____					

(preliminary form)

	NEVER	SELDOM	ABOUT $\frac{1}{2}$ THE TIME	USUALLY	ALWAYS
17. The school program should be evaluated in terms of what teachers think of it.					
18. The school program should be evaluated by teachers. _____					
19. Teachers should select the people who work on the school program. _____					
20. Administrators should have a part in planning the content of the school program. _____					
21. Administrators should have a part in planning the methods to be used in the school program. _____					
22. Administrators should have a part in making decisions relative to the content of the school program. _____					
23. Administrators should have a part in making decisions relative to the methods to be used in the school program. _____					
24. Administrators should have the opportunity to initiate changes in the school program. _____					
25. Ideas suggested by administrators should receive consideration. _____					
26. Administrators should work on committees to improve the school program. _____					
27. Administrators should make the final decision as to what the content of the school program will be. _____					
28. Administrators should make the final decision as to what methods will be used in the school program. _____					

(preliminary form)

	NEVER	SLDOM	ABOUT 1/2 THE TIME	USUALLY	ALWAYS
29. Groups which work on the school program should be organized by administrators. _____					
30. Administrators should discuss the school program with the community. _____					
31. Administrators should discuss the school program with the students. _____					
32. Administrators should discuss the school program with teachers. _____					
33. Administrators should be the leaders in working and planning for the school program. _____					
34. Administrators should help to plan extra curricular activities for the school. _____					
35. Administrators should decide what the extra curricular program of the school is to be. _____					
36. The school program should be evaluated in terms of what administrators think of it. _____					
37. The school program should be evaluated by administrators. _____					
38. Administrators should select the people who work on the school program. _____					
39. Students should have a part in planning the content of the school program. _____					
40. Students should have a part in planning the methods to be used in the school program. _____					

1

(preliminary form)

	NEVER	SELDOM	ABOUT $\frac{1}{2}$ THE TIME	USUALLY	ALWAYS
41. Students should have a part in making decisions relative to the content of the school program. _____					
42. Students should have a part in making decisions relative to the methods to be used in the school program. _____					
43. Students should have the opportunity to initiate changes in the school program. _____					
44. Ideas suggested by students should receive consideration. _____					
45. Students should work on committees to improve the school program. _____					
46. Students should make the final decision as to what the content of the school program will be. _____					
47. Students should make the final decisions as to what methods will be used in the school program. _____					
48. Groups which work on the school program should be organized by students. _____					
49. Students should be the leaders in working and planning for the school program. _____					
50. Students should help to plan extra curricular activities for the school. _____					
51. Students should decide what the extra curricular program of the school is to be. _____					
52. The school program should be evaluated in terms of what students think of it. _____					

(preliminary form)

	NEVER	SELDOM	ABOUT 1/2 THE TIME	USUALLY	ALWAYS
53. The school program should be evaluated by the students. _____					
54. Students should select the people who work on the school program. _____					
55. People in the community should have a part in planning the content of the school program. _____					
56. People in the community should have a part in planning the methods to be used in the school program. _____					
57. People in the community should have a part in making decisions relative to the content of the school program. _____					
58. People in the community should have a part in making decisions relative to the methods to be used in the school program. _____					
59. People in the community should have the opportunity to initiate changes in the school program. _____					
60. Ideas suggested by people in the community should receive consideration. _____					
61. People in the community should work on committees to improve the school program. _____					
62. People in the community should make the final decision as to what the content of the school program will be. _____					
63. People in the community should make the final decision as to what the content of the school program will be. _____					

(preliminary form)

	NEVER	SELDOM	ABOUT $\frac{1}{2}$ THE TIME	USUALLY	ALWAYS
64. Groups which work on the school program should be organized by people in the community. _____					
65. People in the community should be the leaders in working and planning for the school program. _____					
66. People in the community should help to plan extra curricular activities for the school. _____					
67. People in the community should decide what the extra curricular program of the school is to be. _____					
68. The school program should be evaluated in terms of what the people in the community think of it. _____					
69. The school program should be evaluated by the people in the community. _____					
70. The people in the community should select the people who work on the school program. _____					

APPENDIX F

QUESTIONNAIRE ON CURRICULUM RESPONSIBILITIES (Final Form)

This test is anonymous but the following information is needed.

1. _____
(School district in which you are employed)
2. Present position Teacher _____ Administrator _____

VOCABULARY OF THE TEST

ADMINISTRATORS: Persons such as Superintendents, Principals, Curriculum Coordinators, Directors of Instruction and Supervisors.

TEACHERS: Classroom teachers of subject or grade level and special teachers such as music, art, etc.

SCHOOL PROGRAM: The curriculum, course of studies, and all experiences controlled by the school.

EXTRA-CURRICULAR ACTIVITIES: The part of the school program commonly non-credit or outside of school hours. (This would include such school-wide activities as band, chorus, and safety patrol even if they used regular school time.)

PEOPLE OF THE COMMUNITY: All those who live within the boundary of the school district.

SET I is to be answered according to the conditions which exist in your present situation.

SET II is to be answered according to the way you think things should be in your present situation.

SET I -- WHAT EXISTS

Please answer the following statements as they apply to your present situation as an educator.

	NEVER	SELDOM	ABOUT ½ THE TIME	USUALLY	ALWAYS
1. Teachers have a part in making decisions relative to the content of the school program. _____					
2. Teachers have a part in making decisions relative to the methods to be used in the school program. _____					
3. Teachers have the opportunity to initiate changes in the school program. _____					
4. Teachers make the final decision as to what the content of the school program will be. _____					
5. Groups which work on the school programs are organized by teachers. _____					
6. The school program is evaluated in terms of what teachers think of it. _____					
7. Teachers select the people who work on the school program. _____					
8. Administrators have a part in making decisions relative to the content of the school program. _____					
9. Administrators have a part in making decisions relative to the methods to be used in the school program. _____					
10. Administrators have the opportunity to initiate changes in the school program. _____					
11. Administrators make the final decision as to what methods will be used in the school program. _____					



WHAT EXISTS

	NEVER	SELDOM	ABOUT $\frac{1}{2}$ THE TIME	USUALLY	ALWAYS
12. Administrators are the leaders in working and planning for the school program. _____					
13. Administrators help to plan extra-curricular activities for the school. _____					
14. The school program is evaluated by administrators. _____					
15. Students have a part in making decisions relative to the content of the school program. _____					
16. Students have a part in making decisions relative to the methods to be used in the school program. _____					
17. Students have the opportunity to initiate changes in the school program. _____					
18. Students work on committees to improve the school program. _____					
19. Students are the leaders in working and planning for the school program. _____					
20. Students help to plan extra curricular activities for the school. _____					
21. The school program is evaluated in terms of what students think of it. _____					
22. People in the community have a part in planning the content of the school program. _____					
23. People in the community have a part in making decisions relative to the content of the school program. _____					
24. People in the community have the opportunity to initiate changes in the school program. _____					



WHAT EXISTS

	NEVER	SELDOM	ABOUT 1/2 THE TIME	USUALLY	ALWAYS
25. Groups which work on the school program are organized by people in the community. _____					
26. People in the community are the leaders in working and planning for the school program. _____					
27. People in the community decide what the extra curricular program of the school is to be. _____					
28. The school program is evaluated in terms of what the people in the community think of it. _____					

SET II -- WHAT SHOULD BE

Please answer the following statements as you feel they should be applied in your present position.

1. Teachers should have a part in making decisions relative to the content of the school program. _____
2. Teachers should have a part in making decisions relative to the methods to be used in the school program.
3. Teachers should have the opportunity to initiate changes in the school program. _____
4. Teachers should make the final decision as to what the content of the school program will be. _____
5. Groups which work on the school program should be organized by teachers.
6. The school program should be evaluated in terms of what teachers think of it.

WHAT SHOULD BE

	NEVER	SELDOM	ABOUT ½ THE TIME	USUALLY	ALWAYS
7. Teachers should select the people who work on the school program. _____					
8. Administrators should have a part in making decisions relative to the content of the school program. _____					
9. Administrators should have a part in making decisions relative to the methods to be used in the school program. _____					
10. Administrators should have the opportunity to initiate changes in the school program. _____					
11. Administrators should make the final decision as to what methods will be used in the school program. _____					
12. Administrators should be the leaders in working and planning for the school program. _____					
13. Administrators should help to plan extra curricular activities for the school. _____					
14. The school program should be evaluated by administrators. _____					
15. Students should have a part in making decisions relative to the content of the school program. _____					
16. Students should have a part in making decisions relative to the methods to be used in the school program. _____					
17. Students should have the opportunity to initiate changes in the school program. _____					

WHAT SHOULD BE

	NEVER	SELDOM	ABOUT ½ THE TIME	USUALLY	ALWAYS
18. Students should work on committees to improve the school program. _____					
19. Students should be the leaders in working and planning for the school program. _____					
20. Students should help to plan extra curricular activities for the school. _____					
21. The school program should be evaluated in terms of what students think of it. _____					
22. People in the community should have a part in planning the content of the school program. _____					
23. People in the community should have a part in making decisions relative to the content of the school program. _____					
24. People in the community should have the opportunity to initiate changes in the school program. _____					
25. Groups which work on the school programs should be organized by people in the community. _____					
26. People in the community should be the leaders in working and planning for the school program. _____					
27. People in the community should decide what the extra curricular program of the school is to be. _____					
28. The school program should be evaluated in terms of what the people in the community think of it. _____					



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