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Dimensional Aspects of Role Perceptions in Team Teaching

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DIMENSIONAL ASPECTS OF ROLE PERCEPTIONS IN TEAM TEACHING

by

Philip Michael Carlin

A Dissertation Submitted to the Faculty of the Graduate School of Loyola University in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

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Finally, he is most thankful for the patience, encouragement, quiet exhortation and understanding, and just-plain-being-there of his wife, Mary.
Philip Michael Carlin was born in Chicago, Illinois, on September 29, 1927.

He was graduated from St. Ignatius High School, Chicago, in June, 1945, and served as a petty officer in the United States Navy from 1946 to 1948. He was awarded the Bachelor of Arts degree in February, 1951, and the Master of Education degree in February, 1953, from Loyola University, Chicago.

From 1952 to 1959, the author taught English, Latin and journalism at Bowen High School, Chicago. In 1959 he was appointed assistant principal of Bogan High School, Chicago, and served there until his appointment to the principalship of Pasteur Elementary School, Chicago, in 1961. In 1962, as principal, he opened Pirie Elementary School, Chicago, a new school designed for team teaching.

He has taught variously in Education Departments at St. Xavier College and Loyola University in Chicago, and is also serving as the chairman of the Chicago Board of Education Curriculum Council Committee on Team Teaching.

The purpose of this study is to examine certain attitudes of teachers involved in team teaching programs as they relate to a conceptual framework of group dynamics and role theory. Certain postulates derived from the Getzels and Guba model of social behavior form the basis of the research and an attempt is made to analyze attitudes of team teachers as they pertain to these postulates. It is a further purpose of the study to provide some possible conclusions regarding the efficiency of team teaching in the area of teacher job satisfaction and morale as it may be determined by the examination of attitudes in group effectiveness and toward children.

Inherent in any educational innovation such as team teaching, there are a number of conditions which affect both the teacher and the child and which may or may not be beneficial in the total aspect of the educational program. Regarding the possibilities in team teaching which may or may not be significant, the area of teacher-pupil relations should be examined. It is therefore a further purpose of this study to ascertain attitudes of teachers toward pupils in a team teaching program as they may be measured by the Minnesota Teacher Attitude Inventory and further relate them to interpersonal and group attitudes.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIFE</td>
<td>1</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>11</td>
</tr>
<tr>
<td>PREFACE</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF ILLUSTRATIONS</td>
<td>vii</td>
</tr>
<tr>
<td>Chapter I.  INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II.  A REVIEW OF WHAT HAS BEEN DONE</td>
<td>4</td>
</tr>
<tr>
<td>III. THE PLACE OF TEAM TEACHING</td>
<td>14</td>
</tr>
<tr>
<td>The Concept of Team Teaching</td>
<td></td>
</tr>
<tr>
<td>Flexible Grouping</td>
<td></td>
</tr>
<tr>
<td>Team Structure</td>
<td></td>
</tr>
<tr>
<td>Morale</td>
<td></td>
</tr>
<tr>
<td>Peer Supervision</td>
<td></td>
</tr>
<tr>
<td>Team Teaching in the Schools Involved</td>
<td></td>
</tr>
<tr>
<td>in the Study</td>
<td></td>
</tr>
<tr>
<td>Differences</td>
<td></td>
</tr>
<tr>
<td>IV. CONCEPTUAL MODELS OF BEHAVIOR</td>
<td>32</td>
</tr>
<tr>
<td>Role Theory</td>
<td></td>
</tr>
<tr>
<td>The Getzels and Guba Model</td>
<td></td>
</tr>
<tr>
<td>V.  A DISCUSSION OF THE INSTRUMENTS</td>
<td>54</td>
</tr>
<tr>
<td>The Minnesota Teacher Attitude Inventory Validation studies</td>
<td></td>
</tr>
<tr>
<td>Fakeability</td>
<td></td>
</tr>
<tr>
<td>The Interview</td>
<td></td>
</tr>
<tr>
<td>Guide to the interview</td>
<td></td>
</tr>
</tbody>
</table>

iv
VI. EXAMINATION OF THE DATA

The Design and Rating of the Interview
Analysis of the Results

VII. CONCLUSIONS AND RECOMMENDATIONS

The Hypotheses
Recommendations

BIBLIOGRAPHY

APPENDICES

A. The Minnesota Teacher Attitude Inventory
B. The Interview
C. The Instructions
D. The Data Sheet
E. A Sampling of Comments
F. The Data
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Design and Rating of the Interview</td>
<td>84</td>
</tr>
<tr>
<td>2.</td>
<td>Comparison of Demographic Data - Bell and Pirie</td>
<td>89</td>
</tr>
<tr>
<td>3.</td>
<td>Comparison of Bell and Pirie Teachers in the Areas of Hypotheses</td>
<td>92</td>
</tr>
<tr>
<td>4.</td>
<td>Nomothetic - Idiographic Index Comparisons</td>
<td>96</td>
</tr>
<tr>
<td>5.</td>
<td>Correlations</td>
<td>104</td>
</tr>
</tbody>
</table>
# LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Role Expectations as Determined by Role Incumbent</td>
<td>43</td>
</tr>
<tr>
<td>2.</td>
<td>General Model Showing the Nomothetic and Idiographic Dimensions of Social Behavior</td>
<td>48</td>
</tr>
<tr>
<td>3.</td>
<td>The Interaction of Role and Personality in a Behavioral Act: $B=F(RxP)$</td>
<td>50</td>
</tr>
<tr>
<td>4.</td>
<td>Relation of Role Expectations and Personality to Efficient, Effective, and Satisfying Behavior</td>
<td>51</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

In order to investigate certain characteristics of teachers involved in team teaching, the following hypotheses are formulated for investigation in this study:

I. Teachers in an elementary school team teaching program will demonstrate orientation toward their roles more closely related to idiographic or personalized perceptions than to nomothetic or normative perceptions (as expressed in the Getzels-Guba model).

II. Teachers in an elementary school team teaching program will react more positively than negatively to a team teaching program as it relates to their job satisfaction and morale.

III. Teachers in an elementary school team teaching program will demonstrate more accurate perceptions of leadership potential among themselves and be more accepting than rejecting thereof.

IV. Teachers in an elementary school team teaching program will be more compatible than incompatible with their colleagues.

V. Teachers in an elementary school team teaching program will evidence a high attitudinal level toward children.
Teachers in an elementary school team teaching program will exhibit, through self-appraisal, positive personal and professional change during the time of their participation in team teaching.

Most educational programs which are new are susceptible to study and the need for such study is evident in the case of team teaching. It is apparent that the number of studies involving team teaching is increasing every year. This research makes an attempt to isolate two aspects of team teacher characteristics, namely:

1. Attitudes of teachers toward their role in a team teaching program based on certain postulates of role theory.

2. Attitudes of teachers toward pupils in a team teaching program as measured by the Minnesota Teacher Attitude Inventory.

In order to determine any relationship that may exist between teacher attitudes toward teaching and teacher attitudes toward pupils and toward the teachers' role in a team teaching experiment, the following instruments are employed:

1. A focused interview of the teachers involved and

2. an application of the MTAI.

Teachers have been asked a series of questions in the interview which are designed to place them according to their:

1. idiographic versus nomothetic team teaching role perception.

2. positive versus negative attitudes toward team teaching.

3. leadership potential and acceptance or rejection thereof.
4. acceptance of and compatibility with fellow team teachers.

5. self-appraisal of personal change during the time of the participation of teachers in a team teaching program.

It has been demonstrated in many studies that mental health and morale of teachers correlate significantly with their attitudes and any study which can shed light on attitudinal characteristics can also be considered as aiding in the understanding of teacher morale, which has been defined as a "feeling of well-being which underlies effective functioning when an individual experiences acceptance and approval from significant others and when critical expectations either are fulfilled or have a reasonable chance of being attained." There is in particular major research efforts needed to develop an improved definition of teacher roles, increasingly valid criteria of teacher efficiency and an augmented understanding of factors affecting morale. It is the attempt of this study to demonstrate some aspects of attitudinal characteristics of teachers in team teaching programs which may give some slight nudge, one way or the other, to the direction of further research in this fertile field.


CHAPTER II

A REVIEW OF WHAT HAS BEEN DONE

A number of studies have been conducted regarding team teaching programs, some of which have concerned themselves with teacher attitudes, although there have been many studies of teacher attitudes which have not been related to team teaching. In the present research it is felt that team teaching has been demonstrated to have a certain effectiveness and that there is a commitment on the part of many schools and school systems to team teaching that may in part justify this research.

A study done by Davis in 1963 proposed to determine the effect of team teaching on teachers and hypothesized that the introduction of team teaching in a school will cause teachers to undergo significant changes in role perception. The role perceptions were identified further as teaching roles seen by the individual teacher, fellow teacher roles, student roles, administrator roles, and the role of the team teacher -- all as perceived by the individual teacher.2


Davis used reaction sheets, monthly analysis sheets, questionnaires, an opinion survey, and a personal data sheet. Stated perceptions were rated either positive, negative, or neutral. Ratings before and after the inception of team teaching were then compared to detect what changes, if any, had occurred. These changes were then analyzed by means of the nonparametric sign test for determining the probability in changes between related samples.

There were 31 secondary school teachers involved in the test during the school year and Davis found that, although over one-third of the teachers changed their perceptions, no statistically significant differences were found. However, in an analysis of sub-groups it was found that certain teachers (men, teachers with five to ten years of experience, and junior high teachers) made significant changes in a negative direction in their stated perceptions of team teaching. Also, teachers without graduate degrees made significant changes in a negative direction in their stated perceptions of their own roles as teachers. Further inferences were drawn to indicate that the need for team teaching in a school should be apparent to the teachers before they are asked to participate and that joint planning before the fact is desirable. The facts that the development of a team teaching program should not be rushed and that planning both before and after its inception is necessary were also demonstrated.
In 1961, using an instrument developed by Schutz 3, the FIRO-B (Fundamental Interpersonal Relations Orientation -- Behavior), Gilberts made an important contribution to the understanding of team teaching by examining the interpersonal characteristics of teams.

It was hypothesized that compatibility as measured by FIRO-B between team members and between team members and principals would be related to expressions of teacher job satisfaction, ratings of team effectiveness by team members and principals, and ratings of teacher effectiveness by principals. 90 teachers and 21 principals from seven school systems in Wisconsin were used. Various measures of FIRO-B compatibility were correlated with global measures using the Pearson r correlation technique. Four teams were then selected for further examination through the use of a guided interview to determine the teaching teams' operational characteristics. It had been hypothesized that there would be a relationship between compatibility and these characteristics. The interview data indicated that the formal operational characteristics, which were defined as the way the team operated within the professional requirements of the position, were not related to compatibility. It was further found


that the informal operational characteristics, which consisted of the interchange among team members that occurred outside the professional requirements of the position were related to compatibility.

Gilberts concluded that: (1) There were insufficient findings to accept completely the hypothesized relationships of compatibility to expressions of satisfaction, and ratings of effectiveness; (2) There was no relationship between compatibility and formal operational characteristics; (3) There was a relationship between compatibility and informal operational characteristics; (4) Expressed satisfaction was related to adequate nomothetic provisions; (5) Compatibility was a factor only when nomothetic provisions were inadequate.

Also in 1961 at the same institution (the University of Wisconsin), Vodacek made use of the FIRO-B measure of compatibility and, employing the conceptual framework of the Getzels-Guba model for social behavior, plus theoretical work and findings of previous empirical investigations in areas of role consensus, interpreting relations, and teacher satisfactions, he hypothesized that school staffs rating high in role consensus would rate high in compatibility and that high levels in these two variables would be accompanied by a higher level of teacher job satisfaction.5

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None of his predictions were proven true at a significant level. He concluded that the importance of unidentified variables of indeterminate proportions must equal or be greater than that of high levels of role consensus or compatibility in creating satisfaction among the teachers in the sample. He urges that one must not hold the instruments suspect because of the negative results obtained.

Vodacka's study parallels the present study in that it uses the Getzels-Guba paradigm as a model for social behavior, especially in investigating teacher role expectations and job satisfaction. His sample did not, however, include any schools whose instructional program involved team teaching.

Perez in 1958 proposed to examine relationships between teachers' disposition toward authoritarianism as measured by the California F-Scale and their disposition toward teamwork. Although this study was not conducted with teachers in a team teaching situation, Perez devised an instrument to measure this factor (teamwork) and discovered that there did indeed exist a relationship between disposition toward authoritarianism and disposition toward teamwork. He further discovered that this relationship varied with sex and age in that younger men and older women were highly skewed in their disposition toward authoritarianism and negative in their disposition toward teamwork, while with older men and younger women the converse was true. A final conclusion found that there were no significant differences between teachers
with graduate degrees and those without. 6

North, on the other hand, in a study involving 233 Arkansas teachers, found no relationship between teaching experience and attitudes toward the administration. Nor did he find any significant difference between teaching experience and attitudes toward pupils, the profession, or the community. 7

A 1963 study by Classon to measure teacher attitudes toward pupils and toward supervision employed the MTAI and the Elementary Supervisory Programs Scale, designed to reveal whether teachers had autocratic or democratic attitudes toward supervision. An additional instrument, the Teacher’s Role in Supervision Scale was designed to reveal whether the teacher behaved in an autocratic or a democratic manner in supervisory activities. It was found that there exists a positive relationship between teacher attitudes toward children and toward supervision but that no relationship exists between teachers’ supervision.


The apparent relationship that exists between teacher attitudes toward children and teacher attitudes toward supervision has implications for the present study in that certain aspects of supervision are inextricably bound in to a program of team teaching. Since team teaching programs involve supervisory functions as part of the teachers' role, democratic and autocratic considerations of the supervisor are germane to the examination of teacher attitudes in a team teaching program.

In a study commended in the *Review of Educational Research* as having a good research design, Willower found that principals holding a relaxed and nondirective view of their administrative function held a higher opinion of the professional status of teachers than those principals who were directive and unrelaxed. Willower's study adapted the Getzels-Guba theoretical framework in his examination of style in administrative behavior. He distinguished between the nomothetic or normative mode and the idiographic or personal mode, eliminating the middle or transactional style of behavior. The hypothesis with which we are

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concerned here, significant at the .01 level of confidence, stated that an idiographic leadership style regarded teachers more as professionals than did a nomothetic leadership style. (the latter being demographically older, more likely women, in high school, in larger schools, or more experienced).

The present study identifies similar perceptions based on the Getzels-Guba paradigm of team teachers and their roles while examining their relationship to teacher attitudes toward pupils.

The relationship of selected variables to attitudes toward teaching was the subject of a study by Riccio in 1958. He found that success in interpersonal relations represents a crucial characteristic of the effective teacher. Although this study was made with first course education college students, it has implications for the present study because the major instrument used was the MTAI. He found among a sample of 488 college students that females had more desirable attitudes toward teaching than males, that students who decided to teach later in life also had more desirable attitudes and that there was little relationship between the MTAI and a Study of Values designed to measure value attitudes. 11

The fact that different norms are used for college students when employing the MTAI than for experienced teachers may have

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accounted for the fact of older students scoring higher.

Rippy in 1960 conducted a study which involved certain attitudes and personality characteristics of 54 selected elementary teachers as they related to classroom behavior.\(^{12}\) He made use of the Bowers Teacher Opinion Inventory, the MTAI, the Survey of Educational Leadership Practices by Valenti and Nelson, and 17 scales of the Minnesota Multi-Phasic Personality Inventory and found through an analysis of variance around a regression line that there were six significant departures from linearity, implying among other things that observation of teachers' behavior is a good criterion for teacher effectiveness, that personality characteristics are better predictors of teacher and pupil behavior in the classroom than attitude measures or self-descriptions. "The criteria which were found to be unrelated appear to indicate the necessity for consideration of the continuity and sequence of a child's teachers as well as the continuity and sequence of other aspects of the child's curriculum."\(^{13}\) Although Rippy identifies the teacher as part of the curriculum here,


\(^{13}\) Ibid., p. 212.
he makes his point in calling for a consideration of teacher variables in the deployment of teachers in a school.

The influence of teacher variables as they operate in group situations in a team are important to the present study which seeks to determine some of the effects of team teaching on these variables.

There have been a great many more investigations into the area of teacher attitudes as well as the area of team teaching. None of these studies, however, examine a combination of the two areas.
CHAPTER III

THE PLACE OF TEAM TEACHING

"The rigidity of the platoon or the instability of the crowd is changed into the resourcefulness and flexibility of the team." ¹ So state Getzels and Thelen in their recommendation of the team as an ideal agent of accomplishment. The words are repeated over again in many ways by the proponents of team teaching as an educational program designed to enhance professionalism among teachers and better learning conditions for students.

The first appearance of any reference to team teaching in the literature occurred in March 1957 in the International Journal of Religious Education in an article by Virgil E. Foster, entitled "Teaching by Teams". ² In it the author states that a Sunday School type program can be better organized if the instructors work as teams. A group of leaders organize as a team with one of them, usually selected for outstanding ability, acting as head teacher. ³ The key to the program is the fact

³ Ibid., p. 18.
that the team meets frequently for cooperative planning. "Each member of the team needs to be aware of the whole program and feel a responsibility for it so that his or her part is closely related to all other parts. The group has one unified program, not several. This is not difficult to accomplish if planning is carefully done."

The early discussion of team teaching is strikingly similar to many of the more recent treatments of the topic which stress leadership, cooperative planning and a unified but flexible approach.

The second article to appear using the term team teaching, also in the International Journal of Religious Education, stresses the fact of greater pupil involvement and motivation while also introducing the idea that teachers perform their functions better when involved in the fellowship of other teachers. Leadership, it is stated, becomes a quality of group activity and not just the performance of an individual. The importance of preparation becomes greater and a challenge to do a better job results from the expectation of more individual initiative.

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4 Ibid., p. 19.
Unfortunately these early comments on team teaching have since grown to such proportions that it is difficult to separate in the current literature just what constitutes team teaching and what does not. Furthermore, the very volume of articles on team teaching indicates that it may become, if it has not already, a catch phrase for something to do to be "in", so that we can say along with Halpin that "we must not let our ideas degenerate into slogans. Expressions such as 'action research' and 'group dynamics' have been used so loosely and with such abandon that they have been debauched of meaning. 'Administrative theory' [and, we may say, "team teaching"] will become another empty slogan if we use it as a rallying cry and proselytize in its name."

We find some authors claiming a full fledged team teaching program without any type of cooperative planning and we also find an article claiming financial benefits for team teaching by increasing pupil teacher ratios. Such claims, if they proliferate, can only have the effect of discouraging responsible school people from embarking upon a program of team teaching.


7 "Team Teaching and All That; Scottish Experience," The Times (London) Educational Supplement, Vol. 2544 (February 21, 1964) p. 446.

The Concept of Team Teaching

It is not within the scope of this study to present an exhaustive examination of all of the literature on team teaching, nor is it possible to present all the forms that team teaching programs can take, nor all of the benefits and disadvantages inherent in these programs. There are, however, certain common features of all programs which qualify as team teaching programs. Shaplin says that "Team teaching is a type of instructional organization, involving teaching personnel and the students assigned to them, in which two or more teachers are given responsibility, working together for all or a significant part of the instruction of the same group of students." 9

This seems to embody the basic premises of team teaching programs beyond the fact that they are based on a rationale which anticipates the improvement of instruction.

Many other definitions may be cited here with various orientations but they all seem to contain the points included in Shaplin's definition. The organizational structure and the rationale of the schools involved in this study will be discussed in the next section of this chapter.

Inherent in Shaplin's definition and exposited in the early articles is the concept of team planning without which no

9 Shaplin and Olds, Team Teaching, p. 15.
team program can qualify. Most of the reports and studies written on this agree that "exposing more students to varied learning experiences and to outstanding instructors has to include detailed planning, together with ongoing evaluation."10 Teams just don't take turns or divide children. Without team planning, a team is not a team.

A word should be said for some of the advantages said to accrue to those educational programs which espouse a form of team teaching. Although there have been a number of reports written which intimate that team teaching is not what the field of education needs, the number appears to be constant and may be necessary as an antidote for the unwarranted and uninformed enthusiasm of some of the proponents of team teaching.

James B. Conant, a much read author in the field of education, has cited several advantages to the educational program that is based on a team teaching structure, among them


the orientation of new teachers, the attraction of the more able college students into elementary school teaching, although he also claims that team teaching is in danger of becoming a "magic phrase".

Thus it must be remembered by the discriminating reader that the very multiplicity of articles on team teaching, many in popular magazines, can possibly turn a term like "team teaching" into a shibboleth of sophisticated meaninglessness.

**Flexible Grouping**

Team teaching may and most often does involve some kind of flexible grouping among students. This can be expected, for a team of teachers will frequently make a more pliable size and composition out of the group of learners for which it is responsible. But flexible grouping must not be regarded as team teaching, for in a true team program the latter begets the former. To have intricate scheduling and varying sizes and compositions in learning groups without a planning team of teachers whose exercise of decision making powers has birthed the varying groups is to have an offspring without a sire. If such a program lays claim to the name of team teaching, it is contributing to the store of misinformation about team teaching that is already existing.

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14 Ibid. p. 147.
15 Ibid. p. 58.
Team Structure

Many team structures are based upon a hierarchical type of organization in which a team includes a leader, senior teachers, regular teachers, student teachers, teacher aides, and so on down the scale. Ideally, this type of organization is best suited to one of the benefits of team teaching which Conant sees as retaining and attracting good teachers.

Martin Trow comments on this point:

Through comparative studies of schools and systems, we may discover that, within limits, proportionately as many men leave teaching where the pay is good as where it is low and that the appraisal of their own situations is based not so much on the absolute levels of their pay as on their comparisons of their own situations with that of others. For many male teachers, the "others" with whom they compare themselves are likely to be school administrators, who are largely recruited from the ranks of male classroom teachers and whose pay and status are very often much higher than that of teachers. It is an hypothesis worthy and possible of test that loss of men teachers from the classroom is related to the size of the differences in pay and status between them and their own school administrators. If this is so, the policy implication is that if it is desired to retain more of the most able male teachers in the classroom, the difference between the rewards of teachers and administrators must be kept low -- not necessarily by holding down the pay of administrators, but perhaps by providing an alternative channel of advancement within teaching. 16

It is true that hierarchy can divide staffs when the competition for position is keen and the personal adjustment of

teachers less than favorable. When such conditions exist it may be more desirable to organize teams in a cooperative structure, a confederation of associates who act in concert but who do not receive pay and status differentials.17 Such a team structure may be second best, but the type and quality of the personnel may necessitate its existence. If, for instance, there is no provision for differential pay according to leader status, the hierarchical team structure may not be beneficial. In the case of equality among existing staff, it may be more appropriate to consider the cooperative type of team structure, thus avoiding the introduction of unnecessary frictions among teachers.

Morale

A major claim of the proponents of team teaching is that it fosters a more advanced type of professionalism among teachers, resulting in greater teacher job satisfaction and morale which will redound to the benefit of the learner. Research has been done in the field which has been alluded to in ChapterII but the issue remains in some doubt. Certainly it can be expected that a better learning situation will ensue if the teacher is happier in the job. As a profession, teaching does not assume the corporate responsibilities of a profession according to Wolpert's

findings and while he avers that higher professional status among teachers is important and desirable, he concludes that quality of service and professional status are interrelated and mutually inter-dependent.

A close relationship is found between morale and the quality of education as there is between professional status and the quality of education. We can suggest then that an increase in professionalism among teachers will have a positive effect upon their morale. A somewhat elusive term, morale has been variously described. French defines it thus:

Morale refers to the conditions of a group where there are clear and fixed goals (Purposes) that are felt to be important and integrated with individual goals, where there is confidence in the attainment of these goals and subordinately confidence in the means of attainment, in the leaders, associates and finally in one's self; where group actions are integrated and cooperative and where aggression and hostility are expressed, against the forces frustrating the group rather than toward other individuals within the group.

If this definition is subscribed to, it can be seen that


a program of team teaching might have a greater influence on morale, positive or negative, than conventional programs of education because of the enforced group activity that team teachers are expected to experience. If morale is connected with group functioning, we can expect that morale will be high in those situations where a team of teachers performs well in the accomplishment of common goals and morale will be lower where the team functions less well or where the goals are not mutually sought after or common to the team. The fluctuations of morale in conventional programs of education may not be expected to occur as readily because of the essentially separate functioning of teachers.

**Peer Supervision**

Another concept involved in team teaching is the concept of peer supervision. In many team programs this has come about through the operation of teams in the teaching situation in which one teacher charged with the responsibility for large group instruction is observed in his performance by fellow team members who thereafter may offer suggestions to the performing teacher to the end of improving his efforts in instruction. Such a situation may be augmented, improved and regularized by scheduling opportunities for teams of teachers to observe and critique other teachers for the purpose of improving the total
instructional program. This is known as peer supervision. 21

"I believe that the ultimate test should be how the teacher
performs in a classroom, as judged by other teachers,"22 [italics
mine] states Conant who sees value in this type of supervision
especially as it may be applied to student teachers and new
teachers. The difficulty lies chiefly in the ability of teachers
to accept the supervision of their colleagues without feeling a
threat to their own security. This personality feature which
Cogan calls "permeability"23 and Heller refers to as "pliability"
is an essential characteristic in teachers who would work well as
team members. It is even more crucial in team teaching programs
which take full advantage of the opportunity team teaching affords
for peer supervision.

21 Morris L. Cogan, "Clinical Supervision by Groups," The
College Supervisor: Conflict and Challenge, Association for
Student Teaching, 43rd Yearbook, (Cedar Falls, Ia.; Association

22 Conant, The Education of American Teachers, p. 58

23 Cogan, The College Supervisor, p. 121F.

24 Melvin P. Heller, "Qualities for Team Teachers," in
Beggs (ed.) Team Teaching, X p. 148.
TEAM TEACHING IN THE SCHOOLS INVOLVED IN THE STUDY

The investigation relevant to the accomplishment of this study has been effected through the assistance of teachers in two Chicago public elementary schools -- John T. Pirie school and Alexander Graham Bell school. Both of these schools have been involved in a program of team teaching. Pirie has had a total team teaching program involving 25 teachers since its opening in September, 1962. Bell, a larger school, has had a partial program of team teaching for eight years involving 47 teachers. Although the team programs in these schools have many similarities, they also have a number of differences, not the least of which concerns the structure of the teams. In the case of Pirie, the teams are established on a cooperative basis and do not have a designated leadership. At Bell, a hierarchical team structure has been established.

The teachers in each of these schools have been participating in a team teaching program long enough for it to have had an effect, if any, on the attitudes to be measured. They have also been in a stable situation in regard to the extent of turnover of both faculty and pupil population and they have worked with the same administration for the total period of time that the program of team teaching has been in existence in each school -- at Pirie, since its opening in 1962; at Bell, since 1957.
The faculties of both schools are overwhelmingly women with Pirie having 5 of its 25 teachers men and Bell having only 2 of the 35 participants in the study men.

The median years of experience in teaching at Bell school is 8.0 and the median years of experience at Pirie is 9.0, both considered optimum.

The total school population of 750 children is involved in the team program at Pirie while between 300 and 350 children at Bell are involved in team teaching.

Team teaching at Pirie and Bell satisfies the basic definition to which reference was made in the previous section, i.e. teachers work together as a team responsible for the instruction of a common group of learners. They are provided with a scheduled time to plan together as a team during the school day or beyond it if they receive extra monetary compensation. Their team teaching function varies between the schools as it does among the teams in each school regarding the exact duties and specialized responsibilities of individual team members.

John T. Pirie school is an elementary school on the south side of Chicago which enrolls a student population of 750 in grades kindergarten through six. It is located in a middle class area. It is a new building, having been constructed in 1962, and has a unique design among the schools of Chicago in that it is built to facilitate the concept of team teaching by having operable walls between contiguous classrooms.
The fact that this feature has made flexible grouping considerably easier has contributed to the success of the team program at Pirie.

The school employs 25 teachers 18 of whom were members of the faculty when the school opened.

Alexander Graham Bell elementary school is located on the north side of Chicago and serves a student population of 750 in grades kindergarten through eight, including several divisions for physically handicapped children. The team teaching program at Bell had its inception eight years ago and has since developed to the point where 47 of its 67 teachers are involved in one way or another. It also serves a middle class community. The building was built in 1918 and it has a number of large and small areas which may be used for accommodating groups of varying sizes. The school has a very stable student population and faculty regarding turnover. Its number of teaching divisions is twice that of Pirie because of the exceptionally low class size accorded to the handicapped children there.

The similarities between the schools are many and there are some differences. Among the similarities can be counted the provision of planning time for team members ranging from two 40 minute periods a week for primary teachers at Pirie to one 45 minute period per day for some teachers at Bell who are participating in a program for the gifted which has as a part of the State of Illinois subsidy supporting it, additional time in the morning during which teachers are given a pro rata salary.
Planning time, while not pari passu, is common to each program and indeed forms the basis of the team teaching philosophy at each school.

Both schools provide for some form of flexible grouping.* In the case of Pirie this is facilitated by the design of the building with its operable walls. Teams plan for grouping changes according to the nature of the material to be learned, the ability and achievement of the learner, and the expertise of the teacher. Thus it is common to have large group instruction going on in one area with as many as 100 to 150 children exposed to the instruction of a teacher whose special talents may lend themselves to teacher-centered instruction and whose background, training and interest may lie in that particular subject area. At the same time a group of 10 or 12 students or less from the same team may be under the tutelage of a teacher whose expertise lies in small group discussion or child-centered instruction for the purpose of remediation in an area in which the learners are debilitated or for a project designed to enrich the curriculum for a particularly capable group of students to whose achievements the content of the concurrent large group lesson is superfluous.

Both schools tap teacher talents according to the thinking of the teams, thus exercising another function of team teaching common to both schools: the delegation of decision-making powers of a supervisory kind to the teaching team.
Organizationally, both schools employ a system that designates teams of from two to six members with larger overriding teams consisting of two or more teams such as the primary team which is made up of several smaller teams.

Curriculum teams which act in an advisory capacity are formed from each instructional team with members serving in curriculum areas to determine general ways of implementing the curriculum. In the Chicago school system, curriculum considerations are fairly well defined by the Department of Curriculum which regularly publishes curriculum guides, setting down general topics to be taught in each of the curriculum areas. Within the framework of the curriculum guides, however, it falls to the curriculum team of the schools in the study in general and the instructional teams in particular, to implement the prescribed content.

DIFFERENCES

The major difference between the two schools in the study lies in the team structure of each. Pirie employs a cooperative type of team structure while Bell has instituted a hierarchy which assigns leaders to each team. The advantages and disadvantages of both have been discussed in the previous section of this paper. The fact that leadership has been designated at Bell and not at Pirie has some bearing on the investigation of certain aspects of leadership contained in this study. Bell school team leaders are appointed by the
principal or elected by the team depending on the maturity of
the team, and have responsibilities designated by the principal. Pirie school functions without designated team leaders. Certain team members, however, have emerged as de facto leaders.

Another difference existing between the two schools is the inclusion at Bell of the physically handicapped children and their teachers in the team teaching program. It is the specialized training and personal orientation of these teachers that has special significance to this investigation. Pirie enrolls no physically handicapped children and consequently has no teachers that might fall into the same category as these teachers at Bell who are charged with the specialized instruction of the physically handicapped, some of whom are involved in the team program there.

A third difference in the team teaching programs in the two schools is the departmentalized organization of the Bell school seventh and eighth grade. While it is true that Pirie does not enroll seventh and eighth grade students, the teaching process involving these higher level students and the effect thereof on teachers and teacher attitudes is probably not different from that involving children in the middle grade levels. The organizational difference, however, has some significance to this study because of the comparatively strong subject matter orientation of teachers who are functioning in a departmental organization which has its basis in subject matter divisions.
Generally, the team teaching programs in the two schools involved in this study is basically the same. In fact, the elementary schools of Chicago at the present time can claim only these two schools as truly operating team teaching schools. Although there are many elementary schools in the city that are and have been experimenting with programs of team teaching, none of them has developed a program to the extent, nor with the longevity, that these two schools have at the elementary level.
CHAPTER IV

CONCEPTUAL MODELS OF BEHAVIOR

"A reviewer's task", write Jensen and Parsons introducing a chapter on conceptual models of behavior, "involves examining many studies, selecting and classifying the important ones, and then reporting them tersely, often with the effect that whatever substance and value they contain remains a secret to everyone but himself."  

It is a necessary part of this study to explicate "whatever substance and value" is contained in the conceptual model of social behavior propounded by Jacob Getzels in concert with Egon Guba and sometimes Herbert Thelen. The hypothetical comparison made here between the model of Getzels and Guba and the role perceptions of teachers in team teaching require a working understanding of the Getzels-Guba model. In somewhat simplified form it is eminently adaptable to the interactional aspect of team teaching.

The Getzels-Guba paradigm with its typology seems to be gaining acceptance as a genuine contribution to theory in education and may possibly be compared legitimately to the classic study by Lewin, Lippitt, and White comparing democratic, autocratic and laissez-faire types of leadership as far as impact in the literature is concerned. There is a danger, however, that the typology of any system may attract adherents to the system because of their love for the nomenclature and not because of any particular inclination toward the system. Such, in fact, has been the accusation against Kurt Lewin's Gestalt school of topological psychology, containing as it does esoteric (to some) terminology, such as "life-space", "positive and negative valences "neutral barriers", etc. Some critics of Lewinian psychology suggest that recondite language describing a system can be positively harmful.

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The very vagueness and seeming pretension which had acted as a barrier for many people proved to have a powerful positive valence for others. There are many people who are not at all repelled by fancy language describing rather vague concepts. Some people, on the contrary, have a vast appetite for impressive terminology that cannot be tied down to anything definite. And many of these people took to the Lewinian concepts as a duck takes to water, with the result that Lewinian ideas have been discussed with more enthusiasm than insight.³

The possibility of such a condition arising in relation to the Getzels-Guba model cannot be gainsaid. There are those for whom the crisp, incisive "idiographic" and rolling, sonorous "nomothetic" would have a philological attraction and who would thereby espouse the system on its language while avoiding or distorting the meaning that Getzels and Guba attach to it.

Getzels and Guba have thus developed a model for their theory which has a certain ease in presentation and whose taxonomical terminology has a possibility of finding a secure place in the language. As previously mentioned, the study by Lewin, Lippitt, and White comparing democratic, autocratic and laissez-faire leaders still has impact and is occasionally duplicated while the language of the study has become commonplace in its original designation.⁴

Many attempts have been made to create operationally testable conceptual models of role theory in group dynamics. A proposal which appears to have some validity as it has been employed in administrative and classroom theory is that which has been proposed by Getzels and Thelen.

The construction of a theory demands an act of creative imagination. Theories cannot be produced on demand; they evolve in many shapes and many different degrees of precision. Getzels and Guba have tested empirically several specific hypotheses about role conflict derived from their model. Feigl states:

... a 'theory' in the empirical sciences...
may mean anything from a style or jargon of mere descriptions, from a mere classification inventory, or typology, to a full-fledged hypothetico-deductive system; from a bold guess or a suggestive working hypothesis, a program of research, to an elaborate model in either analogical or purely abstract mathematical terms.

5 Getzels and Thelen, The Dynamics of Instructional Groups
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Thus a taxonomy or classification scheme is not a theory and investigations based upon taxonomical constructs are liable not to be productive of operational meaning. It is generally agreed that the Getzels-Guba theory of social process and behavior, while molecular rather than molar in its typology, offers a functional, adaptable model for the purpose of study.

In brief, this theory postulates two dimensions of social behavior (herein adapted to the team structure and delimited as such). (1) the nomothetic or normative dimension represented by the institution as the body, the role as the mode, and the expectation as the goal director, and (2) the idio­graphic or personalized dimension represented by the individual as the body, the personality as the mode and the needs as the goal director.

These two areas work together or against each other, exerting some force to produce a third, middle dimension which is represented by the group as the structure or body (in our instance both the individual team and the total team), the climate as the mode and the intentions as the goal director. The totality of this paradigm operates to produce actions which are defined as observed goal behaviors.

A word might be said here about the place of the conceptual model in the Weltanschauung of educational science. It must be remembered that models or isomorphic frameworks are bound to the current culture of man and indeed are generated by it. Thus we can see that such models have no eternal
permanence but must give way to others as the general culture undergoes change. But for currency or timeliness the model of the day has operational validity and such is the assumption in the present study for the use of the Getzels-Guba paradigm. Griffiths has a comment that may be worth noting here:

Early man used the image of his own society as the modes for physical nature. He pictured physical reality as a society of animated objects which could be influenced by talking to them through the right kind of incantations. Thus, nature was a type of anthropomorphic system.

The achievements of man served as models for accompanying other things. Thus the pyramid became a model for thinking about social hierarchy, the wheel for putting order into the heavens, the pump for a metaphor for the heart, and the clock yielded the classical model of mechanism. The machine has given way to the now dominant concept of the organism as the prevailing model of system analysis. It can be seen that models are very much culture-bound.

All models therefore are constructs of systems. Meadows contends that the assumption that reality exists in systems is an integral part of the conceptual apparatus of current science.

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Deutsch contends that men think in terms of models and that each of their models consists of structure, a pattern of distribution of relative discontinuities, and some laws of operation. Deutsch and Meadows are saying the same thing: first, man thinks in terms of systems; second, through models man creates systems.

(Contrary to the history of the *Minnesota Teacher Attitude Inventory* which is based on a theory of classroom atmosphere, ergo behavior, not heretofore related to team teaching, the Getzels-Guba model has been cited in a discussion of the rationale for team teaching and has therefore been used as a basis of examination which the construction of the second instrument in this study, the interview, has as one of its bases.)

Attitudes of teachers, resulting from the complexity of the whole personality, may easily be negatively influenced by such factors as: general appearance, failure in heterosexual adjustment, low social status (a high proportion of teachers have upper-lower and lower-middle class backgrounds),

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to be accepted socially in school and adolescence, etc. The failure of a teacher to gain secure adjustment in social relations before entering teaching militates against the gaining of security through teaching. An examination of these factors is not within the purview of this study.

Role Theory

Beginning with a psycho-sociological framework for the study of educational administration, Getzels and Guba sought explanations of the points of articulation among role conflict, personality and effectiveness. In general, they found that the extent of role conflict varied with incompatibility of expectations and that intensity of role conflict was related not only to certain individual and attitudinal characteristics but also with role effectiveness. In interviews with teachers they uncovered conflicts related to expectations of the school and the community as well as to role assignments in one situation or another. Not only did they develop a theory with explicit hypotheses to be tested by drawing sample populations from real life, military and educational settings, but also they constructed situational and personalistic role-conflict instruments based upon earlier interviews to supplement standard psychological tests.13

Any understanding of the Getzels-Guba model of social interaction demands an acquaintance with some of the postulates of role theory, which belongs properly to social science and which has implications for any organization which involves human beings.

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12 Variety in background and its impact on personal and group attitudes, has been studied exhaustively and comprehensively presented in T. N. Adorno, et al., The Authoritarian Person. (New York: Harper and Bros.) 1950.

Role theory as outlined by Parsons\(^{14}\) suggests a general conceptual scheme for examining group behavior. Role theory is the dynamic organization of behavioral facts into purposeful constructs which can not only explain certain behaviors of persons functioning in rather well defined roles but predict them. Role theory considers cultural personality and social backgrounds and also a wide range of perceptions and expectations.

A basic premise that role concept takes into account is the personality of social interaction. Without this assumption the role concept becomes sterile and mechanistic...\(^{15}\)

Our consideration of role theory and the several constructs which it postulates must therefore be accomplished with the understanding that whatever excisions from the total societal structure we make of the functions, expectations, behaviors, perceptions, and the like, relative to the role and/or personality of any given individual must, in the last analysis, remain an integral part of that societal structure and in a large measure be governed by it. Our attempts at measuring certain aspects of role concepts in relation to the teachers in the study are accordingly reported in their larger sense, that is in the group totality of each school.


In the literature of the philosophy of science, and increasingly in the empirical sciences, there are references to "formal systems," "axiomatic systems," "postulate systems," "mathematical models," or simply "models." All these terms refer to attempts to construct from certain basic terms and laws governing the relations of these terms, a language that will "fit" a certain part of the world. That is, if these terms are given coordinating definitions (i.e. connected with some empirical phenomena), then the phenomena will follow laws parallel to those in the model language. "As scientists we try to find the structure of reality and to put it into words. These words suggest consequences, which can then be checked empirically."\(^{16}\)

When a theory has been constructed, formulated or designed, it is incumbent upon the designer or his assigns to propose a model through which the theory can be seen to operate, thus models are necessarily constructs of theories or systems. As physical and social scientists become increasingly aware of feedback and servo-mechanisms, they have had to construct teleological models to account for purposive behavior in machine and living systems. As Griffiths has indicated,

the prevailing model is the organism which in its basic state allows for a freedom of growth and atrophy, a more than handy model for the social scientist and one which easily lends itself to a specific typology for identification of its parts and functions.

Broadly conceived, role theory holds that almost every activity of an individual may be viewed as being in conformity with or in opposition to the expectations of his role. These expectations include his own conception of his role and the role expectations of others vis a vis his behavior. Role is defined by others and by his reactions to the perceptions of others. Role expectations, therefore, have personal and sociographic dimensions. Furthermore, role theory proposes that role expectations are based on the conception of the role regardless of the particular role incumbent. If, for instance, the role expectations of others regarding the role of a particular role incumbent are varying, then the role incumbent may react to those others whose expectations of his role are in agreement with his own perception of his role expectations and thus will not agree with all. Role conflict then ensues and role effectiveness is accordingly diminished.

Role theory says that the interacting role incumbent should reflect his role perceptions thereby demonstrating not only his own concept and role expectations but his orientation to his role. Therefore, his behavior in his role, which we
may call role behavior, is made up of response patterns determined by his perceptions of what others believe his role expectations are and his own values and purposes, molded by his own personality, which, in total, make up his own role expectations. The role incumbent then does what his role expectations say he ought to do.

**FIGURE 1**

**ROLE EXPECTATIONS AS DETERMINED BY ROLE INCUMBENT**

role expectations as role incumbent perceives that others see them role incumbent's values purposes role incumbent's personality
We can see by this diagram that the role expectations of the role incumbent are affected by himself and others. When there is a disparity between the two forces that is continuing and generally constant we may expect the role expectations and consequent behavior to take a direction one way or the other, but when the perceptions of others regarding the role expectations of the role incumbent vary, there develops a discontinuous fluctuation of forces affecting the role expectations as they finally determine role behavior and this is when role conflict exists.

Role conflict is a major cause of low morale and its relative absence is associated with high morale and increased job satisfaction, an aspect of this study.

Brown and Neitzel found that a disparity between role as defined by members in a social situation and role as perceived by the role incumbent was related to decreased morale.  

Role incumbents thus have many factors operating on their behavior but these may be legitimately combined in the role expectations of the person. If we specify a role, say of teacher, we can assume that the role behavior of the teacher will be determined by his role expectations. Since people act or behave on their perceptions of their role expectations, the teacher's role expectations will determine his actions. Furthermore, the definition of a teacher's role and the fulfillment of his role expectations will affect his interaction with others. This has special significance in team teaching as we shall see. In teaching, teachers behave in reference to others, i.e. pupils, other teachers, administrators, parents and community. In this study we are concerned chiefly with the interaction of teachers with other teachers and their attitudes toward pupils.

When considering role in this discussion, especially in reference to teacher morale and job satisfaction, we must be careful to distinguish between role and status. The following explication by Fenlason may be helpful.

Status refers to the position or place one occupies in a society by virtue of age, sex, birth, occupation, and achievement. Position in this context refers to an individual's location in a societal structure that is characterized by a given set of social norms. Norms are commonly held or accepted behavior expectations; that is, the learned responses held in common by the members of a society or members of one of its sub groups. Status, then, refers to the relative ranking of a position within a society, and includes the value assigned
to the rank and to the person fulfilling the role(s) constituting the position. Inherent in position are specific task-oriented roles, in the performance of which certain behavior is expected. For example, in many cultures, a multitude of task-oriented roles are expected of the father; one who has father status is expected to play the roles of breadwinner, spouse, disciplinarian, supporter, and model for male identification while fulfilling his role as leader in the primary family group.

Role is the part one is expected to play in each of the assigned or achieved statuses. It is human interaction affected by structure and function in relation to status and position and when the helping professions view role in this context, they find deeper insights into the meaning of human inter-relationships in the social order. Both status and role are social products and one could not exist without the other... The array of association roles which each status carries becomes a complicated network in the functioning of any human being. Just how complex the functioning of many roles together can be was glimpsed in the above example of the father. 18

Linton further comments on the inter-relatedness of status and role by defining status as "the place in a particular system which a certain individual occupies at a different time," and defining role as "the sum total of the cultural pattern associated with a particular status. Thus we see that role assumes

18 Fenlason, Essentials in Interviewing, pp. 103-104.

more of a functioning aspect than status which appears to be a more positional concept but which depends on role to exist.

When we consider the organization of the societal system in which a particular role functions we must deal with a dimension of role theory. That is one of the greater determiners of role expectations. Fenlason says:

The role concept relates the range of perceptions, expectations - individual, cultural and societal - and performance of specific tasks and activities to membership, position the chief status determiner and participation in various groups and organized societal institutions. This frame of reference encompasses the fusing of ego perceptions and strivings with societal expectations... It also takes into consideration the value symbols represented by organizations and institutions per se.20

As the team teacher considers himself and his relation to others, he and others must consider the institutional role and its expectations in this case, the educational program and purposes of the school. (Thus the institutional nomothetic dimension of the Getzels-Guba model operates.)

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20 Fenlason, Essentials of Interviewing, p. 105.
The Getzels and Guba Model

Jacob Getzels and Egon Guba in evolving their paradigm of social behavior state that they conceive a social system as involving two major classes of phenomena which are at once conceptually independent and phenomenally interactive. They are, first the institution with certain roles and expectations that will fulfill the goals of the system. Second, inhabiting the system, there are individuals with certain personalities and need-dispositions whose interactions comprise what we generally call "social behavior." Social behavior may be apprehended as the function of the following major elements: institution, role, and expectations which together constitute the nomothetic, or normative, dimension of activity in a social system; and individual personality and need disposition which together constitute the idiographic, or personal, dimension of activity in a social system.21

The general model of this theory is represented pictorially in Figure 2.22

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22 Ibid. p. 425.
The nomothetic is represented by institution, role, and expectation, each being the analytic unit for the term next preceding it. As social system is thus defined by its institution, institution by its constituent roles, and each role by the expectations attached to it. The same relationships hold true for the idiographic dimension which is comprised of the individual, his personality, and the need-dispositions deriving from his personality. Behavior then is the net result of an individual reconciling the expectations held for his role and his own individual need-dispositions in striving for a goal. The importance of each dimension is dependent upon the specific act, specific role and the specific personality involved. Getzels and Guba present a general equation which represents this relationship, \( B = f(R \times P) \) where \( B \) is observed behavior, \( R \) is a given institutional role defined by the expectations attaching to it and \( P \) is the personality of the particular role incumbent defined by its need disposition.\(^{23}\) The \( f \) refers to "function of" in the verbal arsenal of the social scientist. Thus "Behavior" is a function of institutional role and personality.

\(^{23}\) *Ibid* p. 429.
The concept is graphically portrayed in Figure 3.24

![Diagram](role-personality.png)

Figure 3. The interaction of role and personality in a behavioral act: \( B = f(R \times P) \).

Any observed behavior then could theoretically be located on the axis X to Y and the relative proportion played by role and personality determined.

Getzels and Guba go on to discuss various types of conflicts that can be examined within the framework of their theory.25 Individual and institutional conflict occurs when there is a lack of congruence between expectations and needs. The conflict can arise out of three sources in the social system. Role personality conflicts are created when expectation patterns of a given role are not the same as the need-disposition patterns of the person in that role. Role conflicts occur when a person is required to conform simultaneously to a number of expectations which are mutually exclusive, contradictory or inconsistent; and the third type of conflict occurs when there are opposing needs and dispositions within the personality of the role incumbent.

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24 Ibid. p. 430.
25 Ibid. p. 431-33.
Getzels and Guba also state that A primary concern in any organization is the effectiveness, efficiency and satisfaction of the staff (role incumbents.) The administrative problems concerned with effectiveness, efficiency, and satisfaction have been confused for want of an appropriate frame of reference. The model we are using makes possible clearcut and heuristic distinctions between the terms so that a given role incumbent may, for example, be seen as effective without being efficient, and efficient without being effective and satisfied without being either effective or efficient.

The relationship of these factors is seen in Figure 4.27

Figure 4. Relation of role expectations and personality to efficient, effective and satisfying behavior.

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27 Ibid. p. 33.
Effectiveness is the relationship between observed behavior and the expectation of the role. Efficiency is the relationship between needs and behavior. The closer behavior conforms to the needs of the individual, the less the drain on psychic energy to behave in that specific way, and therefore the more efficient will be that individual's acting. In this model satisfaction is a function of the congruence of institutional expectations with individual need dispositions. If the individual's behavior would simultaneously meet situational expectations and personal needs, the relation of the individual to the organization would be ideal and presumably would produce maximum satisfaction for all concerned.

In this review of the Getzels and Guba theory, the emphasis is on the interaction of the nomothetic dimension with the idiographic - the congruence of these two dimensions producing satisfaction.

It is difficult to escape individual perception of the institution per se as a factor which influences expectations about its services and the way in which they are administered. An individual's perceived image of an institutional role may be relatively realistic or it may be a distorted misconception that is an overly positive or unduly negative expectation. 28

The team teacher's perception of his role, therefore, has considerable effect then upon, not only his functioning as a teacher and as a team member, but also upon the functioning of the others of the team and, indeed, upon the total team program.

28 Fenlason p. 107.
Much of what this study examines is based upon the team teacher's role perception.

Furthermore, as the teacher considers his role in the educational program, he brings to his consideration certain variables which are governed by his personality, some of which he may know and some of which operate below the conscious level, and over most of which he exercises little or no control. These variables constitute the idiographic dimension of the societal structure we call the school, and specifically in this instance the team teaching program. It should be further understood that these examples of nomothetic and idiographic dimensions must be considered when the total group (whether the entire school or the individual team) is involved, for we cannot have a model of societal behavior when we only consider individuals or institutions as discrete entities. It is the interaction, consequent goal seeking behavior, and its variant directions that give us the system for which we seek determiners.

Again, it must be mentioned that the only aspect of role theory and its concomitant effects (morale, etc.) which is under investigation in this study is the admittedly narrow one comprising the school, team teaching, teachers and children. When one begins to contemplate the vasty deeps of the individual human personality, coupled with the overwhelming complexities of human interaction and the abounding multiplicity of properties contained in human institutions, one must sometimes consider himself presumptuous to think of analysis at all.
CHAPTER V

A DISCUSSION OF THE INSTRUMENTS

When we speak of the tools of this study we are speaking basically of two, the Minnesota Teacher Attitude Inventory and the personal interview. The former is a standardized instrument that has been employed with varying degrees of success in many studies involving teachers and learners. It has a fifteen year history of acceptable validity and reliability according to the purpose for which it has been used.

The personal interview has been specifically designed for the purpose of examining some aspects of this study. It has not been standardized nor has it ever been used before in this or any other connection. Part of the interview was designed to meet the requirements of examining teacher perceptions as they may be applied to the Getzels-Guba model. Its total purpose is to test the hypotheses of this study and to discover any relationships that may uphold or negate these hypotheses and its functional life is intended to terminate with this study.
A Personal Data Sheet and other items of recording importance have also been used in this study and may qualify as instruments. They will not be discussed here, however, but may be found in their entirety in Appendix D.

The Minnesota Teacher Attitude Inventory

"Investigations carried on by the authors over the past ten years indicate that the attitudes of teachers toward children and school work can be measured with high reliability and that they are significantly correlated with the teacher pupil relations found in the teachers classrooms. The Minnesota Teacher Attitude Inventory has emerged from these researches. It is designed to measure those attitudes of a teacher which predict how well he will be able to get along with pupils in interpersonal relationships and indirectly how well satisfied he will be with teaching as a vocation... It is assumed that teachers ranking at the high end of the scale should be able to maintain a state of harmonious relations with his pupils characterized by mutual affection and sympathetic understanding. The pupils should like the teacher and enjoy school work. The teacher should like the pupils and enjoy teaching. Situations requiring disciplinary action should rarely occur. The teacher and pupils should work together in a social atmosphere of cooperative endeavor... Group solidarity resulting from common goals, common understandings, common efforts, common difficulties and common achievements should characterize the class.

At the other extreme of the scale is the teacher who attempts to dominate the classroom. He may be successful and rule with an iron hand, creating an atmosphere of tension, fear and submission; or he may be unsuccessful and become nervous, fearful and distraught in a classroom, characterized by frustration, restlessness, inattention, lack of respect, and numerous disciplinary problems. In either case both teacher and pupils dislike school work; there is a feeling of mutual distrust and
hostility. Both teacher and pupils attempt to hide their inadequacies from each other...
The teacher tends to think in terms of his status, the correctness of the position he takes on classroom matters, and the subject matters, and the subject matter to be covered rather than in terms of what the pupil needs, feels, knows, and can do...

It can be assumed that the attitudes of a teacher are the result of the action of a multitude of factors, and therefore that attitudes afford a key to the prediction of the type of social atmosphere a teacher will maintain in the classroom.

It is assumed, therefore, that for the purposes of this study the results of the MTAI scores will yield an index of teacher attitude toward children which will vary from excellence at its high end toward undesirability at its low end. It is not assumed that from this index alone there is a categorization of teachers' proficiency in the classroom, only that the attitude range of teachers vis-a-vis children must necessarily place each teacher somewhere in the continuum which is identified as high or low. The authors of the MTAI have attached meliorative or pejorative significance to the higher or lower ranking respectively on the scale. That this would indicate better or

worse attitudes is not properly within the scope of this study. Such inferences may, however, be drawn if one is to follow the purpose of the authors of this instrument.

The MTAI has been examined as an effective instrument in a large number of studies some of which we shall discuss here. Barr and Jones report eleven investigations concluding that "It would appear from these and other investigations reported earlier that the MTAI is well on its way toward being established as a useful instrument for the measurement and prediction of teacher efficiency."  

Cronbach, however, cautions that the test should be used only on a research basis and that it should not be used to select applicants for teacher training or beginning teachers until it is further validated, but for short term prediction or hiring teachers whose attitudes have become stabilized "one can expect better results."  It is designed to measure those attitudes which will predict how well the teacher will get along with pupils and is definitely a tool for research for which purpose it deserves extensive use. Coss found that supervising teachers who scored

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low on the MTAI significantly retarded attitudinal development in their student teachers which prompted him to urge care in the selection of supervising teachers perhaps using the MTAI for that purpose. Clarke also concluded that the MTAI can aid in the selection of supervising teachers for particular intern teachers after studying 149 directing (supervising) teachers and interns employing the MTAI in a validity test. Some demographic differences have been found in the administration of the MTAI, among which may be counted the facts that men tend to score lower than women and that elementary teachers tend to score higher while age has little bearing on the results. Some investigators have found that teaching experience tends to lower the MTAI score because experienced teachers are less concerned with pupil freedom and more concerned with establishing a stable, orderly

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classroom with high academic standards. Using the Guilford-Zimmerman Temperament Survey, La Bue found that there was a significant correlation between the knowledge of principles of educational psychology, child development and behavior and scores on the MTAI, but found no significant relation between certain personality traits measured by the Temperament Survey such as friendliness, emotional stability and personal relations. La Bue while stating the truism that maladjusted personalities have no place in the classroom recommends the assessment of personality in a prospective teacher. Cook, one of the authors of the MTAI, recommends that teachers be hired with the MTAI scores as part of the selection device.

Thus we can see that the MTAI is given credibility in assessing the worth of teachers attitudes toward children and that these attitudes are not necessarily tied to personality.

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Validation Studies

A number of validity studies have been conducted with the MTAI using various criteria such as expert observers ratings, principals ratings and pupil ratings with composite ratings correlations ranging from .46 to .63. The purpose of the test seems to be fulfilled also in predicting classroom social atmosphere.

A question is raised about the validity of the MTAI by Fishman when he asks if the instrument will continue to measure the degree of teacher orientation to and acceptance of the child's emotional and developmental needs when administered in a non-norm universe as in a minority group school. He answers that when

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previous education of teachers is adequate, especially when teachers are young American born females with college degrees, the MTAI increases its validity. This question is not pertinent to the present study, however, since any degree of distortion would be mitigated by Fishman's findings. The teachers studied who might be considered as belonging to a minority group were all young American born females with college degrees.

Finally, the Katzells recently noted that several studies showed a positive relationship between supervisors ratings of teacher effectiveness and their scores on the MTAI and further noted that many investigators were continuing to address efforts toward further specifying the concurrent and predictive validities of well established instruments against external criteria of performance, but "whereas criteria of individual or social pathology were being vigorously studied, criteria of performance in educational vocational and social settings were still receiving too little attention." 


14 Ibid. p. 59.
Apparently the MTAI is one of the best instruments now available for investigating teacher attitudes toward children and determining relative teacher proficiency therefrom. It appears to be also one of the best validated, having been under the glass for some fifteen years.

**Fakeability.**

The possibility of respondents' faking response sets to any attitude instrument must certainly be considered when examining the validity of such an instrument, for if it can be demonstrated that the instrument is susceptible to faking then the user of the test must take great pains to create conditions that will mitigate the effects of possible faking. In 1954 Rabinowitz found that female college students in teacher education at a large metropolitan college could markedly alter scores on the MTAI when given explicit instructions to simulate attitudinal orientation of particular types of teachers. A further study involving experienced teachers, a replication of the Rabinowitz work, provided statistically significant differences (F 4.77) between administration of the test when respondents were asked to simulate permissive and authoritarian attitudes as against standard attitudes. It was concluded that a combined group of male and female graduate students in education, all members of such a group being experienced teachers, can alter scores when so minded.

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Faking the MTAI must be recognized as possible if the subjects are oriented attitudinally toward representing themselves as particular types of teachers, such as permissive or authoritarian. The problem of response sets and distortion continues to sap the validity of structured tests of personality. Though more has been learned about the nature and operation of such factors, methods that will control them better are still needed.

In further consideration of the factors affecting the possible faking of MTAI scores, the fact that respondents are under some compulsion to respond one way or the other depending on what they feel should be done in order to insure positive evaluation on the part of a rater was studied by Eason. In investigating the possibility of faking the MTAI he questioned "the applicability of the MTAI to evaluating courses which attempt to create and develop certain kinds of teacher attitudes." This was done with college sophomores in educational psychology courses. Stein and Hardy, on the other hand, found

16 Paul C. Polmantier and John L. Ferguson, "Faking the MTAI" Educational and Psychological Measurement XX (Spring, 1960) pp. 79-82.
17 Katzell and Katzell, op. cit. p. 59.
insufficient evidence to establish whether the MTAI is significantly susceptible to faking. Biased instructions to the respondents served only to confuse them. 19 Furthermore, it has been found that respondents to the MTAI are not likely to fake responses unless they are specifically cued from instructions before the administration of the test. 20 An injunction derived from still another study advises those administering the MTAI should motivate respondents not to distort and found that susceptibility to distortion (faking) increased with the flexibility of the group examined and with the amount of professional preparation of the respondents.

Armed with the foregoing, research into the fakeability of the MTAI, this investigation was careful to provide against such distortion. The fact that teachers who responded to the instrument were in no way concerned with ratings or evaluation as a result of the administration of the test facilitated such provisions. Respondents were encouraged to give honest responses

19 Stein and Hardy, op. cit. p. 326.


since no trend of responses was indicated or could be divined. Moreover, the instructions concerning the instrument indicated that there was no such thing as a right or wrong answer. Since the teachers who served as respondents felt no pressure to orient themselves attitudinally one way or the other - indeed, which way would have been pure guess on their part - it is felt that little chance for deliberately or subconsciously distorted bias existed.

THE INTERVIEW

The second instrument employed in this study takes the form of an individual interview with each of the teachers in the sample. The interview was tape recorded to minimize recording errors and biases on the part of the interviewer. The interview was designed to determine teacher attitudes regarding their role in the team teaching enterprise and their individual appraisals of the program, their part in it, their attitudes towards their colleagues, and their self-estimate of the efficacy their role has had in the effective functioning of the program. Included in the interview is an area of investigation which will be based on an examination of teacher attitudes toward children in a team teaching situation and which will be compared to previous responses to the MTAI. This item relates responses to attitudinal orientation to children and attempts to test one of the hypotheses.
In deciding upon the form of the instrument by which to measure teacher attitudes and role perceptions, it was necessary to settle upon a type which would be relatively free from distortion and bias. The idea of a questionnaire was considered and discarded after some investigation. Schutz makes use of the questionnaire type instrument in his FIRO-B, which examines inter-personal relations among respondents. The questionnaire, however, has the disadvantage of indirect contact with respondents and insufficient power to probe beyond dichotomized responses even though many have been designed to discover varied reactions. A further disadvantage to the questionnaire is that it may contain connotative language which the designer may not perceive but which may influence the respondent in undetermined and subtle ways. Consider the following statements taken from the FIRO-B instrument to which the subject is asked to react in any of six different ways. The option: 1. usually, 2. often, 3. sometimes, 4. occasionally, 5. rarely, and 6. never.

45. I like people to act close toward me.
46. I like people to act cool and distant toward me.
47. I like to influence strongly other people's actions.
49. I like people to act close and personal with me.

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22 Schutz, FIRO: A Three Dimensional Theory of Interpersonal Behavior.
52. I like people to act distant toward me.

54. I take charge of things when I'm with people. 23

Statements number 45 and number 49 are obviously reinforcing as are statements number 46 and 52; and also 47 and 54. The language, however, directed toward adult respondents carries affective overtones the effect of which on the subject could hardly be determined. Words such as "close", "personal", "cool," "distant," and "take charge of things," have emotional characteristics beyond their cognitive meanings. To determine, categorize and quantify interpersonal relationships among people is admittedly an ambitious undertaking, the enterprise of which is deserving of credit, but to essay an analysis of responses among whose members are included reactions to language such as the foregoing appears to be averring objectivity where it is not likely to exist.

A further reason for not using the questionnaire lies in the fact that the sample in this study is comparatively small. With less than seventy-five participants in the study, it was felt that greater depth could be ensured, better rapport established between the investigator and the subject, and more accuracy obtained in the gathering of reaction data and the interpretation thereof if the interview technique was employed rather than the questionnaire.

The interview as a method of measurement has been studied by social scientists and psychologists to a large extent. When attitudes and their values are being examined, depth is desirable, that is, the ability to probe vague responses and cross check suspect reactions. The existence of error and bias is something to be guarded against and is most prevalent in the disparity of backgrounds and psychological orientation between interviewer and interviewee. If these are controllable there is a greater opportunity for eliminating the sources of error and bias. \(^{24}\) One condition that tends to mitigate bias depends upon the interviewer's insight into the respondent's situation. \(^{25}\) In this study, the interviewer was a part of the same profession as the respondents. He had developed insights into the conditions under which the respondents worked and had concern about problems similar to those which the respondents faced. He was not alien to the role of the respondents, having been in fact employed in the same general capacity for some years. In no way could it be conceived that the respondents' situation was totally unfamiliar to the interviewer.


\(^{25}\) Ibid. p. 139.
A further admonition to the interviewer concerns his employment of a common vocabulary with the respondents and a familiarity with the conceptual framework in which the respondents are understood to be operating. Since the interviewer, in this instance, is involved in the same type of program as the respondents it appears that this qualification is met. The interviewer in this research was not only conversant with the language of the respondents but functioned in a similar capacity and he had no difficulty relating the conceptual framework of the interview to the operating conditions of the respondents. This fact had some bearing on the success of the interview as it was conducted. It also had an effect which was not desired and not controllable. Reference here is made to Borg's comment:

Market research studies have demonstrated that many subtle factors relating to the interaction between an interviewer and an interviewee can affect the interviewee's response. For example, if the interviewee perceives the interviewer as being of a higher social status than himself, his responses will be different than if he perceives the interviewer to be of a lower social status.27

Borg does not indicate, however, how these responses will be different or in what manner these differences may manifest themselves. The only precaution that may be said to have been taken in this regard (for it is possible that the interviewees

26 Ibid., p. 148.
27 Borg, op. cit., p. 16.
may have perceived the interviewer to be of a higher social status than themselves) was that the interviewer was aware of the possibility of some distortion because of the fact of his positional status and was at pains to obviate by his demeanor any effect this condition may have had on the interviewees' responses.

A comment may be apropos here regarding the time duration of the interview. It has been said that a recorded interview for purposes such as obtained in this study should consume not much more than twenty minutes. The sixty interviews obtained consumed no more than thirty minutes each. The total interview time, therefore, lasted no more than thirty hours. The tape recordings of these interviews take about this amount of time to replay.

Guides for the Interview

The interview was designed to test the six hypotheses for this study and was therefore conducted with structured purpose. Each interviewee was asked certain questions, the response to which was gauged to place him in a general category of reactions in the six basic areas. Accordingly, the questions fall into

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six categories (see page 2), each category representing an area of investigation which attempts to discover how the interviewee relates to these concerns:

1. The relative weight of idiographic behavior and nomothetic behavior of teachers as it operates in teaching teams.

2. The disposition of teachers towards the satisfaction of their needs in a team teaching program.

3. The self-perceived capacity and/or malleability for leadership in a team program.

4. The acceptance or rejection of team members with whom the teacher daily works (compatibility).

5. The team teacher's attitude toward children.

6. The assessment of personal change that may or may not have occurred by reason of being involved in a program of team teaching.

The complete list of focusing questions relating to these areas of investigation may be found in its entirety in Appendix B.
EXAMINATION OF THE DATA

In order to begin properly an examination of the data, it is necessary to consider the method of gathering the data. During the late spring months of 1965 the writer made many visits to both schools involved in the study determining who was to participate and in what sequence the instruments were to be administered. The Minnesota Teacher Attitude Inventory was then given on two successive days, one day at each school. At this time teachers were given a sheet of directions which proposed the rationale for the study and gave an assurance of anonymity by means of a Participant Number Card. This direction sheet can be found in Appendix C.

Also at this time the participants were asked to complete a Data Sheet, coded by Participant Number, in which they provided certain demographic information concerning: sex, age, number of years experience, number of years in team teaching, leadership experience, and certain educational background data. This form can be found in Appendix D.
The Minnesota Teacher Attitude Inventory was then administered and, electrographic pencils having been provided, the score sheets were sent to The Psychological Corporation in New York for electronic scoring to minimize possible scoring errors. The MTAI can be found in Appendix A.

During the first three weeks of June 1965 the writer conducted interviews with the participants in the study at both schools. The interview is a major feature of this study and deserves more than a brief comment.

The Design and Rating of the Interview

In designing the interview it was necessary to accomplish the task of probing all six areas represented by the six hypotheses (see page 1) and to do this within a reasonable time for the interview which was established at a maximum of thirty minutes. Furthermore, it was necessary to so design the questions that their responses would permit some quantification. The initial approach to such problems appeared to lie in the direction of careful structuring for fear of gleaning a mass of unrelated utterances and leaving the researcher feeling rather like Stephen Leacock's horseman who "leaped upon his horse and rode off in several directions."

Having decided then on a structure based upon the six hypotheses, the researcher assigned different weights to certain responses designed to produce a numerical rating as a result of
the totaling of these weighted responses.

The justification of weighting the interview questions relating to Hypothesis I, idiographic and nomothetic role perceptions, should be amplified. Getzels and Guba state that these dimensions are "at once conceptually independent and phenomenally interactive" (page 48), making discrete categorization difficult. It is felt, however, that where the function of the institution appeared to be paramount in the respondent's intentions such responses were rated as nomothetic. Admittedly the satisfaction of need-dispositions, a function of the idiographic dimension, was a factor in every response to the extent that whatever choices one made resulted from his personal perception. In this examination, however, it was felt that responses which tended more toward a preference for behaviors which were clearly institutional in their inclination would be the result of the respondent's perception of the expectations of his role rather than a more personalized satisfaction of needs, albeit his choice was a purely personal one. When institutional values appeared to dominate the response, it was given a nomothetic rating.

Hypothesis I - Idiographic and Nomothetic Role Perception

In order to rate respondents according to their perceived roles in relation to their tendencies toward idiographic behavior (satisfaction of personalized need dispositions within team teaching) or toward nomothetic behavior (satisfaction of institutionalized role expectations within the program, questions were asked which represented attitudes or behaviors that could be considered either nomothetic or idiographic. (See Chapter IV.) Plus and minus weights were assigned to these responses, the totality of which represented nomothetic or idiographic role perception in a numerical value. There is no judgmental
significance in the assigning of plus values to idiographic responses and minus values to nomothetic responses. In fact the final rating is represented thus: I8 (idiographic rating of 8); N12 (nomothetic rating of 12); or 0 (nomothetic responses balance out idiographic responses).

A. "What features of team teaching are most pleasurable to you?" (weight - 4)

The responses to this question were varied and most attention was paid to first thoughts of the respondent. Thus responses which centered around teacher interaction, creativity, friendship, planning together, observation, etc. were rated idiographic. Responses which centered around subject specialization, grouping possibilities, more teaching materials, new teaching techniques, actual teaching of children (the purpose of the school), etc. were rated nomothetic.

This question was rated up to a plus or minus 4.

B. "If you had a choice right now, would you rather sit down and plan with your team members or, assuming adequate preparation, teach a large group lesson?" (weight - 2)

This question was rated idiographic if the respondent preferred planning; nomothetic, if the respondent would rather teach. This question was a forced choice.

This question was rated plus or minus 2.

C. "In planning meetings, do you prefer an unstructured session or one with a definite agenda?" (weight - 2)

This is another forced choice. Teachers who opted for the definite structured plan were rated nomothetic while those whose choice is the unstructured meeting were rated idiographic.

This question was rated plus or minus 2.
D. "In your association with team teaching, have any of the teachers in your team been your social friends? (weight - 1)

If the answer to this question was "yes", the respondent was rated idiographic. A negative response rated nomothetic. A hesitant or indecisive answer rated neither.

This question was rated plus or minus 1.

E. "If you had your choice, would you rather eat lunch with: 1. your team members, 2. your pupils, 3. your friends, 4. the principal, 5. alone?" (weight - 1)

The question of which regular lunch partners are preferred rated idiographic only if the respondent chose to eat with his personal friends on the faculty. Nomothetic rating was given to responses of "pupils", "the principal", and "alone". An answer of "teammates" received no rating since this could manifest either nomothetic or idiographic behavior.

This question was rated plus or minus 1.

F. "Would you be happier as a leader or a non-leader in your team?" (weight - 1)

A response in which leadership is desired by the respondent was viewed as nomothetic while the desire to be a follower rated idiographic. An "It doesn't matter" or "I don't care" answer was not rated.

This question was rated plus or minus 1.

G. "How much of the time do you develop your own lesson plans?" (weight - 1)

This question is rated only if the response was 75 per cent (or more) and then it was considered nomothetic. Any other answer was not rated.

This question was rated a plus or minus 1.
H. "How often do you discuss informally, that is, outside of scheduled team planning sessions, problems of the team?" (weight - 1)

If the answer to this question was "very frequently" or some other extremely positive response, the interviewee was rated idio­graphic. "Sometimes", "occasionally", "pretty much" and the like received no value.

This question was rated plus or minus 1.

I. "Would you rather have a definite lesson plan from which you could not depart or no lesson at all where you would 'play it by ear'?" (weight - 2)

A forced choice, this question was designed to attach nomothetic value to respondents that chose a definite rigid plan and idio­graphic value to those who selected no plan at all.

This question was rated plus or minus 2.

J. "Please select the definition of education which most nearly fits your philosophy:

1. Education is handing down what is known to those who do not yet know.

or 2. Education is helping a person know what he wants to know.

(weight - 3)

This question was another forced choice, one which placed a respondent in the nomothetic classification, should he have selected "1", and in the nomothetic classification, should he have selected "2". Those who stated that education is "handing down what is known" assigned more weight to the institutional dimension of their role, while those who thought education consisted of "helping a person" leaned more toward the idiographic.
This question was rated at plus or minus 3.
The total possible rating for this Hypothesis was plus or minus 18.

Hypothesis II - Job Satisfaction and Morale

The question of job satisfaction was particularly pertinent to morale and its relevance here is considered only in relation to the team teaching program. It is felt that teachers who would rather not work in a team program would have to be rated low in job satisfaction and that the resultant conflict in role perception of the role incumbent and the role perceptions of others would negatively affect the role expectations of the role incumbent - role conflict and low morale ensuing. We are not here concerned with status. (See Chapter IV)

A. "Do you feel happier in a team program than in a self-contained classroom?" (weight - 2)

A definite affirmative answer to this question was rated 2. An undecided or hesitant answer rated 1; and a negative answer was not rated.

B. "Do you feel other teachers enjoy team teaching as much as a self-contained classroom?"

A "yes" response rated 2; undecided 1; and a negative answer was not rated.
(Teachers perceptions of others' attitudes are felt to be important to this question.)

C. "Do you think that the team organization could be changed in any way?"
Teachers who answered "yes" to this question were considered to be honestly responding to their situation. Any organization can be bettered by change. Respondents who answered negatively to this question were felt to be insincere in their responses to questions relating to job satisfaction and were rated minus 1 for this question. Any response, other than "no", was not rated.

The total weight given to responses for this hypothesis was 4.

Hypothesis III - Leadership Perception.

The quality of leadership assumes more importance in the team teaching enterprise because of the increased decision making powers of the team and the opportunities arising therefrom for leadership.

A. "In your experience as a team teacher, do you feel that you could work with anyone who has been on your team if he or she were the team leader?" (weight - 2)

An affirmative response was rated 2. A hesitant or equivocating response rated 1, and a negative answer was not rated.

B. "Do you think you could be the team leader?" (weight-2)

An affirmative response was rated 2. A hesitant response rated 1 and a negative response was not rated.

The total weight given to responses for this hypothesis was 4.
Hypothesis IV - Compatibility.

In order for team members to function efficiently it is desirable that they be compatible with one another. One manifestation of compatibility is evidence of personal like and dislikes. If a person would rather be in another situation because of a personal dislike toward a colleague, this also may be construed as evidence of incompatibility.

A. "In your team teaching experience, have you personally liked everyone on your team?" (weight - 2)

This question received a score of 2 when answered affirmatively. Undecided responses rated 1 and negative responses were rated zero.

B. "At present, would you rather be on another team?" (weight - 2)

A negative answer to this question was given a score of 2. Hesitant or undecided answers rated 1, and an affirmative answer was given no rating.

The total weight given to responses for this hypothesis was 4.

Hypothesis V - Attitude Towards Children

This hypothesis was tested primarily by means of the results of the Minnesota Teacher Attitude Inventory. Both raw scores and percentiles (for experienced teachers with four years of training in school systems with 21 or more teachers )

were employed as a rating measure. However, two questions were asked during the interview, the responses to which were used as a rough face validity check on the MTAI.

A. "Generally, how many children do you see in a day as a teacher in a teaching-learning situation?"

B. "Roughly, how many of these children would you prefer to see out of your class?"

If the answer to Question B was ten per cent or more of the answer to Question A, the respondent was considered to have demonstrated a negative attitude toward children. Any other response combination was considered neutral. Negative attitudes toward children were then matched with the respondents' MTAI scores.

Hypothesis VI - Personal and Professional Change

It was the intention of this study as part of its design to examine the element of personal change assessed by teachers through self-appraisal. To this end, two questions one of which allowed of wide interpretation were asked of all the respondents in the study.

A. "Do you feel that you as a teacher have changed during your time as a team teacher?" (If the answer is 'yes') How?"

B. "Would you rather be back in a self-contained classroom?"

The responses to these questions were varied and a structure or categorization was imposed upon them. If a teacher responded that there was no change, no value was assigned to this question. If a teacher felt that he had changed, a rating of 1 was
given. The categories into which responses fell were in the areas of (1.) professional proficiency, (2) personal adjustment, and (3.) technical competence and know how.

These three areas were assigned ratings of 3, 2, and 1 respectively with the judgment of the interviewer making minor adjustments in these ratings according to what he felt might be the degree of intensity and evidence of sincerity in the respondent. Most ratings followed the assigned pattern, however.

If the answer to Question B was "no", the respondent was rated 2. A hesitant or undecided response was given a rating of 1 and an affirmative answer was not rated.

The total change rating was 9.

One final question, somewhat gratuitous, was asked of all the participants in the interview:

"What suggestions do you have for improving team teaching and making it more attractive to other teachers?"

Various reasons are given for the inclusion of this question. First, it permitted participants to make a value judgment of the program they were in and about which they were being asked questions. For some it was an opportunity to "let off steam." Second, the answers to this question permitted some verification of earlier responses. Finally, there were some very perceptive and valuable comments and suggestions concerning team teaching which may have worth for anyone interested in team teaching.

A sampling of these comments can be found in Appendix E.
Table 1 presents the design and rating of the interview in tabular form.

**Analysis of the Results**

Before approaching the task of analyzing the results of this study it must be borne in mind that the six hypotheses under examination were formulated for the purpose of throwing some light on attitudinal characteristics of teachers involved in elementary school team teaching programs. Little attempt has been made here to compare team teachers with teachers in conventional school programs. At one of the schools in the study, Bell, many teachers are not in a team program and hence not participants in the study. Some of the teachers at Bell who were in the team teaching program did not participate in the study but this number was very small, perhaps three or four, and can be disregarded in the analysis. We are considering teachers in two team programs which are, at least as far as can be determined, unique in the City of Chicago at this date.

**Analysis of Participants' Information**

The Data Sheet (see Appendix D) was given to every participant at the time of the administration of the MTAI and was completed and collected at that time. The results of this
<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>QUESTION</th>
<th>RESPONSE</th>
<th>WEIGHT</th>
</tr>
</thead>
</table>
| Idiographic-Nomothetic Role Perception | A. What features of team teaching are most pleasurable to you? | Teacher interaction, Creativity, Friendship, Planning together, Observation | -nomothetic | 4
| | B. Would you rather plan ... or teach...? | Plan | | 4
| | C. Would you rather plan ... unstructured... or with a definite agenda? | Unstructured | | 4
| D. Have any of your team members been your social friends? | Yes | | 1

TABLE 1
DESIGN AND RATING OF THE INTERVIEW
<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>QUESTION</th>
<th>RESPONSE</th>
<th>WEIGHT</th>
</tr>
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<tbody>
<tr>
<td>I (continued) (Idiographic-Nomothetic)</td>
<td>E. Would you rather eat lunch with ...</td>
<td>+ idiographic</td>
<td>- nomothetic</td>
</tr>
<tr>
<td></td>
<td>F. Would you be happier as a leader or non leader...?</td>
<td>Personal friends</td>
<td>Pupils Alone Principal</td>
</tr>
<tr>
<td></td>
<td>G. How much time... on your own lesson plans?</td>
<td>Non-leader</td>
<td>Leader</td>
</tr>
<tr>
<td></td>
<td>H. How often do you discuss informally ...?</td>
<td>Very frequently</td>
<td>Over 75%</td>
</tr>
<tr>
<td></td>
<td>I. Would you rather teach from a definite lesson plan or &quot;play it by ear&quot;?</td>
<td>&quot;Play it by ear&quot;</td>
<td>&quot;Handing down what is known to those who do not yet know.&quot;</td>
</tr>
<tr>
<td></td>
<td>J. Select the definition of education ... your philosophy:</td>
<td>&quot;Helping a person know what he wants to know.&quot;</td>
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<td></td>
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<td>(total -18)</td>
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<tr>
<td>HYPOTHESIS</td>
<td>QUESTION</td>
<td>RESPONSE</td>
<td>WEIGHT</td>
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<tr>
<td><strong>II Job Satisfaction and Morale</strong></td>
<td>A. Do you feel happier in a team program...?</td>
<td>A. Yes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>B. Do you feel other teachers enjoy team teaching...?</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>C. Do you think the organization could be changed...?</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>(total:4)</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>III Leadership Perception</strong></td>
<td>A. Do you feel you could work with anyone who was the team leader?</td>
<td>A. Yes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>B. Do you feel you could be the team leader?</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>(total:4)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IV Compatibility</strong></td>
<td>A. Have you personally liked everyone on your team?</td>
<td>A. Yes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>B. Would you rather be on another team?</td>
<td>No</td>
<td>1</td>
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<td><strong>(total:4)</strong></td>
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TABLE 1 (continued)

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>QUESTION</th>
<th>RESPONSE</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>V Attitude toward Children</td>
<td>A. How many children do you see... (as a teacher)?</td>
<td>-idiographic</td>
<td>-nomothetic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(If the response to B is 10% or more of A, it is construed as evidence of negative attitude toward children.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. How many children would you prefer to have out of your class?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI Assessment of Change</td>
<td>A. Do you feel... you have changed?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professionally</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personally</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technically</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Undecided</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>B. Would you rather be back in a self-contained class room?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(total: 9)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
survey are herewith presented in Table 2. First perusal of this table shows that the preponderance (88%) of participants were women. This can be expected in elementary schools, although 19% of the Pirie faculty were men. Their integration into the team program may account for some of the later differences to be found. Only two of the thirty-four Bell participants were men.

Bell school seemed to have a slightly higher mean age than Pirie (42.9 years compared to 37.0 years), and the mean age of 40.0 for the group coincides almost exactly with the 1964 median age of 39.9 years for female teachers as stated in the 1964 Actuarial Statistics of the Chicago Teachers' Pension and Retirement Fund. The group in this study is therefore representative of the city as a whole regarding age.

Teaching experience is averaged at 11.6 years with Bell again having a slight edge in experience (2.1 years). Since the Bell teachers are 5.9 years older than Pirie teachers, it may be assumed that they began teaching a little later in life.

Experience in team teaching for all teachers in the study is 3.1 years. Again Bell teachers average .8 years more team teaching experience than Pirie teachers (3.4 years to 2.6 years) but, since the team teaching program at Bell has been in existence much longer than at Pirie, this difference is considerably smaller than it might be expected to be. A number of teachers fairly new to team teaching are included in the Bell sample.
<table>
<thead>
<tr>
<th></th>
<th>Bell</th>
<th>Bell</th>
<th>Bell</th>
<th>Pirie</th>
<th>Pirie</th>
<th>Pirie</th>
<th>Composite</th>
<th>Composite</th>
<th>Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
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<tr>
<td><strong>SEX</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>32</td>
<td>91%</td>
<td>21</td>
<td>81%</td>
<td>53</td>
<td>88%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>2</td>
<td>9%</td>
<td>5</td>
<td>19%</td>
<td>7</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AGE (Mean Years)</strong></td>
<td>42.9</td>
<td></td>
<td>37.0</td>
<td></td>
<td>40.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXPERIENCE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Teaching (Mean Years)</td>
<td>12.5</td>
<td></td>
<td>10.4</td>
<td></td>
<td>11.6</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Team Teaching</td>
<td>3.4</td>
<td></td>
<td>2.6</td>
<td></td>
<td>3.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LEADERSHIP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>15</td>
<td>44%</td>
<td>11</td>
<td>42%</td>
<td>26</td>
<td>43%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Years (Leaders)</td>
<td>52</td>
<td></td>
<td>18</td>
<td></td>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average/Teacher</td>
<td>3.4</td>
<td></td>
<td>1.6</td>
<td></td>
<td>2.7</td>
<td></td>
<td></td>
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<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>31</td>
<td>91%</td>
<td>26</td>
<td>100%</td>
<td>57</td>
<td>95%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours Beyond</td>
<td>588</td>
<td></td>
<td>190</td>
<td></td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master's Degree</td>
<td>10</td>
<td>30%</td>
<td>6</td>
<td>23%</td>
<td>16</td>
<td>27%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours Beyond</td>
<td>297</td>
<td></td>
<td>78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Leadership experience is almost equal when we consider the percentage in each group that have had some leadership experience (44% at Bell; 42% at Pirie). The average length of time that these teachers acted in a leadership capacity is quite different, Bell teachers having functioned thus for more than twice as long (3.4 years compared to 1.6 years). It must be remembered also that leadership in this sense includes resource functions of staff personnel in which they might readily be expected to exercise certain leadership functions, such as adjustment teacher, librarian, etc.

In educational background we find that practically every teacher in the study has a bachelor's degree. Three teachers at Bell do not own this degree and they are teaching on a certificate issued before the bachelor's degree was required to teach elementary school in Chicago. This was known as the Normal School Certificate. More teachers at Bell, however, possess a master's degree than do Pirie teachers (30% as against 23%) but the difference is not great. Almost one-third of the teachers in one school, Bell, and almost one-fourth of the teachers in the other, Pirie, possessing master's degrees represents a rather good proportion. In the area of hours beyond the respective degrees, however, Bell has three times as many in both categories. Bell teachers are evidently more able to and more concerned about continuing their education beyond the terminal point of the degree. Some of these teachers at the bachelor's level, moreover,
may be very close to a master's degree, thus increasing their advantage in this category. This surmise is not possible to determine from the information provided in the Data Sheet.

In looking over the information gleaned from the Data Sheet we find that the teachers at Bell are higher than Pirie in every category with the exception of two: (1) Pirie has 100% teachers with bachelor's degrees while Bell has 91% and (2) Pirie has more than twice as many men on its faculty - three times as many, percentage-wise.

**Analysis of the Areas of the Hypotheses**

In considering the areas of the six hypotheses we refer to the results of the interview and the MTAI. These two instruments enable us to look into the teachers' role perceptions and attitudes and make some judgments concerning the hypotheses. It will be remembered that the interview was designed to test these hypotheses and we will proceed to a consideration of them in order. Table 3 presents the comparative results of the interview and the MTAI scores between Bell and Pirie. These ratings were obtained by tabulating the results of the interview, as explained in the beginning of this chapter, and computing mean differences and testing for significance. Raw scores were used throughout the study; there was no attempt made to group the data. The size of the samples are large enough to assume normality in
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>School</th>
<th>Total Number Possible (N)</th>
<th>Degrees of Freedom (df)</th>
<th>Mean</th>
<th>Standard Deviation of the Difference</th>
<th>t-test Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Bell</td>
<td>34</td>
<td>26</td>
<td>33</td>
<td>I 1.03</td>
<td>6.18</td>
</tr>
<tr>
<td>I</td>
<td>Pirie</td>
<td>26</td>
<td>25</td>
<td>N 0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Composite</td>
<td>60</td>
<td>58</td>
<td>I 0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>+18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Bell</td>
<td>34</td>
<td>26</td>
<td>33</td>
<td>2.26</td>
<td>1.34</td>
</tr>
<tr>
<td>II</td>
<td>Pirie</td>
<td>26</td>
<td>25</td>
<td>3.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Composite</td>
<td>60</td>
<td>58</td>
<td>2.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Bell</td>
<td>34</td>
<td>26</td>
<td>33</td>
<td>3.09</td>
<td>1.19</td>
</tr>
<tr>
<td>III</td>
<td>Pirie</td>
<td>26</td>
<td>25</td>
<td>3.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Composite</td>
<td>60</td>
<td>58</td>
<td>3.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### TABLE 3
COMPARISON OF BELL AND PIRIE TEACHERS IN AREAS OF HYPOTHESES (continued)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>School</th>
<th>Total Number</th>
<th>Degrees of Freedom (df)</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error of the Difference *</th>
<th>t-test</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV Compatibility</td>
<td>Bell</td>
<td>32</td>
<td>31</td>
<td>2.63</td>
<td>1.19</td>
<td>.99</td>
<td>.295</td>
<td>2.34</td>
</tr>
<tr>
<td></td>
<td>Pirie</td>
<td>25</td>
<td>24</td>
<td>3.32</td>
<td>.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Composite</td>
<td>4</td>
<td>57</td>
<td>2.95</td>
<td></td>
<td>.295</td>
<td>2.34</td>
<td>significant at the .05 level of confidence</td>
</tr>
<tr>
<td>V</td>
<td>Attitude</td>
<td>Bell</td>
<td>34</td>
<td>33</td>
<td>34.03</td>
<td>29.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pirie</td>
<td>26</td>
<td>25</td>
<td>22.92</td>
<td>35.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Children</td>
<td>Bell</td>
<td>60</td>
<td>58</td>
<td>29.22</td>
<td>(32.98)*</td>
<td>8.85</td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td>Pirie</td>
<td>50</td>
<td>50</td>
<td>58</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Composite</td>
<td>150</td>
<td>150</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>Personal and Professional Change</td>
<td>Bell</td>
<td>34</td>
<td>33</td>
<td>4.41</td>
<td>2.55</td>
<td>.607</td>
<td>3.26</td>
</tr>
<tr>
<td></td>
<td>Pirie</td>
<td>26</td>
<td>25</td>
<td>6.38</td>
<td>2.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Composite</td>
<td>9</td>
<td>60</td>
<td>58</td>
<td>5.27</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Used in computation of significance, compared with MTAI norm group.
the distribution. Differences in the means of these two groups of teachers can be seen to be significant in some instances. These differences will be discussed in Chapter VII.

Hypothesis I - Role Perception

The total possible rating for this hypothesis, as mentioned before, is a plus or minus 18. No interviewee attained this rating, which would be pure idiographic or nomothetic role perception. The highest rating was N 13 (Nomothetic 13) attained by two teachers at Pirie, while I 12 (Idiographic 12) was attained by one teacher at Pirie and two teachers at Bell. As can be seen by referring to Table 3 the mean of both schools was 1.32, or almost zero. This would indicate an almost perfect balance between nomothetic and idiographic role perception. Bell teachers tended slightly toward the idiographic dimension (I 1.03) and Pirie teachers were in a smaller measure inclined toward the nomothetic dimension (N.62). This balance among sixty teachers

\[ SD = \frac{1}{N} \sqrt{\frac{\sum (x - \bar{x})^2}{N} - \left(\bar{x}\right)^2} \]
\[ s_{M_1 - M_2} = \sqrt{\frac{SD_1^2}{N_1} + \frac{SD_2^2}{N_2 - 1}} \]

Significance was tested using an F-table.

---

2 In computing the standard deviation and the standard error of the difference, the following formulas were employed:
in itself is somewhat unique and would indicate among other things a minimal amount of role-conflict, according to the Getzels and Guba theory.

The difference involving teachers rating idiographic or nomothetic between the two schools was not statistically significant.

An examination of Table 4 will provide insight into some differences and similarities between Bell and Pirie school regarding the relative number of teachers in each school who evidenced idiographic, nomothetic, and balanced role perceptions. Bell school teachers were almost evenly divided between nomothetic and idiographic role perceptions. (47% and 53%). Half the Pirie faculty demonstrated nomothetic responses, while one-third tended toward idiographic perceptions (54% and 31% respectively). The rest of the Pirie faculty (4 teachers) rated a perfect idio-

graphic-nomothetic balance of zero. The composite picture represents a slight advantage for nomothetic role perception (50% to 43%) with 7% in balance.

When we consider a cutoff point of plus and minus 3 which represents perceptions close enough to zero that we may arbitrarily consider this group (N3 to I3) balanced, we find that there are 16 teachers at Bell (47%) and 14 teachers at Pirie (54%) who fall into the balanced category. This total of 30 teachers is exactly half (50%) the total number of teachers participating in the study. We may say then that half the teachers in the study.
### TABLE 4
NOMOTHETIC - IDIOGRAPHIC INDEX COMPARISONS

<table>
<thead>
<tr>
<th></th>
<th>BELL</th>
<th></th>
<th>PIRIE</th>
<th></th>
<th>COMPOSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>NOMOTHEThICS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>16</td>
<td>47%</td>
<td>14</td>
<td>54%</td>
<td>30</td>
</tr>
<tr>
<td>IDIOGRAPHICS</td>
<td>18</td>
<td>53%</td>
<td>8</td>
<td>31%</td>
<td>26</td>
</tr>
<tr>
<td>BALANCED (ZERO)</td>
<td>0</td>
<td>0%</td>
<td>4</td>
<td>15%</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>BELL</th>
<th></th>
<th>PIRIE</th>
<th></th>
<th>COMPOSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>NOMOTHEThICS</td>
<td>7</td>
<td>21%</td>
<td>7</td>
<td>27%</td>
<td>14</td>
</tr>
<tr>
<td>IDIOGRAPHICS</td>
<td>11</td>
<td>32%</td>
<td>5</td>
<td>19%</td>
<td>16</td>
</tr>
<tr>
<td>BALANCED (N3-I3)</td>
<td>16</td>
<td>47%</td>
<td>14</td>
<td>54%</td>
<td>30</td>
</tr>
</tbody>
</table>
demonstrate balanced role perceptions concerning idiographic and nomothetic dimensions.

The remaining 30 teachers are almost evenly split between nomothetic and idiographic perceptions (27% to 23%) with the same differential trend in the respective schools that obtained when we did not as broadly conceive the balanced category, that is, at Bell, 32% idiographic and 21% nomothetic; at Pirie, 27% nomothetic and 19% idiographic. We again see a preponderance of teachers whose role perceptions are balanced between the idiographic and nomothetic dimensions.

Hypothesis II - Job Satisfaction and Morale

In the area of job satisfaction and its concomitant effects on morale through the relative pervasiveness of role conflict it was discovered that there existed a difference between the mean ratings of Pirie teachers and Bell teachers, statistically significant at the .01 level of confidence. Out of a perfect score of 4.00, Pirie teachers rated 3.27 while Bell teachers scored 2.26, a difference of 1.01. If we assume a score of 2.00 to be a neutral rating in this area, then the composite mean of the entire group (2.70) may indicate a slightly higher general level of job satisfaction. Since there is no basis for this assumption, however, it will not be considered here. Reference is again made to Table 3 (Hypothesis II).
Hypothesis III - Leadership Perception.

Both Bell teachers and Pirie teachers obtained their higher mean rating in the area of leadership perception. Out of a possible score of 4.00, Bell and Pirie teachers rated 3.09 and 3.50 respectively, attaining a composite average of 3.27, the highest mean rating of the three "4.00" Hypothesis scores (Hypotheses II, III and IV). Leadership perceptions would appear to be rather keen among the teachers in the study. This may be accounted for by the comparatively high level of training which the teachers in the study have achieved. It may also have some relation to team teaching which will be discussed in Chapter VII. Although Pirie teachers again scored higher in this area (3.50 to 3.09) and the .49 difference was significant at the .10 level of confidence, there is doubt about rejecting the null hypothesis at this comparatively low level. We shall accept, therefore, the null hypothesis that there is no statistically significant difference between the teachers at Bell and the teachers at Pirie in the area of leadership perception.

Hypothesis IV - Compatibility

In examining the results of the interview in the area of compatibility it was found that teachers at both schools rated higher (2.95 mean) than an assumed neutral score of 2.00 out of a possible 4.00. Compatibility in this sense refers to the capacity of teachers in a team teaching program to get along with
their fellow team members. Reference may be made to the earlier
part of this chapter on interview design and rating, Hypothesis
IV. Teachers at Pirie again rated higher than their Bell
counterparts in this category, Pirie teachers scoring at a mean
of 3.32 while Bell teachers attained a 2.63 rating. This mean
difference of .69 was statistically significant at the .05 level
of confidence, high enough, we assume, to reject the null hy-
pothesis. Teachers at Pirie, therefore, can be said to possess a
higher degree of compatibility than their counterparts at Bell.
We also discover in examining Table 3 (Hypothesis IV) that there
exists less variability among the teachers in their respective
schools than in any other "4.00" hypothesis area. Bell school
has a standard deviation of 1.19 while Pirie's standard deviation
is .99. This might indicate generally less disparity among teach-
ers regarding compatibility. When one considers that for a teach-
er to be compatible or incompatible with another teacher, that
other teacher most probably is compatible or incompatible to the
same degree with him, the fact of greater similarity in this area
is not incomprehensible.

Hypothesis V - Attitude toward Children

Examination of teacher attitudes toward children was ac-
complished through administration of the Minnesota Teacher
Attitude Inventory which has been thoroughly discussed in Chapter
V. Teachers in both schools who took this instrument obtained a
composite mean score of 29.22, which ranks at the 23rd percentile for teachers with experience and four years training in school systems employing twenty-one or more teachers. This percentile is considerably lower than the 50th percentile established by the norm group and a comparison of these means was made to determine if there was a significantly lower score for the teachers in this study with these results:

<table>
<thead>
<tr>
<th>Norm Group</th>
<th>Bell and Pirie Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>247</td>
</tr>
<tr>
<td>M</td>
<td>55.1</td>
</tr>
<tr>
<td>SD</td>
<td>36.7</td>
</tr>
</tbody>
</table>

Standard error of the difference = 4.89

\[ t-test = 5.29, \text{ significant at the } .0005 \text{ level of confidence.} \]

So we can say with assurance that the teachers at Bell and Pirie scored significantly lower than the norm group in the MTAI, thus demonstrating a lower position on the scale with respect to attitudes toward children.

Another check was applied to the results of the MTAI. It will be recalled that two questions in the interview (Hypothesis V) were designed to determine negative attitudes toward children. Ten teachers qualified for this pejorative distinction by responding that they would prefer to have more than 10% of the children that they saw daily in a teaching-learning situation out of their class. These ten teachers scored a mean raw score on the MTAI:

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3 Cook, Leeds, and Callis, MTAI, p. 9.
of minus 0.9, or at the 5th percentile, compared to the mean of the group of plus 29.22, the 23rd percentile. This was interpreted as a successful negative validity test of the MTAI.

Of a possible plus or minus raw score of 150, Bell teachers attained a mean raw score of 34.03 and Pirie teachers, 22.92, a difference of 11.11, referring again to Table 3. Testing for the significance of the difference between these means a t-test ratio of 1.26 resulted, indicating that no statistically significant difference obtained between the two means. The null hypothesis that no difference exists between attitudes toward children of Bell and Pirie teachers was therefore accepted. Although, compared to the norm group, teachers at both of these schools operate at a lower attitudinal level, there can be no assurance that they differ as a group between themselves.

**Hypothesis VI - Personal and Professional Change**

The final hypothesis in this study concerns teachers' perceptions of personal and professional change as evidenced in the interview through self-appraisal. The interview questions relating to this area were categorized into three major aspects; technical change, personal change, and professional change. These aspects coupled with responses to certain other questions resulted in a possible top rating of 9 achieved by one teacher at Bell and one teacher at Pirie. Four Bell teachers and one Pirie teacher scored zero (0) thus indicating no change occurred
during their time of participation in an elementary school team teaching program.

Assuming that evidence of moderate change would yield a mean score of 4.5, Bell teachers, rating at a mean of 4.41, came very close to this moderate index. Pirie teachers, on the other hand, scored a mean rating of 6.38, considerably above the moderate level. The mean score of the composite group was 5.27, which would indicate a more substantial change for the group as a whole.

In testing for the significance of the difference between the two means (1.83) it was discovered that the difference was significant at the .01 level of confidence. In fact, the t-test ratio of 3.26 was the highest of all the differences tested. We therefore must accept the conclusion that during their time as team teachers, Pirie teachers changed more substantially than did Bell teachers. This will be discussed in Chapter VII.

Correlations Examined

In appraising the results of this study, it was determined that certain measures be taken to analyze the role perceptions of teachers as they fall into the Getzels-Guba paradigm of nomothetic and idiographic dimensions. Certain correlations were therefore tested to discover what relationship existed, if any, between the idiographic and nomothetic index of role perception, hereinafter referred to as the I-N Index. It will be remembered that plus and minus scores were obtained for idiographic and nomothetic
perceptions. In order to determine coefficients of correlations, it was necessary to select one dimension as the highest in order and the other, the lowest in order. The nomothetic dimension was arbitrarily chosen to represent the highest and the idio­
graphic, the lowest. Hence we might inquire what relationship exists between the incidence of nomothetic behavior and the incidence of some other variable.

Three variables were selected for this purpose. They are (1) MTAI raw scores, (2) the index of personal and professional change, and (3) the age of the participants in the study. The tabulation of the results of these correlations may be found in Table 5.

It can be seen by glancing at the table that there exists no significant correlation between the I-N Index and any of the variables, with the possible exception of the MTAI scores and this only at the .10 level of confidence which is not sufficient to reject the null hypothesis. Two methods were employed to calculate the coefficient of correlation (r), the product-moment

\[ r_{xy} = \frac{N\bar{X}\bar{Y} - (\bar{X})(\bar{Y})}{\sqrt{[N\bar{X}^2 - (\bar{X})^2][N\bar{Y}^2 - (\bar{Y})^2]}} \]

2. rank - difference
\[ r_d = 1 - \frac{6E^2}{N(N^2-1)} \]

3. t-test for significance
\[ t = \frac{r\sqrt{N-2}}{\sqrt{1-r^2}} \]

The formulas used in these calculations were:
<table>
<thead>
<tr>
<th>Variables</th>
<th>School(s)</th>
<th>N</th>
<th>df</th>
<th>Method</th>
<th>r</th>
<th>t-test</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTAI raw score and Index of nomothetic behavior</td>
<td>Bell and Pirie (combined)</td>
<td>60</td>
<td>58</td>
<td>rank-difference</td>
<td>-.105</td>
<td>.84</td>
<td>not significant</td>
</tr>
<tr>
<td>Change Index and Index of nomothetic behavior</td>
<td>Bell and Pirie (combined)</td>
<td>60</td>
<td>58</td>
<td>rank-difference</td>
<td>-.067</td>
<td>.51</td>
<td>not significant</td>
</tr>
<tr>
<td>MTAI raw score and Index of nomothetic behavior</td>
<td>Pirie</td>
<td>26</td>
<td>24</td>
<td>product-moment</td>
<td>+.331</td>
<td>1.71</td>
<td>significant at .10 level of confidence</td>
</tr>
<tr>
<td>Age and Index of nomothetic behavior</td>
<td>Pirie</td>
<td>26</td>
<td>24</td>
<td>product-moment</td>
<td>+.184</td>
<td>1.08</td>
<td>not significant</td>
</tr>
</tbody>
</table>
and the rank-difference method. All correlations are so close to 0.00 that with the exception of the Pirie teachers and the I-N Index that there is little doubt that no relationship exists between idiographic and nomothetic role perceptions and either age or personal and professional change in teachers.

There is also no significant correlation between attitudes toward children and idiographic or nomothetic role perceptions, when measured with the entire group of teachers in the study by the rank-difference method. Although there is a positive correlation between these variables of +.33 when measured with Pirie teachers only using the product-moment method, this difference is significant only at the .10 level. If accepted, it would indicate that teachers at Pirie with nomothetic perceptions have better attitudes toward children. However, the possibility of error resulting from chance is too great to permit such acceptance. Moreover, the overall correlation between these two variables is negative (-.10) which would indicate exactly the opposite relationship.

The null hypothesis that nomothetic and idiographic role perceptions have no relationship to (1) the incidence of change, (2) attitudes toward children, or (3) age is therefore accepted.
CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

In this the final chapter of this study we shall consider the implications of what has been discovered concerning team teacher attitudes in the areas of the six hypotheses and make recommendations in the light of these implications. Much of what has been discovered that has any significance may be attributable to the differences in the team teaching programs in the two schools involved in this study.

Hypothesis I

Teachers in an elementary school team teaching program will demonstrate orientation toward their roles more closely related to idiographic or personalized perceptions than to nomothetic or normative perceptions (as expressed in the Getzels - Guba model.)

In the light of the examination of the data in the previous chapter this hypothesis must be rejected. Team teachers do not demonstrate orientation to their roles which tend toward either dimension of the Getzels - Guba model. They do, in fact, seem to be represented more by a balance between these two dimensions. If such congruence generally exists between institutional expectations, described by the nomothetic dimension, and individual need-dispositions, described by the idiographic dimension, we might say
that team teaching is a contributing cause. If the individuals' behavior would simultaneously meet situational expectations and personal needs, the relation of the individual to the organization would approximate the ideal. (See page 52). In this instance, we would presumably have both maximum efficiency and maximum effectiveness. Further study of the effect of nomothetic and idiographic behavior in the teaching situation, perhaps using a non-team teaching school as a control, would be necessary to discover any relationship between the congruence of these two dimensions and team teaching. Investigation into this area is to be encouraged.

Hypothesis II

Teachers in an elementary school team teaching program will react more positively than negatively to a team teaching program as it relates to their job satisfaction and morale.

We can accept this hypothesis as a result of this study. Moreover, following from the conclusions of the previous hypothesis, congruence of nomothetic and idiographic role perceptions should produce maximum satisfaction for teachers in the organization. The fact that all teachers evidenced a rather high mean level of job satisfaction leads us to believe that a minimum incidence of role conflict existed, further confirming a substantial amount of nomothetic - idiographic balance. The relationship between this condition and team teaching, can only be
surmised. There is room for further study of these phenomena, however, and it should be encouraged.

The significant difference between the level of morale at Pirie and that at Bell indicates that there may be some variable in the two team teaching programs that may be contributing to the difference. Pirie teachers rated significantly higher in this area than did Bell teachers. A condition comes to mind which may have had some effect. Pirie is a new school that initiated a full panoplied team program from its inception. Every faculty member on its staff is there because he wants to be there. Teachers at Pirie requested assignment to the school. Although they were not well acquainted with team teaching, they at least knew that they would be asked to participate in something new in educational programs. This prior commitment may have some bearing on their high morale level. Bell teachers, on the other hand, while not having the program imposed upon them, were asked to participate in a partial team program for many years. The fact that Bell has a partial team program may also contribute to this difference.

French's definition of morale (page 22) indicates that an integration of group goals and individual goals are important to good morale. Team teaching would seem to foster such integration.

**Hypothesis III**

Teachers in an elementary school team teaching program will demonstrate more
accurate perceptions of leadership potential among themselves and be more accepting than rejecting thereof.

This hypothesis must be accepted. Of all the areas under investigation in this study, teachers scored highest in this one. It can be seen that in team teaching programs the opportunity for exercising leadership functions and accepting the leadership of peers is much more available. The designated leadership hierarchy at Bell seems to have had little effect on the results of this study for the significance of the difference in the leadership area between the two schools does not exceed that level which would exclude chance differences. (The difference in team structure may have had an effect on job satisfaction, however.) Apparently the cooperative type of team at Pirie and the hierarchical type at Bell are both conducive to rather keen perceptions of the leadership role. Whatever difference there is seems to favor the cooperative type at Pirie, but then the conditions which produce differences in morale and compatibility (to be considered next) may well have operated to the detriment of Bell leadership perceptions, in which case Bell's hierarchical mean rating in leadership is higher than would be expected. No conclusion can be reached regarding the comparative efficacy of the two types of team structure.
Hypothesis IV

Teachers in an elementary school team teaching program will be more compatible than incompatible with their colleagues.

This hypothesis is related to Hypothesis II (morale) and the results of the study suggest that we accept it. The mean index of compatibility for the combined faculties is higher than might be expected. There is a difference between the two schools, however, which leads us to conclude that Pirie teachers are more compatible with their teammates than are the teachers at Bell. This difference corresponds to the difference found between the schools in the area of job satisfaction and could be attributable to the same causes, i.e., Pirie teachers volunteering for a full school team program. It sometimes happens that when people choose a situation in which to work they subconsciously try harder to make it acceptable to them. Many teachers who discovered what kind of a program Pirie was to have when it opened withdrew their applications for assignment.

Compatibility is a crucial condition to the success of a team teaching program. Without it most such programs are predetermined failures. Reference might be made here to some of the comments in Appendix E.

Hypothesis V

Teachers in an elementary school team teaching program will evidence a high attitudinal level toward children.
One of the two major instruments used in the study was the Minnesota Teacher Attitude Inventory which was employed to test primarily this hypothesis. Proponents of team teaching will be disturbed to learn that in this area team teachers indicated a lower attitudinal orientation toward children than teachers in conventional programs represented by the norm group. On this result, this hypothesis has to be rejected.

The norm group against which the teachers in this study have been matched, however, represents "teachers in school systems employing 21 teachers or more." No attempt, as far as can be discovered, has been made to establish norms for teachers employed in a large urban school system. There is room for such a study in the validation of the MTAI.

Although team teachers do not exhibit a high attitudinal level toward children, Bell teachers rated higher in this category than Pirie teachers but not significantly so. If Bell teachers did tend to score higher in attitudes toward children, this may be accounted for by the fact that Bell enrolls a large number of handicapped children toward whom teachers may be expected to be more kindly disposed in their attitudes.

There is no indication that attitudes toward children as measured by the MTAI have any relationship to idiosyncratic or nomothetic perception as measured by the interview. (It may be parenthetically noted that in each school the principal, although
not a participant in the study, scored higher than any of the teachers in the school on the MTAI. The Bell school principal scored higher than any teacher in the entire group.)

**Hypothesis VI**

Teachers in an elementary school team teaching program will exhibit, through self-appraisal, positive personal and professional change during the time of their participation in team teaching.

This hypothesis must be accepted without qualification. The evidence of the data supports the fact that team teachers experience a high degree of positive change, which we may consider growth, during their time of participation in team teaching. We have to agree without cavil that this condition contributes to the educational effectiveness of team teaching programs. Bell teachers evidenced a significantly lower index of change than did Pirie teachers, however, although they were still above the index of moderate change. This fact could be attributed to conditions that affect morale and compatibility which we discussed earlier in this chapter. Also to be considered is the fact that Bell school has a departmentalized upper grade program in which teachers operate in a more subject-centered environment which is perhaps less favorable to personal and professional change. The fact that Bell teachers are almost six years older as an average could also affect their index of change. Possibilities for examining the relationship between these two conditions (age and change) for further study exist.
No relationship exists between the index of change and idiographic-nomothetic role perceptions. This is consonant with other aspects discovered about the idiographic - nomothetic index.

**Recommendations**

The results of this study indicate that with circumspection a school can profitably embark upon a program of team teaching and feel it is contributing to an upgrading of the quality of the educational enterprise. Aspects of role behavior need not be specifically considered, although some attempt should be made to attract the most "pliable" or "permeable" personnel for participation in the program. It is not necessary, with the right teachers, to attempt to satisfy individual needs rather than formal goals, for if a congruence exists between the idiographic and nomothetic dimension in the societal organization of the team, these considerations will balance themselves.

Team teaching has much to recommend it as a vehicle for educational progress. In closing this study we may find currency in the words of John Dewey, a predecessor of Getzels and Guba by many years at the University of Chicago:

> It is by making the cultivated person our goal, rather than frenzied specialization on the one hand, or amiable togetherness on the other, that we can avoid the dangers of ulcers in the strenuous life.

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APPENDIX A

MINNESOTA TEACHER ATTITUDE INVENTORY

Form A

WALTER W. COOK  CARROLL H. LEEDS  ROBERT CALLIS
University of Minnesota  Furman University  University of Missouri

DIRECTIONS

This inventory consists of 150 statements designed to sample opinions about teacher-pupil relations. There is considerable disagreement as to what these relations should be; therefore, there are no right or wrong answers. What is wanted is your own individual feeling about the statements. Read each statement and decide how YOU feel about it. Then mark your answer on the space provided on the answer sheet. Do not make any marks on this booklet.

If you strongly agree, blacken space under "SA"
If you agree, blacken space under "A"
If you are undecided or uncertain, blacken space under "U"
If you disagree, blacken space under "D"
If you strongly disagree, blacken space under "SD"

Think in terms of the general situation rather than specific ones. There is no time limit, but work as rapidly as you can. PLEASE RESPOND TO EVERY ITEM.

The test contained in this booklet has been designed for use with answer forms published or authorized by The Psychological Corporation. If other answer forms are used, The Psychological Corporation takes no responsibility for the meaningfulness of scores.

1 The Psychological Corporation, 304 East 45th Street, New York 17, N.Y., 1951.
1. Most children are obedient.

2. Pupils who "act smart" probably have too high an opinion of themselves.

3. Minor disciplinary situations should sometimes be turned into jokes.

4. Shyness is preferable to boldness.

5. Teaching never gets monotonous.

6. Most pupils don't appreciate what a teacher does for them.

7. If the teacher laughs with the pupils in amusing classroom situations, the class tends to get out of control.

8. A child's companionships can be too carefully supervised.

9. A child should be encouraged to keep his likes and dislikes to himself.

10. It sometimes does a child good to be criticized in the presence of other pupils.

11. Unquestioning obedience in a child is not desirable.

12. Pupils should be required to do more studying at home.

13. The first lesson a child needs to learn is to obey the teacher without hesitation.

14. Young people are difficult to understand these days.

15. There is too great an emphasis upon "keeping order" in the classroom.

16. A pupil's failure is seldom the fault of the teacher.

17. There are times when a teacher cannot be blamed for losing patience with a pupil.

18. A teacher should never discuss sex problems with the pupils.

19. A teacher should not be expected to burden himself with a pupil's problems.

20. Pupils have it too easy in the modern school.

21. Pupils expect too much help from the teacher in getting their lessons.

22. A teacher should not be expected to sacrifice an evening of recreation in order to visit a child's home.

23. Most pupils do not make an adequate effort to prepare their lessons.

24. Too many children nowadays are allowed to have their own way.

25. Children's wants are just as important as those of an adult.

26. The teacher is usually to blame when pupils fail to follow directions.

27. A child should be taught to obey an adult without question.

28. The boastful child is usually over-confident of his ability.
29. Children have a natural tendency to be unruly.
30. A teacher cannot place much faith in the statements of pupils.
31. Some children ask too many questions.
32. A pupil should not be required to stand when reciting.
33. The teacher should not be expected to manage a child if the latter's parents are unable to do so.
34. A teacher should never acknowledge his ignorance of a topic in the presence of his pupils.
35. Discipline in the modern school is not as strict as it should be.
36. Most pupils lack productive imagination.
37. Standards of work should vary with the pupil.
38. The majority of children take their responsibilities seriously.
39. To maintain good discipline in the classroom a teacher needs to be "hard-boiled."
40. Success is more motivating than failure.
41. Imaginative tales demand the same punishment as lying.
42. Every pupil in the sixth grade should have sixth grade reading ability.
43. A good motivating device is the critical comparison of a pupil's work with that of other pupils.
44. It is better for a child to be bashful than to be "boy or girl crazy."
45. Course grades should never be lowered as punishment.
46. More "old-fashioned whippings" are needed today.
47. The child must learn that "teacher knows best."
48. Increased freedom in the classroom creates confusion.
49. A teacher should not be expected to be sympathetic toward truants.
50. Teachers should exercise more authority over their pupils than they do.
51. Discipline problems are the teacher's greatest worry.
52. The low achiever probably is not working hard enough and applying himself.
53. There is too much emphasis on grading.
54. Most children lack common courtesy toward adults.
55. Aggressive children are the greatest problems.
56. At times it is necessary that the whole class suffer when the teacher is unable to identify the culprit.

57. Many teachers are not severe enough in their dealings with pupils.

58. Children "should be seen and not heard."

59. A teacher should always have at least a few failures.

60. It is easier to correct discipline problems than it is to prevent them.

61. Children are usually too sociable in the classroom.

62. Most pupils are resourceful when left on their own.

63. Too much nonsense goes on in many classrooms these days.

64. The school is often to blame in cases of truancy.

65. Children are too carefree.

66. Pupils who fail to prepare their lessons daily should be kept after school to make this preparation.

67. Pupils who are foreigners usually make the teacher's task more unpleasant.

68. Most children would like to use good English.

69. Assigning additional school work is often an effective means of punishment.

70. Dishonesty as found in cheating is probably one of the most serious of moral offenses.

71. Children should be allowed more freedom in their execution of learning activities.

72. Pupils must learn to respect teachers if for no other reason than that they are teachers.

73. Children need not always understand the reasons for social conduct.

74. Pupils usually are not qualified to select their own topics for themes and reports.

75. No child should rebel against authority.

76. There is too much leniency today in the handling of children.

77. Difficult disciplinary problems are seldom the fault of the teacher.

78. The whims and impulsive desires of children are usually worthy of attention.

79. Children usually have a hard time following instructions.

80. Children nowadays are allowed too much freedom in school.

81. All children should start to read by the age of seven.

82. Universal promotion of pupils lowers achievement standards.

83. Children are unable to reason adequately.
84. A teacher should not tolerate use of slang expressions by his pupils.

85. The child who misbehaves should be made to feel guilty and ashamed of himself.

86. If a child wants to speak or to leave his seat during the class period, he should always get permission from the teacher.

87. Pupils should not respect teachers anymore than any other adults.

88. Throwing of chalk and erasers should always demand severe punishment.

89. Teachers who are liked best probably have a better understanding of their pupils.

90. Most pupils try to make things easier for the teacher.

91. Most teachers do not give sufficient explanation in their teaching.

92. There are too many activities lacking in academic respectability that are being introduced into the curriculum of the modern school.

93. Children should be given more freedom in the classroom than they usually get.

94. Most pupils are unnecessarily thoughtless relative to the teacher's wishes.

95. Children should not expect talking privileges when adults wish to speak.

96. Pupils are usually slow to "catch on" to new material.

97. Teachers are responsible for knowing the home conditions of every one of their pupils.

98. Pupils can be very boring at times.

99. Children have no business asking questions about sex.

100. Children must be told exactly what to do and how to do it.

101. Most pupils are considerate of their teachers.

102. Whispering should not be tolerated.

103. Shy pupils especially should be required to stand when reciting.

104. Teachers should consider problems of conduct more seriously than they do.

105. A teacher should never leave the class to its own management.

106. A teacher should not be expected to do more work than he is paid for.

107. There is nothing that can be more irritating than some pupils.

108. "Lack of application" is probably one of the most frequent causes for failure.
109. Young people nowadays are too frivolous.
110. As a rule teachers are too lenient with their pupils.
111. Slow pupils certainly try one's patience.
112. Grading is of value because of the competition element.
113. Pupils like to annoy the teacher.
114. Children usually will not think for themselves.
115. Classroom rules and regulations must be considered inviolable.
116. Most pupils have too easy a time of it and do not learn to do real work.
117. Children are so likeable that their shortcomings can usually be overlooked.
118. A pupil found writing obscene notes should be severely punished.
119. A teacher seldom finds children really enjoyable.
120. There is usually one best way to do school work which all pupils should follow.
121. It isn't practicable to base school work upon children's interests.
122. It is difficult to understand why some children want to come to school so early in the morning before opening time.
123. Children that cannot meet the school standards should be dropped.
124. Children are usually too inquisitive.
125. It is sometimes necessary to break promises made to children.
126. Children today are given too much freedom.
127. One should be able to get along with almost any child.
128. Children are not mature enough to make their own decisions.
129. A child who bites his nails needs to be shamed.
130. Children will think for themselves if permitted.
131. There is no excuse for the extreme sensitivity of some children.
132. Children just cannot be trusted.
133. Children should be given reasons for the restrictions placed upon them.
134. Most pupils are not interested in learning.
135. It is usually the uninteresting and difficult subjects that will do the pupil the most good.
136. A pupil should always be fully aware of what is expected of him.
137. There is too much intermingling of the sexes in extra-curricular activities.

138. The child who stutters should be given the opportunity to recite oftener.

139. The teacher should disregard the complaints of the child who constantly talks about imaginary illnesses.

140. Teachers probably overemphasize the seriousness of such pupil behavior as the writing of obscene notes.

141. Teachers should not expect pupils to like them.

142. Children act more civilized than do many adults.

143. Aggressive children require the most attention.

144. Teachers can be in the wrong as well as pupils.

145. Young people today are just as good as those of the past generation.

146. Keeping discipline is not the problem that many teachers claim it to be.

147. A pupil has the right to disagree openly with his teachers.

148. Most pupil misbehavior is done to annoy the teacher.

149. One should not expect pupils to enjoy school.

150. In pupil appraisal effort should not be distinguished from scholarship.
APPENDIX B

FOCUSING QUESTIONS FOR THE INTERVIEW

Rationale for the Interview Given to the Interviewee

There are two reasons why we need your help in this interview. First of all, we are interested in the attitudinal characteristics of team teaching, that is, your opinion of your own attitude and that of others on team teaching functions. Secondly, we are interested in your evaluation of the idea of team teaching and its worth.

Questions relating to Hypothesis I
(idiographic and nomothetic teaching behavior)

A. What features of team teaching are most pleasurable to you?
B. If you had a choice right now, would you rather sit down and plan with your team members or, assuming adequate preparation, teach a large group lesson?
C. In planning meetings, do you prefer an unstructured session or one with a definite agenda?
D. In your association with team teaching, have any of the teachers in your team been your social friends?
E. If you had your choice, would you rather eat lunch with
   1. your team members
2. your pupils
3. your friends
4. the principal
5. alone

F. Would you be happier as the leader or a non-leader of your team?

G. How much of the time do you develop your own lesson plans?

H. How often do you discuss informally, that is, outside of scheduled team planning sessions, problems of the team?

I. Would you rather have a definite lesson plan from which you could not depart or no lesson at all where you would "play it by ear?" (forced choice).

J. Please select the definition of education which most nearly fits your philosophy:

   - a. Education is handing down what is known to those who do not yet know.

   - or b. Education is helping a person know what he wants to know.

Questions relating to Hypothesis II
(Job satisfaction and morale)

A. Do you feel happier in a team program than in a self-contained classroom?

B. Do you feel that other teachers enjoy team teaching as much as a self-contained classroom?
C. Do you think the organization could be changed in any way?

Questions relating to Hypothesis III (leadership appraisal)

A. Do you feel you could work with anyone on your team if he or she were the leader?
B. Do you think that you could be the team leader?

Questions relating to Hypothesis IV (compatibility with team members)

A. In your entire team teaching experience have you personally liked everyone on your team?
B. At present would you rather be on another team?

Questions relating to Hypothesis V (attitude toward children)

A. How many children do you see during the day as a teacher in a teaching-learning situation?
B. Roughly, how many of these children would you prefer to have out of your class?

Questions relating to Hypothesis VI (assessment of personal change)

A. Do you feel that as a teacher you have changed during your time as a team teacher? How?
B. Would you rather be back in a self contained classroom or do you care to continue as a team teacher?

C. What suggestions might you have to improve team teaching to make it more attractive to other teachers?

Injunction

Please do not discuss the nature of these questions with other teachers until this series of interviews is concluded. Thank you very much.
TEAM TEACHING ATTITUDE STUDY

TO: Team teachers participating in the attitude study.

RE: Administration of the Minnesota Teacher Attitude Inventory.

The team teaching attitude study in which you are participating has been designed to examine certain attitudinal characteristics of teachers involved in elementary school team teaching programs. We are extremely appreciative of your voluntary cooperation in this study. As you probably realize, any study of attitudes cannot be based on any arbitrary designation of "good" or "poor" attitudes. There is no such thing as a "right" or "wrong" answer to any of the questions in the instruments. Therefore, we wish to make abundantly clear that neither will there be, nor can there be, any attempt at "rating" teachers participating in the study.

There are to be two instruments used in the study:
1. The Minnesota Teacher Attitude Inventory (the MTAI), and
2. A personal Interview.

The usual time needed to complete the MTAI is about 30 minutes and each interview is expected to take about 20 minutes. Participating teachers, therefore, will be asked to contribute about 50 minutes of their time to the study.

A report of the findings and the conclusions of the study will be given to each participating teacher.

In the administration of the MTAI teachers will be asked to take:
1. a Participant Number card.
2. a Data Sheet.
3. an IBM Answer Sheet.
4. an MTAI Test Booklet.

In order to preserve anonymity as much as possible, each respondent will be identified only by the Participant Number (on the Data Sheet, the IBM Answer Sheet for the MTAI and the Interview). Since the Interview will be conducted at a later date, it is important that each participating teacher remember his or her Participant Number. Each teacher should keep his or her Participant Number card so that the correct number can be assigned to the Interview at the time it is conducted.

We again wish to thank each participating teacher for cooperating in this research. If any insights can be gained regarding the efficacy of team teaching in the elementary school you will have made a significant contribution in the field of educational research.

Thank you,

Philip M. Carlin
APPENDIX D

TEAM TEACHING ATTITUDE STUDY

DATA SHEET

Participant Number ______

Male ______ Female ______

Age ______

Experience:

How many years have you been teaching? ______

How many years have you been involved in a team teaching program? ______

How many years have you been a designated leader in a team teaching program (team leader, resource teacher, etc.)? ______

Education:

Do you hold a bachelor's degree? Yes ____ No ____

How many credits beyond the bachelor's have you? ______

Do you hold a master's degree? Yes ____ No ____

How many credits beyond the master's have you? ______

Do you hold a doctor's degree? Yes ____ No ____
APPENDIX E

A SAMPLING OF COMMENTS

These comments concerning team teaching and other aspects of this study were culled from almost thirty hours of tape recordings and notes taken by the interviewer. They are offered here without any identifying information except that they represent comments from among the sixty teachers involved in this study. Anyone interested in team teaching may find some value in them and for that reason they are included in the study.

"Administrators must know their personnel and the personalities that go with it."

"This hierarchy set up is not attractive. I resent having to accept the authority of a fellow teacher unless she is very superior. It's ego-damaging."

"You have to be careful. Divided responsibility can be no responsibility at all."

"This is the most exciting, challenging experience of my life."

"Team planning time is very important. People don't realize that it's not a cardinal sin to be without children in front of you all the time. If anyone sees me without children, I have a guilt complex. This, after 40 years of teaching."

"Teachers have to know where they're going in this set up."
"I don't enjoy a subordinate role - which I sometimes have to take."

"Informal planning is difficult. Planning time's got to be scheduled."

"I've grown more tolerant of other teachers during this experience but I'm still fearful of a dogmatic person's leadership. It grates on me."

"This thing (team teaching) is worthwhile if teachers can see results in terms of children."

"The office doesn't realize that shifting kids around can be very disruptive."

"Let's face it. Everybody's got to change. You can't be stagnant in a school and survive. Theories about education change a lot too, you know."

"The thing I feel here is enthusiasm."

"You really should be doing a selling job for team teaching. I've learned so much more and I'm less selfish and I have a better attitude toward people."

"You know, you can have a situation where you've got slackers on a team. Then one person does all the work and who wants that?"

"Well, you've got to have a structured organization with exact job definitions and allocation of specific responsibilities."

"We have to think in terms of the team. I have to stop being the star. This is a duet or quartet."
"Frictions on the team may make you look bad."

"There's a possibility of emotional involvement with team mates and this can be good or bad."

"If I went back to the self-contained classroom, I'd feel locked in. I'd have claustrophobia."

"Listen, when you have to stand up in front of other teachers and do your job, don't think you don't try to do your best."

"Teachers should be allowed to get out of team teaching if they don't fit. It's not for everyone. And it should be made easy to get out."

"I've learned how to handle people's personalities. It's great."

"It's really taught me how to get used to other people."

"The learning experience for teachers, being exposed to all these different teaching styles! It's fantastic."
APPENDIX F

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Means 40.0 11.6 308 2922 23 1.32 2.70 3.27 2.95 5.27
APPROVAL SHEET

The dissertation submitted by Philip Michael Carlin has been read and approved by five members of the Department of Education.

The final copies have been examined by the Director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval with reference to content, form, and mechanical accuracy.

The dissertation is therefore accepted in partial fulfillment of the requirements for the Degree of Doctor of Education.

Jan. 27, 1966

[Signature of Adviser]