THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE USE OF CLASS DISCUSSION STIMULI IN THE DEVELOPMENT OF

SOCIAL RELATIONS SKILLS OF FIFTH-GRADE PUPILS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fultillment of the requirements for the

degree of

DOCTOR OF EDUCATION

BY

DONALD RICHARD COX

Norman, Oklahoma

1962

THE USE OF CLASS DISCUSSION STIMULI IN THE DEVELOPMENT OF

SOCIAL RELATIONS SKILLS OF FIFTH-GRADE PUPILS

APPROVED BY

DISSERTATION COMMITTEE

ACKNOWLEDGMENTS

TABLE OF CONTENTS

v

LIST OF TABLES

THE USE OF CLASS DISCUSSION STIMULI IN THE DEVELOPMENT OF

SOCIAL RELATIONS SKILLS OF FIFTH-GRADE PUPILS

CHAPTER I

INTRODUCTION

Background and Need for the Study

Research in the teaching of speech on the elementary school level

is a relatively unexplored area at the present time. Yet the American

elementary school, perhaps more than any other academic division, affords

the most numerous opportunities for its pupils to engage in oral communi-

cation. Current textbooks for elementary teachers on language arts, social

studies, curriculum development, and the few existing speech improvement

books proclaim the use of speech activities as techniques for improving

instruction and for developing certain language and social relations skills

of the elementary age child.

Few of these textbooks substantiate their recommendations with any

tangible evidence of scientific inquiry, yet the speaking situations

frequently found in the elementary school are included in the possible

areas for research in speech. Any act of communication is in the area

of speech. These acts of communicating may range from the simple sharing

periods in the primary grades through special speech classes in the second-

ary school to the professional utilization of speech by participants in

1

business, the trades or the professions.[1] A great deal of research on the secondary, collegiate and adult levels constitute the bulk of the educational inquiry into speech activities and their values, while oral communication as an interaction process developed in the elementary school is often left to a few general recommendations found in textbooks and to the experience of individual teachers. Both of these often leave the classroom teacher with the idea that by simply engaging in activities where children will have to talk, entire realms of language, social and human relations skills will automatically be opened to the pupils and their deftness improved.

Fundamentally this attitude is, at least in part, desirable. There are many reasons for classroom teachers being concerned with the social relations of their pupils and its counterpart, oral communication. The American school has a major objective of helping boys and girls to develop behavior patterns that will enable them to become responsible citizens and effective community participants.[2] All individuals must understand social conditions and forces, how groups operate, the relation of the individual to the group, and the effect of attitudes upon constructive participation in group undertakings.[3] In the immediate surroundings of the classroom, interpersonal relations are often reflected in study skills and the acquisition of knowledge. Day-to-day problems can create chronic social frustrations which interfere with concentration on studies, and the inability to

---

[1]J. Jeffery Auer, An Introduction to Research in Speech (New York Harper and Brothers, Publishers, 1959), p. 28.

[2]Eric F. Gardner and George G. Thompson, "Measuring and Interpreting Social Relations," Test Service Notebook, No. 22 (Tarrytown, New York: Harcourt, Brace and World, Inc., 1959), p. 1.

[3]Hollis L. Caswell and Arthur W. Foshay, Education in the Elementary School (New York: American Book Company, 1957), p. 137.

get along with peers and find friendship makes classroom assignments just another burden to pupils who have inadequate social relations.[1]

The environmental experiences of a child before he enters school affects his maintenance of satisfactory relationships with other boys and girls in the classroom. From infancy, an individual acquires his needs for social interaction by having his basic physiological needs satisfied while in the presence of other people. Acquisition of specific types of social interaction must accompany the increasing maturity and experience of the young child. These are learned as the child finds that many individuals can satisfy his needs. Of course, some persons develop stronger needs than others for particular kinds of social relationships, since these needs are acquired through conditioning and other learning processes. The average classroom of pupils will range from those who are self-sufficient enough to require minimal needs for any type of social interaction to those pupils with intense social needs which cause them to appear apprehensive and unhappy whenever circumstances prevent them from interacting with others. The majority of pupils, however, need the company of others part of the time, and autonomous and independent activities the other part of the time. Thus, the growing child _learns_ to display certain behaviors and to get the social attention he needs.[2]

Because children differ greatly in their abilities to learn and to transfer what they have learned to ever changing social situations, it is necessary for classroom teachers to provide experiences which give meaning to learning. In order to set off thinking, understanding and language

---

[1]Gardner and Thompson, _loc. cit._

[2]_Ibid._, pp. 1-2.

development, direct and concrete experiences become the social context in which children find meanings. Actual involvement in peer social interaction is the spur to communication, visual and auditory discrimination and motor skills. Independence, autonomy and self-direction are the results of purposeful effort. Life experiences and personal observations form the bases for assumed roles in social situations and project themselves into other forms of expression such as interaction and communication. By doing, by attempting to do what is challenging, and by interacting with others, a child learns to be flexible, adaptive and developmental.[1]

The classroom teacher, then, needs objective and reliable information about the social relations of her pupils just as she needs diagnostic information in achievement areas of the curriculum. She needs such information for guidance and counseling purposes as well as for identifying the more severe cases of social maladjustment for referral to specially trained personnel.[2]

Often, after reading generalizations such as the above and consulting textbooks which advocate group activities, the elementary teacher is still confronted with the problem of selecting an activity which will provide experiences in group understandings and language development. Are there specific speech activities which will enable her pupils to develop toward specific goals of group work? Greene and Petty state that "group discussion is the most frequently used classroom means for carrying on learning

---

[1]Laura Zirbes, "What Should We Know About Learning?" Childhood Education, XXXVI (December, 1959), p. 154.

[2]Gardner and Thompson, loc. cit.

in any area."[1] Since group discussion and group dynamics are a part of

the art or theory of communication, according to Auer,[2] the classroom

teacher can best, and on more occasions, study the social and human rela-

tions skills of her students through class discussion involving the entire

group. It is also here that she can most adequately provide for oppor-

tunities for these skills to be developed.

Discussion is defined as "the cooperative deliberation of problems

by persons thinking and conversing together in face-to-face or co-acting

groups under the directions of a leader."[3] Analyzing this definition

further, cooperative deliberation means reflective thinking, rather than

intentional reasoning or critical analysis, which evolves into total group

thought which is the effort of all concerned. Since face-to-face situations

where everyone can see everyone present and can be seen by them is more

typical of small groups, a co-acting situation is often devised to take

care of large groups where all the members of the group respond to some

single, central source of information. Because of the size of a typical

classroom, either type can be used under different circumstances. Leader

direction may either be pre-conceived or emergent, as in small face-to-face

groups; in each case, it is indispensable.[4] Again, either type of leader-

ship may exist in classroom discussions. Discussion as a technique for

learning is best adapted to classes or other relatively small gatherings.[5]

---

[1]Harry A. Greene and Walter T. Petty, Developing Language Skills in the Elementary School (Boston: Allyn and Bacon, Inc., 1959), p. 86.

[2]Auer, op. cit., p. 2.

[3]James H. McBurney and Kenneth G. Hance, The Principles and Methods of Discussion (New York: Harper and Brothers, Publishers, 1939), p. 10.

[4]Ibid., pp. 10-15.

[5]Ibid., p. 38.

There is value to the young student in understanding the discussion process. Discussion and group decisions are prevalent in present American society. Corporations, governmental bodies and administrative groups very seldom rely upon the decisions of a single, powerful figure. Everywhere, from school and social groups to community, state and even nations, the complexities of modern life require widespread reliance upon co-operation and group agreement.[1] For these reasons, group discussion, whether it be a formal, structured situation or regular teacher-pupil classroom interaction, is an integral part of every elementary classroom.

A recognition of these needs for group discussion may lead the classroom teacher to raise questions such as the following:

1. Is there a type or pattern of group discussion stimulus better than other types for helping children learn to listen, to abide by group decisions, to express ideas, etc.?

2. Does research substantiate certain commonly accepted theories such as an open, free classroom discussion stimulating the best involvement and participation on the part of pupils, and working in small groups affording the best practice in planning?

3. Is it possible to teach the goals of group discussion indirectly since "the best way to motivate children to master language skills is not to drill on these skills, but to emphasize communication"?[2]

All of these questions have yet to be answered experimentally. Most of the research studies in group discussion in an educational environment

---

[1]Donald C. Bryant and Karl R. Wallace, Fundamentals of Public Speaking (New York: Appleton-Century-Crofts, Inc., 1953), p. 386.

[2]Mildred A. Dawson and Marian Zollinger, Guiding Language Learning (Yonkers-on-Hudson, New York: World Book Company, 1957), p. 12.

have been concerned with its superiority as a motivational technique. Group discussion generally has been compared with other classroom procedures, such as the lecture method or the laboratory method. However, the important question for research in group discussion at the present time is to see if certain kinds of group discussion stimuli can be more effective in attaining specific objectives, not whether discussion in general is more advantageous than other methods of teaching.[1] Many of the questions within the area of group discussion itself need to be answered. This is the point of focus for this study.

Purpose of the Study

This study evolves from the premise, firmly established in current textbooks for elementary teachers, that group discussion in some form is a vital part of elementary classroom procedures and of the development of the social relations of pupils; as such, they should be subjected to experimental research. The purpose of this study is to experimentally test the use of class discussion in the development of social relations skills of fifth-grade pupils. The specific purposes are:

1. To compare selected patterns of class discussion stimuli as to their effectiveness in helping elementary school children improve their social relations skills

2. To relate the implications of the findings of the study for the classroom teacher as a partial criterion for the selection of classroom discussion procedures

---

[1]G. Max Wingo, "Methods of Teaching," Encyclopedia of Educational Research, ed. Chester W. Harris, III (The Macmillan Company, 1960), p. 853.

The Problem

The central problem to be analyzed statistically and reported

descriptively is to determine if there are any significant differences

in the group outcomes of children's behavior at a single grade level after

they have participated in one of the three commonly used class discussion

stimuli over a sustained period of time. A consideration of the problem

raised the following questions:

1. What are the group gains made in the achievement of specific

social relations skills in each experimental group as measured by the

Russell Sage Social Relations Test?

2. What are the group gains found in the achievement of specific

social relations skills when comparing classes which had the same back-

ground stimuli for discussion and which engaged in the same pattern of

class discussion as measured by the Russell Sage Social Relations Test?

3. What are the group gains found in the achievement of specific

social relations skills when comparing classes which had the same back-

ground stimuli for discussion but which engaged in different patterns of

class discussion as measured by the Russell Sage Social Relations Test?

Definition of Terms

Social Relations--the language and behavior skills needed for

effective group participation.

Class Discussion--used synonomously with group discussion, accepting

McBurney and Hance's definition.[1]

Group--a designated class of fifth-grade pupils who had been

---

[1]McBurney and Hance, loc. cit.

assigned to work with one particular teacher and who had been grouped by a method other than homogeneous or ability grouping procedures.

Elementary School--generally, a school enrolling pupils in grades one through six. In this particular study, a school enrolling pupils in grades four, five and six. It is a separate school from both the junior high school and the senior high school, having its own building, administration and purposes.

Teacher--the regularly assigned person responsible for a class while the pupils are in attendance at school.

Fifth-Grade Pupil--a child assigned to do the work required of the fifth year of school, excluding kindergarten, and who had satisfactorily completed four years of prior school achievement or its equivalent in academic training.

Examiner--the writer of this study who conducted the research, administered all tests, with the exception of the I.Q. test, all questionnaires, and who acted in loco magistri during the class discussion periods.

Observer--a graduate student majoring in speech at the University of Oklahoma who had the responsibility of rating the groups as they participated in the Russell Sage Social Relations Test.

Types of Class Discussion--patterns of discussion stimuli which are distinguished from each other by the designation of Tiegs and Adams as being among the most commonly employed class discussion procedures in the elementary school.[1]

1. Teacher-to-Pupil-to-Teacher Discussion--a teacher controlled form of communication in which the examiner directed pre-

---

[1]Ernest W. Tiegs and Fay Adams, Teaching the Social Studies (New York: Ginn and Company, 1959), p. 119.

planned questions to specific pupils by calling them by
name to answer specific questions. Efforts on the part
of the pupils to digress from the particular question of
the moment were controlled by the examiner.

2. Pupil-to-Pupil Discussion--a situation in which one pupil
opened with a remark, followed by other pupils who called
upon each other and reacted to each other's ideas purely
on a voluntary basis. The pupils did not raise their hands
when they wanted to talk, and were encouraged to look at
each other and talk only with classmates, not to the
examiner. There was no particular structure to the discus-
sion and the only control was that they stick to the subject.
The examiner stood to one side of the room during the dis-
cussion and commented only when it was necessary to keep
the discussion moving.

3. Small Groups Discussion--a situation in which the entire
class was divided into five small groups. Each small
group, consisting of five to seven pupils, was handed a
sheet of typed questions prepared in advance by the
examiner to be discussed among the members of their group.
Each group was responsible for a different set of
questions. After approximately ten minutes, each group
moved their chairs back into the regular places in the
classroom, and one child from each group reported the
thinking of that group's questions. The class was then
allowed to make relevant comments if they so desired by

first raising their hand and then being recognized by

the child reporting. The groups were formed according

to the convenience of their regular position in the

classroom, thus controlling the selection of friends

with which to work. Each group was told that they

could elect a leader if they desired, and that they

could let a different child do the reporting each day

if they wanted to. Neither was compulsory; it was

left entirely up to the group. The membership of the

groups stayed the same throughout the experiment. The

groups were relatively unstructured except for a pre-

planned agenda.

Background Stimuli--the subject matter material or information
presented prior to a discussion period.

Discussion Stimuli--the patterns of class discussion employed,
each serving as a "stimulator of group interest and understanding."[1]

Procedure for the Study

In order to study the effects of different patterns of class

discussion stimuli upon the group achievement of elementary school

children in social relations, the following procedure was observed:

1. A review of current textbooks for elementary school teachers

was made to determine the most commonly used patterns of class discussion.

2. Three patterns of classroom discussion stimuli were selected

which would require no outside or individual preliminary preparation.

---

[1]John Keltner and Franklyn Haiman, "Discussion as a Tool in Acquiring
and Using Knowledge," The Bulletin of the National Association of Secondary
School Principals, XXXVIII (January, 1954), p. 111.

3. A survey of the current textbooks in the field of elementary education was made to obtain a list of the most frequently mentioned goals of group discussion in the elementary school.

4. The Russell Sage Social Relations Test was selected because it measures most of the social relations skills accepted as goals of group discussion, and because it is a test of group, rather than individual, performance.

5. The training of observers to do the ratings on the Russell Sage Social Relations Test constituted the next step in the study. The training included four discussion periods with the examiner, in which meanings of various categories or variables were analyzed, and a trial session.

6. In order to establish the inter- and the intra-reliability of the ratings of the two observers, they were required to test and re-test groups of elementary school pupils who met the same criteria as those pupils who were to participate in the experimental study.

7. The common background stimuli for all groups or classes in the experimental study were devised. These stimuli were composed of various books which were illustrative of different types of literature and which contained situations which would evoke discussion. A list of apropos questions for each book was then compiled by the examiner.

8. The Lorge-Thorndike Intelligence Test and the California Test of Personality were selected to help establish that all of the participants in the experimental study came from the same population. In selecting these instruments the criteria used were (1) the appropriateness of adequate norms, reliability and validity and (2) the practicality of the tests with reference to the time required, the singly derived scores

and the ease of administration. In addition to the above criteria for

both instruments the Lorge-Thorndike Intelligence Test was used because

the results of it were made available to the writer through the school

system involved.

The Lorge-Thorndike Intelligence Test yields a verbal I.Q. score

designed to measure vocabulary, verbal classification, sentence completion,

arithmetic reasoning and verbal analogy.[1]

The California Test of Personality yields a social adjustment score

derived from a measure of the pupil's social standards, social skills,

anti-social tendencies, family relations and community relations.[2]

9. The participants in the experimental study were selected and

the six class groups were randomly assigned.

10. The characteristics of the participants at the beginning of

the experimental study were determined by giving the Russell Sage Social

Relations Test and the California Test of Personality and by securing the

scores on the Lorge-Thorndike Intelligence Test.

11. The background stimulus was presented to each of the individual

classes on ten consecutive school days. Each background stimulus was

followed immediately by a class discussion involving the particular dis-

cussion stimulus assigned to each class.

12. After the completion of all discussion sessions, each partici-

pant filled out a questionnaire to determine the pupil's interest in the

---

[1]Irving Lorge and Robert L. Thorndike, Lorge-Thorndike Intelligence
Tests. (New York: Houghton Mifflin Company, 1954), p. 1.

[2]Louis P. Thorpe, Willis W. Clark and Ernest W. Tiegs, Manual:
California Test of Personality (Los Angeles: California Test Bureau, 1953),
pp. 3-4.

particular type of class discussion which was used in his classroom and to determine his preferences for the various types of literature presented.[1] Each pupil was asked to make his evaluation in terms of his acceptance or rejection of specific patterns of class discussion and preferences for types of literature in all situations in which he encoutnered the patterns and types, not merely on the basis of the time the examiner had been in the classroom.

13. The Russell Sage Social Relations Test was administered as a post-test to all classes.

Description of the Sample and Classroom Procedures

The sample for this experimental study was limited to all of the fifth-grade pupils regularly enrolled in the Moore Elementary School, Moore, Oklahoma, with the exception of those fifth-grade pupils who attended special education classes rather than the regular fifth-grade classes. The elementary school was chosen because children of a normal age for this type of school were, for the first time outside their immediate home environment and relationships, actively engaged in extending their social contacts and broadening their human relationships in discussion situations.

During the school year of 1961-62, Moore Elementary School, Moore, Oklahoma, employed a self-contained classroom pattern of instruction in the upper grades. The fourth, fifth and sixth grades were housed in a building separate from the primary grades. This building had its own principal and there were six fifth-grade classrooms. The typical

---

[1]Because the pupil's ratings of types of literature is not directly related to the purposes of this study but might be of interest to the reader, the results of this portion of the questionnaire are included only in the appendices.

elementary school offerings of language arts, social studies, arithmetic and science were given to groups of pupils who had been assigned to their classrooms according to procedures other than homogeneous or ability grouping. Counting only those pupils who were present for the pre- and post-tests, there was a total N of 158 fifth-grade pupils participating in this study. All of the pupils regularly enrolled, however, were allowed to take part in the discussion sessions between the pre- and the post-tests. Only those pupils who were present for the pre-test took part in the post-test; those pupils who were not present for the pre-test were assigned to another room in the building during the post-test.

Because of the grouping procedures and the fact that all instruction for every group was based upon the same curriculum, it was assumed that each group, considered as a whole, was similar in its relation to the others and its opportunities to have engaged in classroom discussion. Since none of the pupils knew the purpose of this study, it was further assumed that the pupils in each class were randomly representative of the population.

The fifth grade was selected because pupils at this level are typically mature enough in their social development to be able to communicate ideas, feelings and impressions in some sort of organized way, often show the ability to think through an idea or topic beyond the mere first reaction stage, still retain somewhat the uninhibited qualities of earlier childhood, and generally have not faced the frustrations associated with puberty which often cause temporary withdrawal from social interaction. No attempt was made in this study to distinguish between the group discussion behavior of boys and girls because it is very often found that,

at this age level, many of their activities have not yet been segregated
according to sex roles.

The regular classroom situation was chosen as the site for the study
because it is here that discussion, devoid of peer selected associates, is
most likely to occur. No attempt was ever made during the experimental
period to rearrange the pupils according to interests in working with
certain other individuals, or even by topic interests. The regular class-
room arrangement was used in each case, with the exception of the small
groups discussion classes who, of necessity, had to turn their desks to
face the other five to six members.

Books alone were used for background stimuli for the discussion
periods. Most of the books selected were slightly above the recommended
reading level of fifth-grade pupils since they were being presented orally
by the examiner. However, each book was carefully selected in content to
appeal to this grade level child. The books selected were recommended in
the Childrens' Catalogue, and were chosen with appeal for both boys and
girls.

No grades or tests were given over the material contained in the
background stimuli or over the discussion periods. Artificial means of
motivation were omitted in order to get a true picture of how children
developed in communication and social skills when no direct pressure was
put upon them.

The effects of typical patterns of class discussion stimuli upon
the group achievement of fifth-grade pupils in social relations was
limited to only three of the many variations of class discussion which
are possible to have in an elementary classroom. The three patterns
studied were (1) an informal, open type of discussion, (2) a teacher-

pupil-teacher form of communication, and (3) a small group reporting

situation.

Organization of the Report of the Study

This study is divided into five parts:

Chapter I presents an over-view of the problem and a description

of the study.

Chapter II reviews the related literature.

Chapter III analyzes the Russell Sage Social Relations Test as

it was used and interpreted in this study, and describes the procedure

in establishing observer reliability.

Chapter IV presents the collection and treatment of data.

Chapter V contains a summary of the findings and conclusions drawn

and recommendations resulting from the study.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Measurement of Speech Behavior

The fact that research in the teaching of speech on the elementary

school level is a relatively unexplored area at the present time is re-

flected in publications such as the Review of Educational Research. Divid-

ing speech research and its related literature into four main areas, Auer

and Smith give little indication of any important studies concerned with

elementary speech activities.[1] One of the chief reasons for this is that

objective measurement of actual speech situations is difficult on any

level, and therefore much of the research is limited to historical studies

or critical and content analyses of existing materials, which obviously

are not available at the elementary level. However, in the field of tests,

measurements and research instruments, there have been a number of tests

developed recently for general research in speech which can be used on the

elementary level. Bales and Gerbrands have reported the use of an "inter-

action recorder" which has proved useful for keeping observations in their

original temporal sequence.[2] In order to measure individual differences

---

[1]J. Jeffery Auer and Raymon G. Smith, "Speaking," Review of Educational Research, ed. David R. Krathwohl, XXXI (April, 1961), pp. 152-160.

[2]Robert F. Bales and Henry Gerbrands, "The 'Interaction Recorder:' An Apparatus and Check List for Sequential Content Analysis of Social Interaction," Human Relations, I, No. 4 (n.d., 1948), pp. 456-463.

in conformity to group judgment, Crutchfield has devised a "quasi group-interaction method" by which the experimenter wholly controls and manipulates the conditions of group interaction by operating an electrical switchboard.[1] Both of these instruments are steps forward in objectively identifying factors in speech situations, but speech, being of an oral nature, must be evaluated most often by human observation.

Douglas, in a much-needed article, explains the meaning of speech measurement to the classroom teacher and his points are certainly apropos for the elementary teacher. He states that speech testing problems are not insurmountable when the teacher has a theoretical background in the nature of measurement, the objectives of measurement and the factors affecting measurement. All measurement, according to Douglas, is observation and all testers, whether classroom teachers or researchers, must discipline themselves to perceive and comprehend reality.[2]

One of the most frequently used instruments for recording observations, and the type used in this study, is the rating scale. Rating scale procedures are used more frequently than all other psychological measurement methods that depend upon human judgment. They are often used in studies of individual reactions, in evaluations of products and in psychological evaluation of stimuli. Although rating scales are condemned frequently because of the many sources of bias and error to which they are vulnerable, it can now be stated that in most studies these are controllable to some degree and that once the facts become known there

---

[1]Richard S. Crutchfield, "A New Technique for Measuring Individual Differences in Conformity to Group Judgment," Proceedings 1954 Invitational Conference on Testing Problems (Princeton, New Jersey: Educational Testing Service, October, 1954), pp. 69-73.

[2]Jack Douglas, "The Measurement of Speech in the Classroom," The Speech Teacher, VII (November, 1958), pp. 309-319.

are corrections and scaling procedures which can be applied. In view of

the demands to evaluate human beings in all sorts of variables and because

no known better procedures are in existence, the rating method promises to

be welcomed by many researchers for many years to come.[1]

Since a rating scale is used in this study, and thus requires

observers of the group discussion in the pre- and post-testing situations,

a review of the literature concerning observer reliability is included in

this chapter. Most books dealing with the evaluation of research tools

which attempt to observe and record human behavior have an encouraging,

if somewhat skeptical, tone to them. In the words of John Withall, "It

appears that, at long last, researchers have taken to heart the dictum

credited to Kurt Lewin that there is nothing so practical as a good theory."[2]

The multiple-criterion approach, so evident in observing human behavior,

seems to be implicit in some of these theories and is necessary to better

understand, control and predict variables in the global phenomena areas of

education, mental health, psychology, and the like. However, the current

thinking seems to be that broad areas need to be broken down into manage-

able, discrete, describable operations of behavior with defined conditions

specifying, describing and quantifying the behavior of the learners and

other participants in the evaluation environment.[3]

There are, then, two major trends which are currently influencing

---

[1]J. P. Guilford, *Psychometric Methods* (New York: McGraw-Hill Book Company, Inc., 1954), pp. 278-280.

[2]John Withall, "Research Tools: Observing and Recording Behavior," *Review of Educational Research*, ed. David R. Krathwohl, XXX (December, 1960), p. 496.

[3]Ibid.

researchers engaged in observation of classroom activities. One is reflected

in the studies guided by the sociopsychological orientation, and the other

is seen in the attempts to operationally define the specific behaviors in

which teachers and learners relate significantly to group behaviors and

individual learning.[1]

Observers or recorders of group or individual behavior in testing

situations must develop a stenographic type of skill in order to record

observations, be trained specifically in understanding an often complex

set of categories to be observed, and become analytic in "taking the

role of the other" as a classification is made. These skills require long

practice and frequent retraining in order to perform consistently.[2] Then,

at best, there will be a certain margin of error due to the well-known

errors in ratings such as the error of leniency, the error of central

tendency, and the halo effect. The most effective method for minimizing

errors is to train raters carefully, not only in the handling of a spe-

cific instrument, but also in the counteracting of constant errors.

Training that includes practice and discussion periods seems to be the

most effective.[3]

Group Discussion

The ability of individuals to work in group situations has been

increasingly recognized as an important aspect of human development in a

---

[1]Ibid., p. 509.

[2]Robert F. Bales, Interaction Process Analysis (Cambridge, Massa-
chusetts: Addison-Wesley Press, Inc., 1950), p. 85.

[3]Guilford, loc. cit.

democracy. Particularly since World War II, serious studies of group
dynamics and the interaction process involved in group discussions have
advanced our knowledge of social development. However, experimental work
in group discussion is a relatively newcomer as far as the scientific
method is concerned.[1] In 1949, Dickens and Hefferman made a survey of
experimental research in group discussion, claiming to be only the fourth
of such attempts in the history of the area. In this survey, psychologists
were criticized as having too frequently been involved in experimentations
without practical experience in discussion themselves; consequently, they
set up discussion situations for experimentation which were artificial and
unlifelike. The authors of this article did indicate the trend of expanding
topics used in discussion research from mere questions of fact to questions
of opinion in which emotion and irrationality play a part. Another encour-
aging fact in the same review was that the types of discussion experimentally
studied were digressing from the usual learning or problem-solving type to
include unspecified leaders, open forums and joint-action groups. Indi-
vidual thinking compared with group thinking, the lecture method of teaching
versus the discussion technique in classrooms, measurements of attitude
changes in group discussion, analyses of the discussion process per se,
and techniques for comparing the degrees of effectiveness on questions of
opinions were characteristic of the realm of group discussion research.
The use of standardized tests, inventories, attitude scales and similar
devices were questioned, and the development and validation of new experi-
mental techniques and procedures designed purposefully for group discussion

---

[1]Milton Dickens and Marguerite Hefferman, "Experimental Research
in Group Discussion," The Quarterly Journal of Speech, XXXV (February,
1949), p. 23.

situations were encouraged.[1]

Since 1949, there have been many attempts to put evaluation of group discussion on a more scientific basis. Many studies have been done on group discussion as a classroom methodology, while group discussion as a technique for solving problems has increasingly been utilized in industry, business, and the professions. A great many research studies have dealt with the formation of groups and the bearing interaction of members of a group has on social development. Two of the important outcomes of participation in peer groups and classroom groups which have a definite relation to social development are (1) the sphere of social sensitivity is broadened to include persons outside family memberships and (2) the learning of social attitudes and habits which characterize the group is increased as a result of group participation. Children practice the kinds of attitudes shown them by their leader or teacher, and the nature of these attitudes is related to the kind of atmosphere--democratic, authoritarian or laissez-faire--which is maintained by the leader of the group. There is also a relation between the quality of childrens' learning and the nature of the group situation; children generally will work harder in a group than they will alone, mainly because of competition. Children also will work more efficiently when the results of the work are made known to the group than when they are known only by the individual. The atmosphere of the group, or the social climate, influences the efficiency of learning of a lesson and also the learning of social habits.[2]

---

[1]Ibid., pp. 23-29.

[2]Robert J. Havighurst, "Social Development," Encyclopedia of Educational Research, ed. Chester W. Harris, III (The Macmillan Company, 1960), p. 1288.

Teacher-pupil planning, a form of group discussion, has been an
avenue through which discussion effectiveness is receiving some evaluations
in the elementary school. Petty reports that when children know what they
are to do and how they are to do it as the result of teacher-pupil planning,
they are more successful in group work and that teachers also welcome and
appreciate the relationships which come about as a result of teacher-pupil
planning.[1]

Rehage found that in two matched groups of eighth grade social
studies classes the group which participated in teacher-pupil planning
activities had a much greater gain in knowledge than the group which had
no opportunity to participate in the formulation of objectives and the
means to attain them.[2] Ragan states that the basis for a democratic class-
room should be a creative environment in which the teacher and the pupils
have the freedom to experiment, to discover and to develop solutions to
the real problems of living. Opportunities for this kind of intra-group
communicative effort exist in many phases of elementary school work.[3]

Not only in teacher-pupil planning situations, but in all patterns
of group discussion stimuli there must be this freedom to experiment, to
discover and to develop solutions. Overemphasis on drill or too much com-
partmentalized learning reduces learning in actual life situations. The
value of learning or of an experience is ultimately determined by the

---

[1]Mary Clare Petty, Intraclass Grouping in the Elementary School,
(Austin, Texas: Bureau of Laboratory Schools, The University of Texas,
1953), p. 130.

[2]Kenneth J. Rehage, "A Comparison of Pupil-Teacher Planning and
Teacher-Directed Procedures in Eighth Grade Social Studies Classes,"
Journal of Educational Research, XLV (October, 1951), pp. 111-115.

[3]William B. Ragan, Teaching America's Children (New York: Holt,
Rinehart and Winston, 1961), p. 258.

interactions which take place between an individual and his environment. Group approval and the learner's satisfaction of his own behavior and product are the two most influential rewards of the learning process.[1]

One of the most important elements in the growth of a healthy personality, as far as interaction with others is concerned, is the fostering of what is important to one's self. Values do not come as gifts; each individual must obtain them for himself. They come through prizing, cherishing, discriminating in the face of choices, from reflection, from a chance to be expressed, and from support of others who share the same values. Yet values are constantly undergoing change as a result of shared living and thinking.[2] Unfortunately, the value systems of mankind have suffered at the cost of technilogical developments in recent years. The future of man, since he has made tremendous strides in controlling his physical environment, lies in what he does to himself. Whether he will develop to his potentiality or betray it depends upon how he handles his present uncertain conceptions of his own nature.[3] Group discussion, then, provides an opportunity for social interaction in which attitudes and concepts of mankind in general and one's self in particular are developed.

Goals of Group Discussion in the Elementary School

In reviewing some of the current textbooks for elementary school teachers for recommendations of objectives of group discussion, the areas

---

[1]Maycie K. Southall, "How do Children Learn?" Childhood Education, XXXVI (December, 1959), pp. 151-152.

[2]Louis E. Raths, "Values Are Fundamental," Childhood Education, XXXV (February, 1959), pp. 246-247.

[3]J. H. Rush, "The Next 10,000 Years," The Saturday Review, XLI (January 25, 1958), p. 36.

most frequently associated with group work or language development were
analyzed. Language arts, social studies, and directed speech activities
are the specific areas of the elementary school curriculum where group
discussions, with language development and social skills as the most immedi-
ate goals, are most frequently found. A summary of the goals and objectives
of group discussion as found in these textbooks follows.

The objectives of discussion in a language arts program are to
afford practice in clarifying one's thinking, gaining new ideas, learning
to think for oneself, and to form reasonable judgments. Standards to be
stressed include sticking to the point at issue, making only those remarks
which will help to carry the thinking forward toward a definite conclusion,
expressing ideas in clear-cut sentences, speaking distinctly and enunciating
clearly.[1]

In discussion, children must have a clear recognition of the problem
to the extent that they can make a contribution. Cooperation is an impor-
tant outcome of discussion as well as leadership training. Discussion
implies reaching a better understanding of a problem and coming to a common
viewpoint. It also implies tolerance and good sportsmanship.[2] Thus, in
addition to communication skills to be mastered by pupils in group discus-
sion situations in the language arts program, social behavior standards
are also mentioned as objectives.

In the discussion program of social studies classes. Tiegs and
Adams list objectives both for the teacher and for the pupils. Desirable

---

[1]Dawson and Zollinger, op. cit., p. 57.

[2]Greene and Petty, op. cit., p. 234.

skills which the teacher should strive for in her pupils are the ability
to state problems clearly and concisely, recognize the need for supporting
all statements made, and differentiate between fact and opinion. The ability
to accept opposing viewpoints thoughtfully, intelligently and unemotionally,
and the recognition of the value of unifying phrases such as, "as Mary said,"
or "to continue with," are goals of discussion situations which the teacher
should strive for in working with pupils.[1] Selected from a list of twelve
habits and abilities to be acquired by the pupils, the ability to be enthu-
siastic during conversation or discussion, the ability to be a good listener,
the observance of common courtesies, and the skill of changing the topic
tactfully summarize the viewpoint of Tiegs and Adams.[2] Some of the other
skills, knowledges and attitudes to be developed by the pupils in social
studies discussion sessions are knowing when and how to interrupt the
person talking, disagreeing politely with another's statements, not monopo-
lizing or whispering in the presence of others, knowing what to do if two
pupils start to make a contribution at the same time, using moderation in
expressing likes and dislikes, avoiding hurting the feelings of someone
else or of being too personal, evading futile arguments, and finally,
minimizing repetition.[3]

Although a special speech activities program is not usually a part
of the curriculum in most elementary schools, several textbooks devoted
entirely to elementary speech improvement are available as source material

---

[1]Tiegs and Adams, op. cit., pp. 86-87.

[2]Ibid., p. 85.

[3]Ibid., pp. 85-86.

for teachers. The goals of group discussion as stated in such textbooks also give insight into what is expected to be accomplished by elementary school children as they take part in oral communication efforts as a group.

The possibilities and values of group discussion, as listed by Rasmussen, include growth in general enlightenment, problem-solving, and social behavior. The ultimate test of the effectiveness of such discussions is how the pupils behave in future situations where discussion is not necessarily involved, such as manners in the hall or behavior on the playground.[1]

The outstanding characteristics of a good discussion, according to Scott and Thompson, are maintaining good human relations in oral communication situations, active participation, critical thinking, a concern for and the understanding of the problems of others, and leadership. Learning greater self-control and the ability to pool ideas are also desirable outcomes of group discussion. Good speech manners and listening create an atmosphere for the development of appropriate skills which a child will need in order to participate effectively in an adult society; thus helping him to get a clear picture of the realities of the adult world and its expectancies and aiding him in accepting and assuming his adult role more easily.[2]

As an illustrative lesson for upper grade children in problem-solving, Pronovost lists group discussion objectives evolving from a study of a typical unit on health and safety. The principal objectives are to

---

[1]Carrie Rasmussen, Speech Methods in the Elementary School (New York: The Ronald Press Company, 1949), pp. 128-129.

[2]Louise Binder Scott and J. J. Thompson, Speech Ways (St. Louis: Webster Publishing Company, 1955), pp. 14-21.

develop the ability to use an organizational pattern of definition, analysis, exploration, evaluation and decision in this type of situation, as well as skills such as listening, sticking to the point and supporting opinions.[1]

From this survey of recommendations for goals of group discussion from current textbooks for the elementary teacher, a conclusion can be reached that they all agree on the general realm of learning and social outcomes of a class activity involving discussion. These goals were the criteria upon which an instrument was selected for measuring group discussion behavior. In Chapter III, an analysis of the categories included in the Russell Sage Social Relations Test will be given as each category applies to the above mentioned goals of group discussion. This will be followed by an analysis of the Observer Reliability Study.

---

[1]Wilbert Pronovost, The Teaching of Speaking and Listening in the Elementary School (New York: Longmans, Green and Co., 1959), p. 87.

CHAPTER III

THE RUSSELL SAGE SOCIAL RELATIONS TEST AND THE

OBSERVER RELIABILITY STUDY

As stated in Chapter I, the purpose of this study was to see if

there were any significant changes in the group achievement of fifth-

grade pupils in social relations skills after a period of ten consecutive

day-to-day discussion sessions. One of the first tasks was to find a

test which would measure the group discussion goals which were found to

be recommended in current textbooks for elementary teachers. The test

which met this criterion best was the Russell Sage Social Relations Test.

Because of the uniqueness of its structure and method of presentation

and because of the manner in which the test was used in this study, a

description of these two aspects is necessary in order to fully under-

stand the outcomes of this study.

Structure and Administration of the Test

During the administration of the Russell Sage Social Relations Test,

trained observers assess the amount of skill which a classroom group of

children, working with blocks, possess as they devise a plan which is to

govern their behavior in a defined problem situation, and as they carry

out their plan and solve the problem. Each group has three possible

problems which they can solve: building a house, a footbridge, and a

dog. Each problem consists of thirty-six plastic blocks. A model of the problem is shown to the group before they start discussing ways the class can get together and build their duplication of the model in the best and fastest way. The class establishes, through discussion with the examiner, what the model actually represents. Then, as the examiner is giving one or two blocks, depending upon the size of the group, to each child they are asked to begin studying the model and thinking of ways in which the class can get together to solve the problem. The blocks vary in color from red to white to blue. They come in two shapes, square and triangular. They fit together by slipping a notched side through an indented side of another. Each block has two notched and two indented sides. The group is told that their design must be exactly like the model as far as the way the blocks are arranged and facing. The group is also told that their score on the test will be a group score, rather than an individual score, and that it will be the time it takes to build their design plus the number of mistakes they make in building their design.

The children are told that the class may take as long as they like to plan how the class will assemble their design, but that once they begin to build the problem, a maximum of fifteen minutes will be allowed. As the pupils plan by offering ideas and suggestions, the examiner writes them on the blackboard. As little prodding or reminding as possible is done by the examiner during the Planning Stage, and the suggestions from the class are written in exactly the same words as those of the child offering them. Any questions directed to the examiner during this period are answered by saying that everything will be up to them as a group.

During the Operations Stage, which begins when the children have

indicated that they are ready to begin building their design, the examiner

stands quietly to one side of the room. When the group has completed the

building of their design, they are asked to take their seats. When they

have quietened down, their time and the number of errors are written on

the board. They are then ready to take the second problem, which is

introduced without comments concerning the groups' work on the first

problem and which follows the same procedure as the first problem. At

the conclusion of the testing period, the examiner thanks the children for

their cooperation. In the event that children want to know what the test

is for, the examiner tells them that it is a test to see how well boys

and girls can plan and work together.[1]

Since the observers' presence in the room might cause speculation

and uneasiness among the members of a group of children, the examiner in

this study introduced them to the class, explaining that they simply wanted

to observe during the period and that the children should not bother them

with questions during the sessions.

Variables Rated on the Test

To make a comparison between the Russell Sage Social Relations Test

and the most frequently appearing goals of group discussion, below have

been listed the different variables included in the test and the corres-

ponding previously mentioned goals which were applicable to the variable:

Part I of the Test: Planning Stage

1. Participation--a variable with which the rater is concerned

---

[1]Dora E. Damrin, Manual for the Russell Sage Social Relations Test
(Princeton, New Jersey: Educational Testing Service, n.d.), pp. 5-11.

with the quality of participation as well as the quantity of participation. It is primarily based upon the number of children who participate, but the extent to which they carry on the discussion without the help of the examiner is also considered.[1] Goals of discussion which were reflected in this category were cooperation, enthusiasm for the project, active participation and sticking to the point.

2. Communication—a variable concerned with the quality of the children's ideas, as well as the manner in which their ideas are exchanged and evaluated.[2] The goals of discussion which this variable included were making remarks to carry the thinking forward, speaking clearly and distinctly, expressing ideas in clear-cut sentences, listening, and learning to think for one's self.

3. Ideas—a variable concerned with the quality of the children's ideas and with the consistency of the discussion.[3] Forming reasonable judgments, differentiating between fact and opinion, changing the topic tactfully, and critical and reflective thinking were involved in this category.

4. Plan—a variable in which the quality and the precision of the final plan of action that is devised by the group is considered.[4] This category included accepting opposing viewpoints, coming to a common agreement, and the analysis, exploration, evaluation and decision necessary to devise a plan of action.

---

[1]Ibid., p. 27.

[2]Ibid.

[3]Ibid., p. 28.

[4]Ibid.

5. Involvement--a variable differing from the variable of parti-
cipation in the respect that it is concerned with the interest pattern of
the class,[1] while participation is concerned more with the number of chil-
dren who take part. Again, enthusiasm and sticking to the point were
goals of group discussion to be taken into consideration here.

6. Autonomy--a variable concerned with the extent to which the
children carry on their planning discussion by themselves and without the
examiner having to interfere or prod.[2] The skills involved here were
learning greater self-control and learning to function effectively in a
group when a teacher or other adults were not aiding in decision making.

Part II of the Test: Operations Stage

1. Involvement--a variable concerning the extent to which the
participants exhibit and maintain interest in the solving of the problem
as they attempt to put their plans into operation.[3] Cooperation, enthu-
siasm, and sticking to the project were again involved here.

2. Atmosphere--a variable concerned with the changes in the class-
room climate as the pupils solve the problem.[4] Goals of group discussion
included tolerance, good sportsmanship, and understanding and helping each
other.

3. Activity--a variable dealing with the behavior of the children
who have withdrawn from the problem field.[5] Whispering, talking together,

---

[1]Ibid., p. 30.

[2]Ibid.

[3]Ibid., p. 34.

[4]Ibid.

[5]Ibid., p. 35.

moving around the room unnecessarily, or any activity other than engaging in relevant behavior were factors in this classification.

4. Success--a variable concerning the excellence of the final product and the time it takes to complete the task.[1] The goals of discussion employed here were the ability to use an organizational pattern of definition and to receive the satisfaction which comes from group thinking that has been successfully put into operation.

Training of Observers

The two observers used in this study were selected on the basis of their major areas of concentration in graduate speech work and their interest in group discussion. The following procedure was used for their orientation into the undertaking, based upon recommendations found in Damrin's article in the Journal of Experimental Education[2] and Bales' Interaction Process Analysis:[3]

1. Each observer was given a publisher's copy of the manual several days prior to the first meeting of the examiner and the observers in order to become familiar with the meanings of the categories included for rating in the test.

2. Four one-hour sessions were held in which the observers and the examiner discussed the meanings of the various categories and the purposes of the test. These first sessions were discussion situations;

---

[1]Ibid.

[2]Dora E. Damrin, "The Russell Sage Social Relations Test: A Technique for Measuring Group Problem Solving Skills in Elementary School Children," Journal of Experimental Education, XXVIII (September, 1959), p. 90.

[3]Bales, op. cit., pp. 85-87.

each person was encouraged to ask questions, make comments, present ideas and critically evaluate the instrument. The meetings were informal so that interpretations and comments could enable all three participants to obtain a clear idea of the purpose and meanings of each category.

3. After the third discussion session, a trial period was arranged involving a class of thirty-five elementary education students at the University of Oklahoma. The purpose of this trial period was to give the observers an opportunity to see a group reacting to the test and to help visualize the test in operation. This procedure not only increased under-standings of the instrument, but also increased the enthusiasm of the observers for working with the test. The trial period was handled exactly as if the test were being given to a group of elementary school children. All three problems were administered to this class.

4. The fourth discussion period was held immediately following the trial session in order that reactions and impressions could be eval-uated and fitted into the final interpretations of the use of the instru-ment.

<h2 style="text-align:center">Observer Reliability</h2>

In Damrin's reports of reliability studies of observers, only one observer was used in each classroom.[1] In this study, two observers simultaneously rated the same groups in each testing period involving the Russell Sage Social Relations Test in order to strengthen the accuracy of the scoring of the groups. Even though the two observer's ratings were to be pooled immediately following each pre- and post-test in the experi-mental study, a reliability check was made to determine the degree of

---

[1]Damrin, op. cit.

agreement between the raters and the consistency with which each observer

rated the same group.

The sample selected for the reliability study consisted of four

fifth-grade classes of pupils regularly enrolled in the Jackson Elementary

School and the Washington Elementary School, Norman, Oklahoma, during the

school year of 1961-62. All of these groups met the same criteria set for

the experimental study. With a total N of 132, each group was tested, and

after an interval of not more than two days, was re-tested; thus making

the eight trial periods recommended by Damrin for observers.[1] In order

to adequately test the intra-reliability of each observer, the two raters

were not told in advance which group they were going to work with during

the re-testing sessions.

Each of the classroom teachers was asked not to discuss the test

with the children until after both tests had been given, and the examiner

asked the children not to make inquiries from the teacher about it. The

same procedure for testing to be used in the experimental study was adhered

to in the reliability check. Only those pupils who took part in the first

test were allowed to be members of the group in the re-testing session.

Since any one group was not to be compared with any other group

and it was necessary for the two observers to gain experience in recording

behavior centered around all three possible problems in the test, groups

were randomly divided by lot to take either the footbridge and the dog

problems or the footbridge and the house problems.

In order to test the degree of agreement between the observers and

the degree of agreement of each observer's ratings in test and re-test

---

[1]Ibid.

situations of the same group, the following null hypotheses were formulated:

1. The ratings of Observer X and Observer Y are unrelated on the Planning Stage of the test and re-test for the same groups.

2. The ratings of Observer X and Observer Y are unrelated on the Operations Stage of the test and the re-test for the same groups.

3. The ratings of Observer X are unrelated on the Planning Stage of the test and the re-test for the same groups.

4. The ratings of Observer X are unrelated on the Operations Stage of the test and the re-test for the same groups.

5. The ratings of Observer Y are unrelated on the Planning Stage of the test and the re-test for the same groups.

6. The ratings of Observer Y are unrelated on the Operations Stage of the test and the re-test for the same groups.

The Kendall Coefficient of Concordance: W was selected to test the statistical significance of these agreements since Siegel states that this measure is "particularly useful in studies of interjudge and intertest reliability."[1] In testing the significance of the observed W in the inter-reliability check, a x^2 was employed since the N was larger than 7. The results of the inter-reliability check are shown in Table 1.

The first null hypothesis was rejected at the .10 level of significance, thus establishing that the two observers were in agreement on the Planning Stage of the test to the extent that only ten times out of a hundred trials could the agreement have been due to chance. In the same manner, the second null hypothesis was rejected at the .30 level of significance.

---

[1] Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Company, Inc., 1956), p. 229.

TABLE 1

COMPARISONS OF THE TWO OBSERVERS' RATING OF SIX GROUPS
ON THE RUSSELL SAGE SOCIAL RELATIONS TEST

	N	W	x^2
Planning Stage	15	.80	22.40 *
Operations Stage	15	.60	16.80 **

* Significant at the .10 level

** Significant at the .30 level

(df = 14)

Since the x^2 test of the significance of an observed W is used
only when N is larger than 7, the intra-reliability check could not be
submitted to this form of interpretation. According to Siegel, when N is
7 or less, the significance of any observed value of W is tested by
determining the probability associated with the occurrence under a null
hypothesis of a value as large as the s (sum of squares of the observed
deviations from the mean of the sum of the ranks) with which it is
associated.[1] By extrapolation, null hypotheses 3, 4 and 5 were rejected
at the .05 level of significance, thus assuring the intra-reliability of
Observer X in the Planning and Operations Stages and Observer Y in the
Planning Stage, since the observed s in each case was equal to or greater
than that shown in Table R of Siegel for the .05 level of significance.[2]
Null hypothesis 6 could not be rejected at the .05 level of significance,

[1]Ibid., p. 235.

[2]Ibid., p. 286.

indicating that there was less agreement in Observer Y's ratings on the
Operations Stage than on any of the others. However, since there is no
relevant external criterion for either observers' reliability or for the
ratings of fifth-grade pupils in social relations, the pooled ratings of
these two observers served as the "standard" in the experimental study.
Table 2 summarizes the results of the intra-reliability check.

Since there was a statistically significant higher agreement within
the observer's ratings than between them and the fact that the observers
ratings were to be pooled in the experimental study, it was assumed that
the intra-reliability would be the more important factor in determining
the acceptance of these two observers for this study. Although Observer
Y's ratings of the Operations Stage, were not highly consistent, it was
assumed on the basis of the other ratings, that the two observers were
reliable.

TABLE 2

COMPARISONS OF EACH OBSERVER'S RATINGS OF THE SAME SIX GROUPS
IN TESTS AND RE-TESTS OF THE RUSSELL SAGE SOCIAL
RELATIONS TEST

	Observer X			Observer Y		
	N	W	s	N	W	s
Planning Stage	7	.79*	80	7	.81*	87.50
Operations Stage	7	.72*	75.50	7	.30	33

* Significant at the .05 level

(k = 2)

Summarizing this chapter, it was shown how the _Russell Sage Social_ _Relations Test_ was interpreted in its various categories as a useful instrument for measuring the recommended goals of group discussion as they reflect the achievement of fifth-grade pupils in social relations. A report of the results of the observer reliability check was also presented.

In Chapter IV the results of the findings in the experimental study will be reported as comparisons are made in the achievements of six groups of fifth grade pupils in social relations skills after participating in a single pattern of class discussion stimuli over a sustained period of time.

CHAPTER IV

COLLECTION AND TREATMENT OF DATA

The problem in this study was to compare the effectiveness of three

commonly used classroom discussion procedures in terms of the group achieve-

ment in social relations skills of fifth-grade pupils from pre-test to

post-test.

Statistical Analysis of the Sample

To test the validity of the assumption that all groups taking part

in the study came from the same population as far as verbal ability and

social adjustment were concerned, the Lorge-Thorndike Verbal I.Q. Test

and the social adjustment part of the California Test of Personality were

given to each pupil as an index of their relationship to each other in

these areas.

The mean I.Q. was used as an index of the over-all verbal ability

of each group. The technique for determining the difference between the

means of two different groups of unequal size was taken from Wert, Neidt,

and Ahmann.[1] A t-test was run to determine the significance of the dif-

ferences among the fifteen possible relationships. Table 3 presents the

---

[1]James E. Wert, Charles O. Neidt, and J. Stanley Ahmann, Statistical
Procedures in Educational and Psychological Research (New York: Appleton-
Century-Crofts, Inc., 1954), pp. 128-133.

results of the t-test.

The null hypothesis was formulated that there is no statistically significant difference between the mean scores on verbal ability of the six groups. The null hypothesis was accepted (P < .01), in all cases except one. Using a table which Wilkinson presents that furnishes the probability of obtaining a certain number or more significant statistics in a set of N on the basis of chance alone, it was found that this one group comparison of t-scores out of the fifteen which could be rejected at the designated level, could happen by chance fifty three times out of a hundred trials.[1] Thus, it was assumed that all six groups did come from the same population as far as verbal I.Q. is concerned.

The same procedure was used for testing the significance of differences between groups in over-all social adjustment. Again, the mean of each group was used as an index of the social adjustment of each group. Table 4 shows the results of the t-test of the significance of differences between the mean scores as it was applied to the various combinations of groups on the California Test of Personality. The null hypothesis that there is no statistically significant relationship in the social adjustment of the six groups war rejected at the .01 level. Thus, it was assumed that all groups came from the same population as far as social adjustment is concerned.

Statistical Analysis of the Outcomes of Three Patterns of
Class Discussion Stimuli

In order to answer the questions posed and test the hypotheses

[1]Bryan Wilkinson, "A Statistical Consideration in Psychological Research," Psychological Bulletin, XLVIII (March, 1951), p. 158.

TABLE 3

COMPARISONS OF THE SIX GROUPS ON THE MEAN
VERBAL I.Q. OF THE LORGE-THORNDIKE
I.Q. TESTS

Groups	Mean Diff.	S. E. Diff.	t
A--B	1.97	3.66	.538
A--C	8.31	3.45	2.408
A--D	7.93	3.86	2.054
A--E	.31	3.41	.091
A--F	6.52	3.95	1.651
B--C	6.34	3.19	1.983
B--D	5.96	3.65	1.633
B--E	1.66	3.15	.527
B--F	4.55	3.73	1.220
C--D	.38	3.43	.110
C--E	8.00	2.90	2.749*
C--F	1.79	3.52	.508
D--E	7.62	3.39	2.248
D--F	1.41	3.93	.359
E--F	6.21	3.48	1.784

* Significant at the .05 Level of Confidence

TABLE 4

COMPARISONS OF THE SIX GROUPS ON THE MEAN SOCIAL
ADJUSTMENT SCORE ON THE <u>CALIFORNIA</u>
<u>TEST OF PERSONALITY</u>

Groups	Mean Diff.	S. E. Diff.	t
A--B	.45	2.87	.156
A--C	3.54	3.07	1.153
A--D	6.87	3.30	2.081
A--E	.20	3.08	.064
A--F	.93	2.83	.329
B--C	2.09	3.04	.688
B--D	6.42	3.27	1.963
B--E	.20	3.05	.066
B--F	.48	2.80	.171
C--D	4.33	3.45	1.260
C--E	2.84	3.18	.893
C--F	1.61	2.83	.569
D--E	7.17	3.46	2.072
D--F	5.94	3.23	1.839
E--F	2.23	3.01	.741

presented in the "Statement of the Problem" in Chapter I, it was first

necessary to randomly assign one particular type of class discussion

stimuli to each of the six fifth-grade classes participating in order to

avoid bias. This was done in the following manner:

1. All classes were assigned a class meeting time by the examiner.

Since none of the teachers had indicated in a preliminary meeting that there

would be possibilities of conflicts in schedule, and since the examiner had

never met any of the teachers prior to the study, this was done by lot,

designating a thirty minute period for class discussion to each class.

Beginning at nine thirty a. m., discussion sessions extended until two

p. m. Each class met at the same time for one week. The second week, the

schedule was reversed so that those classes which had been meeting in the

afternoons would have an equal opportunity to take part in class discus-

sion in the mornings. The times of the early and late morning classes

were also changed for the second week of discussion.

2. The assignment of one class to one pattern of class discussion

stimuli was also done by lot in the presence of another individual not

connected with the study. Groups A, B, C, D, E and F were designated

to take the place of the teacher's name. In this report, the groups

involved are referred to by their letter names. Table 5 shows the

particular pattern of class discussion assigned randomly to each group.

At the first meeting with each group the Russell Sage Social Rela-

tions Test was administered. This was done with all classes as closely

together as the school schedule would permit and resulted in all classes

having been tested within a one-week period. The results of this pre-

test for each group appear in Tables 6 and 7 which show the ranks of each

TABLE 5

CLASS DISCUSSION STIMULI ASSIGNED TO THE SIX GROUPS
PARTICIPATING IN THE STUDY

Group	N	Class Discussion Stimuli
A	29	Pupil-to-Pupil
B	29	Small Groups Reporting
C	24	Teacher-to-Pupil-to-Teacher
D	24	Small Groups Reporting
E	32	Teacher-to-Pupil-to-Teacher
F	20	Pupil-to-Pupil

Total N = 158

group's pooled ratings in each of the variables in the test other than the

two descriptively rated categories. It will be recalled that two separate

problems constituted the pre-test. On each of these problems, each variable

was rated by the two observers on a five point scale, a rating of 1 being

the lowest score and a rating of 5 being the highest score. The ratings

on both problems on each variable were first averaged so that the group's

performance on the entire test could be determined. This final rating on

each variable was then statistically treated by employing the Kendall

Coefficient of Concordance: W in order to determine the relationships in

behavior between the groups.[1] The null hypothesis that the six groups are

statistically unrelated in the ratings received on the Planning Stage and

[1]Siegel, op. cit., pp. 230-238.

TABLE 6

COMPARISONS OF THE SIX GROUPS IN PRE-TEST BEHAVIOR
ON THE <u>RUSSELL SAGE SOCIAL RELATIONS TEST</u>:
PLANNING STAGE

Group	Variable Participation	Communication	Ideas	Plan	Involvement
A	1.5	3	4	1.5	5
B	3.5	3.5	2	1	5
C	2	1	3.5	3.5	5
D	4	1.5	3	1.5	5
E	4	1	3	2	5
F	3.5	1	3.5	2	5

$s = 221.31$ $W = .628$

TABLE 7

COMPARISONS OF THE SIX GROUPS IN PRE-TEST BEHAVIOR
ON THE <u>RUSSELL SAGE SOCIAL RELATIONS TEST</u>:
OPERATIONS STAGE

Group	Variable Involvement	Activity	Success	Group Classification
A	4	1	3	2
B	4	1	3	2
C	3	1.5	4	1.5
D	3.5	3.5	1	2
E	3	1	4	2
F	4	3	1.5	1.5

$s = 76.50$ $W = .215$

the Operations Stage of the pre-test was rejected at the .05 level of significance, thus assuring the fact that all participants in the study were similar in their social relations behavior at the beginning of the study, as measured by the Russell Sage Social Relations Test. Since the groups were not different, no further analysis of the individual groups was necessary.

Two of the variables in the Planning Stage of the test were rated descriptively by the observers. An analysis of the ratings of the autonomy variable revealed that five of the groups entered into a brief discussion involving from four to seven children with an occasional prod or remind from the examiner. Group B had a more lengthy discussion, but was still assisted or reminded near the end of the discussion. The other descriptive variable was an over-all classification of each group, derived from a majority of ratings received on all the other variables. Five groups received a classification of immaturity in the Planning Stage, while Group E received a classification of semi-controlled.

In the Operations Stage, the descriptively rated variable was the atmosphere of the group. An analysis of the ratings on this variable indicated that Groups A and F were checked as bickering throughout the period, Groups B and E were checked as bickering in the initial period but becoming quarrelsome for the remainder of the time, and Groups C and D were checked as being friendly yet becoming noisy and excited as they put their plan into operation and solved their problem. The variations in the group atmospheres were not sufficiently different to justify concluding that the groups came from different populations as far as this single variable was concerned. The ratings of the atmosphere of the different

groups during the Operations Stage does indicate that all groups did become excited about the project and revealed their excitement in varying degrees of behavior.

At the first meeting with each group, which was for the purpose of having the pupils enter into a single pattern of class discussion, the examiner explained to the pupils that he was interested in sharing some different types of literature for boys and girls with the class and was anxious to get their reactions and feelings about various kinds of stories. The classes also were told what their particular class procedure for this period each day would be. Each class listened to the same background stimuli for approximately 10 minutes and the last 20 minutes were devoted to class discussion.

On the last day of discussion sessions, each pupil in each class was asked to fill out a questionnaire prepared by the examiner in order to determine the interest level of the pupils participating in one particular pattern of class discussion in that type of classroom procedure. Four pupils, or three percent of the total N, indicated that they did not enjoy the particular pattern of class discussion which they had engaged in during the study while all of the other pupils stated that either they enjoyed or enjoyed somewhat the type of classroom procedure used in their room during the study. The four pupils responding negatively represented all three patterns of class discussion stimuli. Twenty-six, or 16 percent of the total N, responded in the "somewhat" category indicating that they were not fully enthusiastic about the pattern of class discussion in which they engaged. These 26 also represented all of the three patterns of class discussion. On the basis that only 19 percent of the total number

of participants in the class discussions indicated that they reacted

negatively in any degree to the class discussion supports an assumption

that the interest level of the pupils was not a factor which would inter-

fere with group achievement.

During the week following the discussion sessions, the Russell Sage

Social Relations Test was again administered to each group to serve as a

measure of the group's achievement in social relations. In order to vary

the pre- and the post-tests problems, the footbridge and the dog designs

were given to each group as a basis for their planning and working together.

Again the ratings of the two observers were pooled immediately following

each test, and the pooled ratings on each problem were averaged to give

an index of the group's behavior on each variable. The results of this

test are presented in terms of assigned ranks in Tables 8 and 9. This

final rating on each variable was then statistically treated by employing

the Kendall Coefficient of Concordance: W in order to determine the

relationships in behavior between the groups.[1] The null hypotheses that

the six groups are statistically unrelated in the ratings received on the

Planning Stage and the Operations Stage of the post-test was rejected at

the .05 level of significance, thus assuring the fact that all partici-

pants in the study were similar in their social relations skills at the

end of the study, as measured by the Russell Sage Social Relations Test.

Since all groups apparently came from the same population as far as the

variables which could be measured statistically were concerned, no further

analysis of the individual groups was necessary. It can be concluded from

this statistical analysis that no one of the three patterns of class

---

[1]Siegel, op. cit.

TABLE 8

COMPARISONS OF THE SIX GROUPS IN POST-TEST BEHAVIOR
ON THE RUSSELL SAGE SOCIAL RELATIONS TEST:
PLANNING STAGE

Group	Variable Participation	Communication	Ideas	Plan	Involvement
A	4	2	2	2	4
B	4	2.5	2.5	1	5
C	2	3.5	3.5	1	5
D	4	3	2	1	5
E	3	1	2	4	5
F	3.5	1.5	3.5	1.5	5

s = 233   W = .677

TABLE 9

COMPARISONS OF THE SIX GROUPS IN POST-TEST BEHAVIOR
ON THE RUSSELL SAGE SOCIAL RELATIONS TEST
OPERATIONS STAGE

Group	-Variable Involvement	Activity	Success	Group Classification
A	3	2	4	1
B	3	2	4	1
C	3	2	4	1
D	3.5	3.5	1	2
E	3	1	4	2
F	3.5	3.5	2	1

s = 82   W = .229

discussion stimuli studied is more effective than the others in enabling pupils to achieve social relations skills as they are reflected in group behavior.

Summarizing the descriptive ratings, all six groups in the autonomy category were rated as having brief discussions with very little assistance from the examiner during the Planning Stage of the test. These ratings indicate a slight increase from the pre-test in the abilities of the group to plan on their own, but do not indicate that the differences are due to factors other than the increased familiarity with the test due to repetition. Five of the groups received an over-all classification of immaturity, while Group E was rated as restrained. These ratings also indicate that there was no significant change in the behavior of the groups from pre-test to post-test.

Subjective Observations of the Data and of the Discussion Sessions

It is of interest in this study to note that there were slight increases in ratings from pre-test to post-test in certain categories when the groups who engaged in the same pattern of class discussion stimuli are considered together. Table 10 presents the results of such an analysis.

From the above observations, it would appear that certain types of class discussion stimuli have the possibility of affording a better means than others to accomplish certain objectives.

The need for classroom teachers to set standards in each class for the different patterns of discussion in terms of objectives was observed. For example, in the Pupil-to-Pupil pattern of discussion where teacher domination was minimized, it was found that pupils were so used to raising

TABLE 10

REPORT OF OBSERVED GAINS MADE BY GROUPS ENGAGING IN THE
SAME PATTERN OF GROUP DISCUSSION STIMULI FROM
PRE-TEST TO POST-TEST

Groups	Type of Discussion	Variables
A--F	Pupil-to-Pupil	Participation Activity Success
B--D	Small Groups Reporting	Plan Involvement
C--E	Teacher-to-Pupil-to-Teacher	Communication Plan Involvement

their hands and looking at the teacher when they talked, that standards of procedure had to be set in order to give the pupils an opportunity to develop skill in autonomy.

Some of the specific observations made by the examiner during this study that have implications for the classroom teacher in terms of improving the social relations skills of her pupils are listed below:

1. The perennial problem in the Pupil-to-Pupil pattern of discussion was the fact that a few pupils consistently did all of the talking. Individual responsibility for contributing to a discussion and the skill of drawing others into the discussion appeared to be an area for development in fifth-grade pupils.

2. Frequently during the study, the regular classroom teachers would comment that it was not their best pupils who were taking part. Assuming that they meant best in the academic sense, classroom teachers

should make constant observations of the relationships between academic ability and social ability in class discussions in order to determine the cause and effect relationships of the two.

3. The regular classroom teachers of the pupils involved in this study also frequently commented that many children who normally did little talking took an active interest in the discussion periods. This would indicate the need in most elementary classrooms for opportunities for class discussion centered around a variety of interest patterns.

4. The need for classroom teachers to determine the sources of difficulty of individual pupils who will not take part in class discussion was further illustrated when some children in this study would talk freely with the examiner outside the classroom, but would never take part in the class discussion.

5. In some instances, it was observed that pupils used the class discussion situation as an opportunity to display their hostility toward other members of the class by constantly directing questions to other pupils whom they obviously disliked. Since tolerance, acceptance of others, and friendly disagreements are goals of group discussion activities, the classroom teacher should be constantly aware of any abuses of the opportunities given to children to develop these skills.

6. Pupils often indicated a narrow span of thought, or the inability to think through a point of view as they talked. Many comments were short and stated simply as, "I think. . ." or "I feel. . ." without an explanation of why they thought or felt a certain way. Skill in developing ideas was an observed need of fifth-grade pupils as reflected through the behavior in discussion of pupils in this study.

7. The status structure of single classes was obvious in the group behavior of class discussions at times during the study. In the classes participating in the Small Groups pattern and the Pupil-to-Pupil pattern, certain pupils were always looked to first by the other pupils to make contributions. Whether such status structure is based upon the brightness of the pupil or upon the ability of individual pupils to express themselves well, or some other factor, the classroom teacher should constantly make an effort to see that all pupils feel that their comments have equal value with every other pupil's comments in a group discussion situation.

The above observations made by the examiner during the study are not intended to be a criticism of the particular pupils involved in the study, but are presented here because they are typical of the behavior which can and should be observed by any classroom teacher during class discussions which are designed to improve the social relations skills of the pupils.

CHAPTER V

SUMMARY AND CONCLUSIONS

This study was focused on a speech activity in the elementary school. Because throughout their school days and throughout their lives, children will probably use oral communication much more than any social relations skill, classroom discussion situations are a vital part of the elementary school program. This study evolved from the premise that little experimental work has been done in the teaching of oral communication of elementary school children as they function as a group, and that some of the theories and recommendations included in current textbooks should be subjected to further analysis.

Since certain social relations skills are needed by participants in group situations and one of the major goals of classroom discussion is to develop these skills, the purpose of this study was to find out if any one of three specific patterns of class discussion stimuli enables a class of fifth-grade pupils to achieve, as a group, any of the specific skills involved in social relations.

The specific purposes of this study were:

1. To compare selected patterns of class discussion stimuli as to their effectiveness in helping elementary school children improve their social relations skills

57

2. To relate the implications of the findings of the study for the classroom teacher as a partial criterion for the selection of classroom discussion procedures

In order to answer the questions raised by the stated purposes of the study, a survey of the recommended goals of groups discussion as they reflected the ultimate objectives sought in social relations was made by reviewing current textbooks for elementary teachers in language arts, social studies and speech. Twenty-two recommended goals of group discussion fell within the ten categories of the Russell Sage Social Relations Test, which was selected as a pre- and post-test for the subjects in the study. Each category in the test received a rating on a five-point scale by two observers as the classes participated in the test. The observers were trained and their reliability established prior to the testing sessions.

Six classes of fifth-grade children took part in ten consecutive sessions of class discussion, two groups being randomly assigned to one of the three patterns of class discussion stimuli selected for consideration in this experimental study. The three patterns of class discussion stimuli studied were (1) Pupil-to-Pupil Discussion, (2) Small Groups Reporting, and (3) Teacher-to-Pupil-to-Teacher Discussion. Types of literature and illustrative stories of each type were used as background stimuli for the class discussions.

Statistical analyses were made to establish that all groups came from the same population as far as verbal I.Q. and social adjustment were concerned and to compare the effectiveness of the outcomes of the three patterns of class discussion stimuli.

Findings

Even though the interpretations of each statistical analysis have been included in the preceding chapters as they were apropos to the results of the treatment of the data, the most significant findings are again reviewed here in order to receive a broader perspective of them in light of the entire study.

1. It was found that in the observer reliability study the two observers, who were to assess the amount of skill which a classroom group of children possess in a problem-solving situation, were sufficiently related in their ratings to continue to serve as observers in the experimental study.

2. An analysis of the ratings of the groups to determine statistically significant changes from pre-test to post-test indicated that no one single pattern of the three selected classroom discussion stimuli is more effective than the others in developing social relations skills when the entire class is evaluated as a group.

3. An analysis of the ratings of each group indicated that the outcomes commonly associated with the three patterns of classroom discussion are justifiable. Pupil-to-Pupil Discussion appears to increase group participation, success and activity more than the other patterns. Small Groups Reporting enables pupils to make progress in planning and involvement. Teacher-to-Pupil-to-Teacher Discussion appears to encourage group achievement in communication, plan and involvement.

4. A questionnaire submitted to all pupils participating in the study indicated that fifth-grade pupils have a high interest level in class discussion procedures, regardless of the pattern of stimuli.

Conclusions

The following conclusions and implications for the elementary school teacher may be drawn from the findings in this study:

1. Regardless of the pattern of stimuli, class discussion is a useful technique for developing the social skills of elementary school children.

2. When choosing discussion activities, the classroom teacher should set up objectives based upon recommended goals of group discussion and systematically offer opportunities for children to participate in this type of activity, as well as systematically measure the outcomes of group participation. This should be done, not only in terms of individual growth, but also in terms of the way individual pupils function in a group situation. The Russell Sage Social Relations Test proved to be a useful instrument which the classroom teacher might use to diagnose and measure the group behavior of her class in social relations skills.

3. From an analysis of the ratings received on the Russell Sage Social Relations Test, it was concluded that each pattern of class discussion stimuli appeared to develop specific social relations skills which are normally associated with that type of discussion; e.g., the free, open atmosphere which is characteristic of the Pupil-to-Pupil pattern of discussion enabled both classes engaging in this type, to make gains in pupil participation and activity when the two classes engaging in a different pattern of discussion did not both reflect gains in these particular areas. The same assumption can be made from the ratings of the two groups engaged in the Small Groups Reporting type of discussion. These two groups both made gains in the variables of plan and interest pattern

of the class which the two classes involved in the Pupil-to-Pupil pattern did not. The ratings on the communication variable reflected the gains of the two groups engaging in the Teacher-to-Pupil-to-Teacher pattern of discussion, while the two groups of the other patterns did not both reflect gains in this area when considered together.

4. From observations made during the study, implications of these for the classroom teacher were made in terms of improving the social relations skills of her pupils. It was concluded from these observations that classroom teachers should be aware of the many factors operating in the social interaction of pupils in order to set up objectives in a program of class discussion and to effectively offer guidance toward the attainment of desirable social skills.

Recommendations

Some of the recommendations for further study which can be derived from the findings and observations made in this study are listed below so that ways may be suggested in which our present understanding of the social skills of elementary children might be improved.

1. A longitudinal study of the social relations skills of elementary school children with age or grade level as a variable would aid in the present understanding of those skills which need the most attention at certain grade levels in the social development of children.

2. A comparison of the social relations skills of children of different sex, socio-economic levels, academic ability, or races would give further insight into the social development of children.

3. The need for valid and reliable instruments especially designed for elementary school children in measuring social relations skills and

group discussion behavior is at present a barrier to much needed research in these areas; consequently, the development of such instruments must be accomplished before further insights into these areas can be gained.

4. More and more teachers should become familiar with the Russell Sage Social Relations Test as a possible instrument for classroom use in helping to determine the social skills of pupils.

5. Studies centered around the group discussion behavior of pupils when pressures such as grades are applied and the behavior of pupils when artificial pressures are eliminated would help to increase our understandings of the effects of such stimuli.

6. Comparisons of individual growth in social relations skills and group accomplishments in discussion should reveal the transfer of learning in this area to applicable situations where the learning is actually put to a test.

7. The intra-class structure as revealed through sociometric measurements as compared with group achievements of certain objectives would improve our knowledge of the effects status structure has upon the functioning of a group of elementary children.

8. Peer-ratings in discussion compared with trained observers' ratings might serve to reveal the understandings of pupils of the purposes and goals of a classroom activity involving discussion.

The social relations skills of effective oral communication, constructive participation in a group, thinking through problems and devising a plan of action, autonomy, relevant activity and interest, personal satisfaction with group success, and contributing to a desirable atmosphere while working cooperatively and sharing with others are all-pervasive in

our daily lives. The American elementary school has accepted the responsibility for helping to develop these skills in the pupils for whom it assumes guidance in learning. The classroom discussion situation is the most prevalent avenue in the elementary school for developing these skills and by continuing, through research, to isolate various patterns of class discussion stimuli in terms of objectives sought by the activity, understandings and insights into the social development of children will enable the classroom teacher to fulfill her responsibility in the educational process.

BIBLIOGRAPHY

Books

Adams, Fay and Tiegs, Ernest W. _Teaching the Social Studies_. New York: Ginn and Company, 1959.

Auer, J. Jeffery. _An Introduction to Research in Speech_. New York: Harper and Brothers, Publishers, 1959.

Bales, Robert F. _Interaction Process Analysis_. Cambridge, Massachusetts: Addison-Wesley Press, Inc., 1950.

Bryant, Donald C. and Wallace, Karl R. _Fundamentals of Public Speaking_. New York: Appleton-Century-Crofts, Inc., 1953.

Caswell, Hollis L. and Foshay, Arthur W. _Education in the Elementary School_. New York: American Book Company, 1957.

Crutchfield, Richard S. "A New Technique for Measuring Individual Differences in Conformity to Group Judgment," _Proceedings 1954 Invitational Conference on Testing Problems_. Princeton, New Jersey: Educational Testing Service, 1954.

Dawson, Mildred A. and Zollinger, Marian. _Guiding Language Learning_. Yonkers-on-Hudson, New York: World Book Company, 1957.

Gardner, Eric F. and Thompson, George G. "Measuring and Interpreting Social Relations," _Test Service Notebook_, No. 22. Tarrytown, New York: Harcourt, Brace and Company, 1959.

Greene, Harry A. and Petty, Walter T. _Developing Language Skills In The Elementary School_. Boston: Allyn and Bacon, Inc., 1959.

Guilford, J. P. _Psychometric Methods_. New York: McGraw-Hill Book Company, Inc., 1954.

Havighurst, Robert J. "Social Development," _Encyclopedia of Educational Research_, ed. Chester W. Harris. The Macmillan Company, 1960.

McBurney, James H. and Hance, Kenneth G. _The Principles and Methods of Discussion_. New York: Harper and Brothers, Publishers, 1939.

Petty, Mary Clare. Intraclass Grouping in the Elementary School. Austin, Texas: Bureau of Laboratory Schools, The University of Texas, 1953.

Pronovost, Wilbert. The Teaching of Speaking and Listening in the Elementary School. New York: Longmans, Green and Co., 1959.

Ragan, William B. Teaching America's Children. New York: Holt, Rinehart and Winston, 1961.

Rasmussen, Carrie. Speech Methods in the Elementary School. New York: The Ronald Press Company, 1949.

Scott, Louise Binder and Thompson, J. J. Speech Ways. St. Louis: Webster Publishing Company, 1955.

Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, Inc., 1956.

Wert, James E., Neidt, Charles C. and Ahmann, J. Stanley. Statistical Procedures in Education and Psychological Research. New York: Appleton-Century-Crofts, Inc., 1954.

Wingo, G. Max. "Methods of Teaching," Encyclopedia of Educational Research, ed. Chester W. Harris. The Macmillan Company, 1960.

Articles and Periodicals

Auer, J. Jeffery and Smith, Raymon G. "Speaking," Review of Educational Research, ed. David R. Krathwohl, XXXI (April, 1961), pp. 152-56.

Bales, Robert F. and Gerbrands, Henry. "The 'Interaction Recorder': An Apparatus and Check List for Sequential Content Analysis of Social Interaction," Human Relations, I, No. 4, 1948, pp. 456-63.

Damrin, Dora E. "The Russell Sage Social Relations Test: A Technique for Measuring Group Problem Solving Skills in Elementary School Children," Journal of Experimental Education, XXVIII (September, 1959), pp. 75-90.

Dickens, Milton and Hefferman, Marquerite. "Experimental Research in Group Discussion," The Quarterly Journal of Speech, XXXV (February, 1949), p. 23.

Douglas, Jack. "The Measurement of Speech in the Classroom," The Speech Teacher, VII (November, 1958), pp. 309-19.

Raths, Louis E. "Values Are Fundamental," Childhood Education, XXXV (February, 1959), pp. 246-47.

Rehage, Kenneth J. "A Comparison of Pupil-Teacher Planning and Teacher-Directed Procedures in Eighth Grade Social Studies Classes," Journal of Educational Research, XLV (October, 1951), pp. 111-15.

Rush, J. H. "The Next 10,000 Years," The Saturday Review, XLI (January 25, 1958), p. 36.

Southall, Maycie K., "How Do Children Learn?" Childhood Education, XXXVI (December, 1959), pp. 151-52.

Wilkinson, Bryan. "A Statistical Consideration in Psychological Research," Psychological Bulletin, XLVIII (March, 1951), p. 158.

Withall, John. "Research Tools: Observing and Recording Behavior," Review of Educational Research, ed. David R. Krathwohl, XXX (December, 1960), p. 496.

Zirbes, Laura. "What Should We Know About Learning?" Childhood Education, XXVI (December, 1959), p. 154.

Manuals

Damrin, Dora E. Manual for the Russell Sage Social Relations Test. Princeton, New Jersey: Educational Testing Service, n.d.

Lorge, Irving and Thorndike, Robert L. Lorge-Thorndike Intelligence Tests. New York: Houghton Mifflin Company, 1954.

Thorpe, Louis P., Clark, Willis W. and Tiegs, Ernest W. Manual: California Test of Personality. Los Angeles: California Test Bureau, 1953.

APPENDIX A

RAW DATA

SCORES ON THE LORGE-THORNDIKE INTELLIGENCE TEST AND THE
CALIFORNIA TEST OF PERSONALITY

Pupil	Group	Verbal I. Q.						Social Adjustment					
		A	B	C	D	E	F	A	B	C	D	E	F
1		122	108	119	83	121	96	61	66	35	32	69	56
2		113	115	114	98	106	120	68	50	69	60	70	57
3		123	111	102	91	107	123	46	66	50	49	64	55
4		127	121	83	128	106	116	70	58	46	36	46	68
5		111	117	83	124	109	119	51	63	36	62	70	64
6		110	111	83	105	107	107	67	57	40	28	66	64
7		89	119	121	88	116	88	25	63	69	49	61	60
8		102	119	108	125	138	107	51	69	64	59	64	58
9		92	101	96	109	105	90	64	67	60	56	52	55
10		114	108	95	106	123	113	66	67	58	66	66	51
11		112	106	104	99	92	76	55	62	64	69	53	33
12		138	130	99	119	122	106	66	67	59	70	63	69
13		123	124	116	92	114	116	43	68	64	34	66	67
14		131	109	112	87	119	123	66	48	47	55	57	50
15		121	106	118	112	115	101	69	52	54	41	53	60
16		121	117	94	99	106	100	64	65	62	59	55	41
17		114	108	121	101	88	97	71	62	56	33	39	53
18		140	103	104	109	97	105	65	54	68	49	45	61
19		115	96	122	107	94	111	46	50	63	55	71	58
20		104	105	90	115	118	95	66	48	45	55	58	58
21		109	127	108	110	118		66	71	69	54	60	
22		122	104	117	117	125		63	37	62	69	64	
23		97	138	74	85	117		50	67	35	44	60	
24		82	76	105	88	112		44	33	52	39	67	
25		121	82			118		67	39			53	
26		75	93			105		43	60			68	
27		111	118			103		57	51			59	
28		103	103			130		59	38			47	
29		101	115			128		48	67			58	
30						111						59	
31						98						62	
32						105						60	

OBSERVER RATINGS ON THE RUSSELL SAGE SOCIAL RELATIONS TEST

Inter-Reliability Study

Planning Stage

	Group R Test Problems		Group R Re-Test Problems		Group S Test Problems		Group S Re-Test Problems		Group K Test Problems		Group K Re-Test Problems		Group M Test Problems		Group M Re-Test Problems	
	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Observer X	4	5	5	5	2.5	4	4	4	5	5	5	5	4	4	4	*
Observer Y	5	5	4	5	3	4	2.5	4	4	4	4	5	1.5	3	3	*

Operations Stage

	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Observer X	4	3.5	4	3.5	2.5	2.5	3.5	2.5	4	4	3.5	3.5	3.5	3.5	2.5	*
Observer Y	5	4	2.5	1.5	4	1	2.5	2.5	3.5	2.5	5	5	3.5	3.5	2	*

* problem not completed by the class

OBSERVER RATINGS ON THE RUSSELL SAGE SOCIAL RELATIONS TEST

Intra-Reliability Study

Observer X

Planning Stage

	Group R		Group S		Group K		Group M	
Problems	1	2	1	2	1	2	1	2
Test	4	5	2.5	4	5	5	4	*
Re-test	5	5	4	4	5	5	4	*
Operations Stage								
Test	4	3.5	2.5	2.5	4	4	3.5	*
Re-test	4	3.5	3.5	2.5	3.5	3.5	2.5	*

* problem not completed by the class

Observer Y

Planning Stage

	Group R		Group S		Group K		Group M	
Problems	1	2	1	2	1	2	1	2
Test	4	3.5	2.5	2.5	4	4	3.5	*
Re-test	4	3.5	3.5	2.5	3.5	3.5	2.5	*
Operations Stage								
Test	5	4	4	1	3.5	2.5	3.5	*
Re-test	2.5	1.5	2.5	2.5	5	5	2	*

* problem not completed by the class

Pooled Observer Ratings in the Russell Sage Social Relations Tests
Planning Stage

	GROUP A				GROUP B				GROUP C			
	Pre		Post		Pre		Post		Pre		Post	
	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2
Participation	2	2	2.5	3	4	2	2	2.5	2.5	2.5	1.5	2
Communication	1.5	1	1	3	4	2	2	2	1.5	1	1	1.5
Ideas	3	3	2	2	3.5	2	2	2	2	2	2	3.5
Plan	2	2	2	2	1.5	1	2	1.5	2	2	1	1
Involvement	3.5	4	4	4	4	4.5	5	4.5	3	4	4	4
Autonomy	2A	2A	2PA	3A	5	5	3A	3A	1.5AP	1.5AP	1P	1P
Over-All Classification	3 *	3 *	3 *	3 *	3 *	3 *	3 *	3 *	3 *	3 *	3 *	3 *

	GROUP D				GROUP E				GROUP F			
	Pre		Post		Pre		Post		Pre		Post	
	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2
Participation	2	3	3	2.5	3.5	3.5	3	2.5	2	2	2.5	2
Communication	1	1	2.5	2	1	2	3	1.5	1	1	1.5	1.5
Ideas	2	2	2	2	2	3	3	2	2	2	2.5	2
Plan	1	1	1.5	1.5	1	3	4	4	2	1.5	1.5	1.5
Autonomy	2A	2A	2A	2A	2A	3A	2P	2AP	1A 2P	1A 2P	2P	2P
Over-All Classification	3 *	3 *	3 *	3 *	4 **	4 **	3 *	3 *	3 *	3 *	2 ***	2 ***

* Immature ** Semi-Controled *** Restrained

Pooled Observer Ratings in the Russell Sage Social Relations Tests
Operations Stage

	GROUP A				GROUP B				GROUP C			
	Pre		Post		Pre		Post		Pre		Post	
	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2
Involvement	4.5	4.5	4.5	4.5	4.5	3.5	4	3	5	3.5	4	3.5
Atmosphere	3H	3H	5-4H	2E-3H	1.5H	2H	3H	3H-3E	3E	2E-3H	2E	2H
Activity	2	2	4.5	4	1.5	3	3	3.5	5	2	3	3
Success	3	5	5	5	3	4	5	5	5	5	5	4
Over-All Classification	3.5 **	3.5 **	3.5 *	3.5 *	2.5 ***	3 **	3 *	3 *	3.5 *	3.5 *	1.5 ****	1.5 ****

	GROUP D				GROUP E				GROUP F			
	Pre		Post		Pre		Post		Pre		Post	
	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2	Prob.1	Prob.2
Involvement	5	4	4	4	3	3.5	3.5	4	4	4	5	4
Atmosphere	HN	HE	HE	EH	1.5H	3CH	3H	3H	3H	3H	4H	2E
Activity	5	4	4	4	1	3	3.5	3	3.5	4	5	4
Success	3	4	4	1.5	3	4	5	5	3	3	5	2
Over-All Classification	4 *	4 *	4 *	3 ***	2 **	3.5 ***	4 **	3 **	3 ***	3 *	4 *	1.5 *****

* Immature   ** Excited   *** Bickering   **** Rowdy

APPENDIX B

Rating Sheets

RSSR OBSERVATION RECORD

Planning Stage

Teacher _____ School _____ Grade _____ No. in Group _____

Examiner _____ Observer _____ Date _____ Problem No. _____

	Blocks	Initial	Middle	Middle	Middle	Decision
Involvement						

Ideas

Construction Group								
Leader-Groups								
Organized Groups								
Leader only								
Nominations-Selections								
Unorganized Groups								
All at once								
Unscorable								
Same as last time								

Communication

Suggests Different Idea								
Repeats Idea								
Evaluates-Improves Idea								

Autonomy

Prods								
Reminds								
Assists								

Plan:

RSSR OBSERVATION RECORD

Operations Stage

Involvement

90-100%								
Approximately 75%								
Approximately 50%								
Approximately 25%								
Fewer than 25%								

Atmosphere

Quiet-Suppressed								
Friendly-Supportive								
Noisy-Joking								
Tense-Excited								
Bickering-Squabbling								
Boisterous-Screaming								
Angry-Quarrelsome								

Activity

Socializing-Quiet Play								
Sitting or Working								
Noisy Play								
Heckling-Nagging								

Success: Time problem completed _____

Number of errors _____

Test Stopped _____

SCORING PROFILE SHEET

Planning Stage

Teacher _____ School_____ Grade _____ No. in group _____

Examiner _____ Observer _____ Date _____ Problems _____

Profile of Group Performance*

Participation _____
              1   2   3   4   5

Communication _____
              1   2   3   4   5

Ideas   _____
              1   2   3   4   5

Plan   _____
              1   2   3   4   5

Involvement   _____
              1   2   3   4   5

Autonomy
(record as A, 1   2   3   4   5
R, or P)

Classification of Group

Group Type	Partic.	Com.	Ideas	Plan	Invol.	Auton.	Majority of Scores	Rating on Problems 1, 2, 3
Mature	5	4-5	4-5	5	5	5	5	___ ___ ___
Dependent	4-5	3-4	3-4-5	4-5	4-5	4A	4	___ ___ ___
Immature	2	1-2	1-2	1-2	4-5	1A-2A-3A	**	___ ___ ___
Semi-Contld.	3-4	4-5	4-5	4-5	3-4-5	3R-4R	4	___ ___ ___
Semi-Restnd.	3-4	3-4	3-4-5	3-4-5	2-3	3P-3A-4A	3	___ ___ ___
Uncontrolled	1	1-2	1-2	1-2	1-2	1R-2R	1 or 2	___ ___ ___
Restrained	1-2	1-2	1-2	1-2	1-2	1P-2P	1 or 2	___ ___ ___

*Performance on problem 1 is recorded in blue
Performance on problem 2 is recorded in red
Performance on problem 3 is recorded in black

**The distinguishing feature of the profile of the Immature Group is an average score of 1 or 2 on the first four variables combined with a high score on Involvement and an Assist rating on Autonomy.

SCORING PROFILE SHEET

Operations Stage

Profile of Group Performance*

Involvement
| 1 | 2 | 3 | 4 | 5 |

Atmosphere
| 1 | 2 | 3 | 4 | 5 |

Activity
| 1 | 2 | 3 | 4 | 5 |

Success
| 1 | 2 | 3 | 4 | 5 |

Classification of Group

Group Type	Involvement	Atmosphere	Activity	Success	Majority of Scores	Rating on Problems 1, 2, 3
Mature	5	5	5	5	5	___ ___ ___
Rollicking	4-5	4N	4-5	3-4-5	4	___ ___ ___
Suppressed	3-4	4H	3-4	3-4-5	3 or 4	___ ___ ___
Immature	4-5	3E-4E-5	4-5	2-3-4	3 or 4	___ ___ ___
Excited	3-4-5	2E-3E-4E	4-5	2-3-4	3 or 4	___ ___ ___
Bickering	2-3	3H	1-3	2-3-4	2 or 3	___ ___ ___
Disinterested	1-2	4H-4E-5	3	4-5	**	___ ___ ___
Rowdy	2-3	1E-2E	1-2	1-2	1 or 2	___ ___ ___
Quarreling	2-3	1H-2H	1-2	1-2	1 or 2	___ ___ ___

*Record performance on each problem using the same color code as employed in the planning stage.

**The distinguishing feature of the profile of the Disinterested Group is the low involvement score coupled with the high Success score.

APPENDIX C

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __1__   Type of Literature: <u>Historical Fiction</u>

Book: Keith, Harold. Rifles for Watie. New York: Thomas Y. Crowell
        Company, 1959.

1. What are some other things about Jeff and Bess which the first part of
    the story did not tell that you would be interested in knowing? Why?

2. How would you describe the homelife of Jeff and Bess?

3. How would you describe the bushwackers?

4. Why do you think Jeff didn't trust the bushwackers at first glance?

5. Why do you think Jeff tried so hard to think of ways to help his
    family? What does this tell us about Jeff's character?

6. Can you think of other ways that Jeff and Bess might have helped their
    family solve the problem which confronted them?

7. How do you think fathers should react, and what do you think they
    should do, when a son tells them that he wants to leave home and
    join the army?

8. Do you think that fist-fighting was more important in those days than
    it is now? Why?

9. What do you think of Jeff's Statement, "I don't want it (the war) to
    end before I get there?"

10. What other situations do you think Jeff will get into as he joins the
    army?

11. How do you think Jeff and his sister would be dressed for their duties
    around the house?

12. Can you think of any problems that Jeff might have as he leaves home?
    How do you think he will solve these problems?

13. Do you think the story is of interest to both boys and girls? Ex-
    plain.

14. What do you think of stories where the author mixes real facts with
    imaginary facts? Why?

15. Do you like to read stories that take place near your own home or
    state? Why or why not?

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __2__   Type of Literature: __Myths__

Book: Kipling, Rudyard. Just So Stories. Garden City, New York:
         Doubleday and Company, 1912. "How the Rhinoceros Got his
         Skin".

1. What do you think a Parsee looks like?

2. What do you think you would have done if a rhinoceros had come up to
    you?

3. Where do you think the Mazanderos, Socotra and Promontories of the
    larger Equinox are?

4. What does a rhinoceros' skin remind you of? Why?

5. What do you think would be a good name for the rhinoceros?

6. Can you think of other ways the Parsee could have gotten revenge?

7. What other myths can you remember reading?

8. Do you like for myths to be comical or serious? Why?

9. What do you think the Parsee was thinking as he watched the rhinoceros
    put on his new skin?

10. What other animals have you read about that have bad tempers and poor
    manners?

11. How would you describe the uninhibited island on the shores of the
    Red Sea?

12. Why do you think legends and myths from different countries are
    strangely alike?

13. What do you think of exaggerations like, "one smile that ran around
    his face two times" in stories?

14. Do you like to read myths? Why?

15. What do you think is the difference between a fairy tale, a fable and
    a myth?

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __3__   Type of Literature: __Family Life__

Book: Forbes, Kathryn. Mama's Bank Account. New York: Harcourt, Brace
          and Company, 1943.

1. When do you think this story is taking place? Why?

2. What kind of transportation, communication, dress, etc., did they
    have at this time?

3. Do you feel that families did more things together then than they do
    now? Explain.

4. Did you feel that the story moved smoothly, or did you feel that the
    author was awkward in presenting it?

5. Did the sentences seem too short and choppy, or too long and complicated?

6. What are some things the family could have done when they found out
    that Mr. Hyde had written them a bad check? What would you have done?

7. How would you describe the family's relationships to each other and
    what kind of a house do you think they lived in?

8. What did you feel was the importance of describing how the neighbors
    moved away?

9. Do you like stories that are divided into separate incidents like this
    one, or do you prefer stories that lead up to one main part? Why?

10. Why do you think Nels would be only thinking about going to high school?
    What did a high school education mean at this time?

11. Do you like to read stories about people from foreign countries who
    now live in America? Why?

12. What do you think inspired the author to write this story? What was
    her purpose in writing the story?

13. Do you think that all people have to be famous to have a book written
    about them? Why?

14. Do you like stories written in first-person? Why?

15. Do you like to read stories centered around family life? What other
    stories have you read like this?

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __4__   Type of Literature: __Adventure__

Book: Sperry, Armstrong. <u>Call It Courage</u>. New York: The Macmillan
       Company, 1943.

1. What do you think might have caused Mafatu's fear of the sea?

2. How do you imagine the other boys and girls and the older people on
    the island acted toward Mafatu because of his fear?

3. What do you suppose Mafatu's parents thought about his fear?

4. How do you think Mafatu acted towards the other people on the island
    because of his fear?

5. What would you do to try to help someone you knew that had a fear that
    everyone made fun of?

6. What should a person do himself about a fear that he has?

7. If you found yourself on an island all alone what would be some of the
    first things you would do?

8. How do you think Mafatu's pets, the dog, Uri, and the albatross, Kivi,
    helped him while they were on the island?

9. Can you remember reading or hearing about some of the customs of
    island people? If so, what were they?

10. How would you describe the Sacred Place of the eaters-of-man?

11. How do you explain the fact that Mafatu was so brave while he was on
    the island when he had been so afraid before?

12. How do you suppose Mafatu managed to build a canoe and kill animals
    for food?

13. How do you suppose the story ends?

14. If Mafatu ever returns home, how do you think his people will feel
    about him then?

15. If you enjoy adventure stories a lot, what is it about them that
    makes you like to read them?

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __5__   Type of Literature: ___Mystery____

Book: McCloskey, Robert. Homer Price. New York: The Viking Press,
        1949. "The Case of the Sensational Scent".

1.   Can you think of some other appropriate names for the skunk?

2.   What are some other things that Homer might have done to capture the
     robbers?

3.   Did you find any exaggerations in the story? Why are exaggerations
     put into stories?

4.   Did you think it was typical of a sheriff to act the way the one in
     the story did when told of the whereabouts of the robbers?

5.   What is meant by the statement "Our early environment is responsible
     for our actions"?

6.   What newspaper headlines can you imagine appeared after Homer captured
     the robbers?

7.   Can you think of any ways that Homer might have helped his parents
     by capturing the robbers?

8.   How do you suppose the sheriff felt when he discovered that Homer
     really did have the robbers in the tourist court?

9.   What do you think is the difference between a detective story and a
     supernatural story? What have you read of each kind?

10. What is the main thing in a mystery story that causes you to enjoy it?

11. When compared with the other stories we have read, what do you find
     missing?

12. What are some other possible endings for the story?

13. What are some other unusual pets boys and girls might have and what
     would be the fun in having them?

14. What do you think are the values in reading mysteries?

15. Do you think girls like mysteries as well as boys? Explain.

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __6__   Type of Literature: __History__

Book: Shippen, Katherine B. New Found World. New York: The Viking
        Press, 1945.

1. What kinds of exciting things can you imagine there are to do and
    watch in South America?

2. Do you think that all conquerors are mean and force people to do
    things they don't want to do?

3. Do you think that conquerors often do not practice conservation of
    natural resources and thus exhaust the supply quickly?

4. Why do you suppose the story about El Dorado got started?

5. Do you think that there is a place, or ever really was a place, like
    El Dorado? How do you think it might look?

6. Can you think of other stories where men have endlessly searched for
    something that does not exist?

7. What do you think drives men to search for things that they are not
    sure of finding?

8. How do you think people would feel and do if they actually found
    something after a long search?

9. Do most people have some unconquerable goal in their minds? What is
    the importance of this to human beings?

10. What picture do you get of the thick jungles of South America?

11. How do you think the Indians in South America in those early days
    differed from those living in what we call the United States?

12. How would you solve the riddle of how Quesado and men managed to settle
    down and live with the Chibchas Indians after they had killed the
    Indians' leaders?

13. Do you think there are many unexplored places left where a person can
    have exciting and dangerous adventures?

14. Do you like to explore, even if it is just in a nearby woods? What
    kind of enjoyment do you get from it?

15. How do you like reading real history as compared with reading other
    kinds of books?

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __7__   Type of Literature: __Science Fiction__

Book: Cameron, Eleanor. Stowaway to the Mushroom Planet. Boston:
       Little, Brown and Company, 1956.

1. What value do you think you get out of reading science-fiction stories?

2. Why do you think science is important in our daily lives?

3. What are some different kinds of science?

4. Would you like to belong to a science club? If so, what kind and why?

5. How would you describe a science-fiction story in relation to other
    kinds of stories?

6. Do you think The Arabian Nights and other very old stories might be
    called science-fiction? Why?

7. In your own words, describe the people of the Mushroom Planet.

8. What do you think Charles and David will find inside the Hall of the
    Ancient Ones?

9. What do you think will happen to Horatio?

10. What do you think the space ship of Charles and David looked like?

11. What do you find in the story that seems unreal?

12. What other stories of science-fiction have you read?

13. Do you think girls are as interested in science and science-fiction
     as boys?

14. Why do you think Mr. Bass so mysteriously disappeared?

15. What is it in science-fiction stories that you like best?

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __8__   Type of Literature: __Social Problems__

Book: Lenski, Lois. Judy's Journey. New York: J. B. Lippincott Company, 1947.

1. Why do you think Judy did not want to leave her new life in Bean Town when she had once thought it awful and dreadful?

2. Why do you think Judy did especially good work in school on the day of Gloria's party?

3. What do the statements that Judy brought Miss Norris, the teacher, some flowers and didn't forget about her little brother and sister after school, tell us about Judy?

4. Do you think Gloria and her friends disliked Judy mainly because she was older and bigger?

5. What do you think Gloria should have done? What could some of her friends have done to help Judy?

6. Do you think that disappointments are sometimes good for people? Explain.

7. Do you think Judy was wrong in wanting to associate with Gloria and her friends?

8. Why do you think it was so important to Judy to go to Gloria's party?

9. How should you act if someone starts tearing down a friend you like very much?

10. Why was Judy glad that she had not said anything to Gloria?

11. Do you think it helped Judy to forget her hurt feelings by moving away?

12. What do you think Judy learned from this experience?

13. What do you think friendship means?

14. Why are stories about big problems, like migrant families, important for us all to read?

15. Do you think we learn a lot about ourselves, about how to act and how to be, by reading stories like this? Explain.

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: ___9___   Type of Literature: ___Poetry___

Book: Bailey, Matilda and Leavell, Ullin W. Worlds of Adventure. New
           York: American Book Company, 1951. Selected Poems

1. Did you see any truth in the poem about Pirate Don Durk? Explain.

2. What do you think makes the poem about "How to Tell Wild Animals"
    funny?

3. What is the lesson to be learned from "The Raven and the Fox"?

4. What are some of the impossibilities you noticed in "Robinson Crusoe's
    Story"?

5. What are some of the things that keep you from doing your work that
    you mean to do each day?

6. How do you think the man who had two loves solved his problem?

7. How would you describe Angela and Carlotta?

8. What part of the poem "Casey at the Bat" gives you the greatest
    surprise?

9. Do you think that Casey deserved what came to him? Why?

10. Are people you know ever like Casey?

11. Do you think the author of "Casey at the Bat" knew a lot about
     baseball? Why?

12. How do you like poetry as compared with other kinds of reading?

13. What do you think makes a good poem?

14. Why do you think the rhythm is important to poetry?

15. What are some types of poetry that you remember reading?

CLASS DISCUSSION QUESTIONS

Background Stimulus Number: __10__   Type of Literature: __Classics__

Book: Kottmeyer, William (adapt.) King Arthur and His Knights. St. Louis:
Webster Publishing Company, 1952.

1. Why do you think a knight of old would have a hard time in battle
today?

2. What personal characteristics do you think a knight had to have?

3. What do you think was the real reason that knights fought?

4. What kind of weapons do you suppose a knight carried besides his sword?

5. What do you think a knight looked like when he was dressed for battle
or for an adventure?

6. Can you describe how the fair ladies of the time might have looked?

7. How do you think knights ordinarily got training for their job?

8. Why do you suppose some knights called themselves the Red Knight, the
Black Knight, the Green Knight, etc.?

9. What did you think of Sir Lancelot making Gareth a knight out in the
middle of a forest? What other ways could a person be made a knight?

10. The age of knights and knighthood is often called, "The Age of Chivalry."
What do you suppose this means?

11. What do you think caused knighthood to go out of style?

12. What do you think happened to a knight who was guilty of cowardice or
some other serious misconduct?

13. Why do you think the Lady Linet asked Gareth to spare the lives of
several of the mean knights he fought with?

14. In England today, some people are still honored by being knighted.
What do you think it means today?

15. What other stories have you read that have knights and fair ladies in
them?

APPENDIX D

EXAMPLES OF CLASS DISCUSSION TAKEN FROM A TAPE RECORDING

Background Stimuli: Lenski, Lois, Judy's Journey.

I. Teacher-to-Pupil-to-Teacher: (All names used are fictitious)

Examiner: Richard, why do you think Judy did especially good work
in school the day of Gloria's party?

Richard: Well, she wanted to show that she was just as good as they
were so she could go to the party.

Examiner: Lois, do you think that Gloria and her friends disliked
Judy mainly because she was older and bigger?

Lois: Maybe that was the reason, and maybe it was because she wasn't
as well as them or as rich as them, or something. (Janie
raises her hand)

Examiner: Alright, Janie.

Janie: Maybe because she moved around so much, or maybe she didn't
dress like they did and they were poor. Maybe because she
made better grades than they did.

Examiner: Bill, do you think that disappointments are sometimes good
for people?

Bill: Oh, sometimes they are and sometimes they aren't. In that
story, it taught them that she was just as good as they were.

Examiner: Richard?

Richard: Sometimes we don't always get our way. We have to have
sorrow sometimes because you can't have all happiness.

Examiner: Don, why do you think it was so important to Judy to go to
Gloria's party?

Don: I think that she wanted to make more friends and to find some-
thing better than what she had.

Examiner: Sue, why was Judy glad that she had not said anything to
Gloria?

Sue: Well, I don't know.

Examiner: Larry?

Larry: Because she thought that she would have really been sad after-
wards if she had said anything.

Examiner: Sally, what do you think Judy learned from this experience?

Sally: I think that she learned that she could get over her disappoint-
ments.

II. Pupil-to-Pupil: (All names used are fictitious)

Billy: I think if I had been Gloria I would have got the girls together
and got some money to buy Judy some shoes.

John: Yeah, but I think Gloria was real mean and thought that she was
real big and everything like that.

Billy: Gloria and the girls didn't want Judy to come to the party
because she was so good in arithmetic and because she shouldn't
have been in the fourth grade.

Bryan: I don't think Gloria should have made fun of her because she
didn't have any shoes and because her family was poor and
everything.

Sharon: I think that the reason she was so good in school that day
was because she was looking forward to the party.

Mary: I think that Judy acted right when she didn't say anything to
Gloria.

John: I don't. When Gloria stamped her foot, if she was mad enough,
she should have slapped at that other girl.

Betty: I think Judy had pigtails and was all messed up, and a feed-
sack dress on, and that her father had on blue carpenter's
overalls.

Jimmy: What do you think of it, Judy?

Judy: I think that the fortune teller was kind and thoughtful and
she had long black hair and long furs and stuff like that.

Bryan: I believe that she was a gypsy.

Carol: I think she had long black hair with braids.

John: I think she was a real old fat girl.

Billy: I think Judy's little brother was about six and the other one
about seven.

Louise: I think Gloria should have invited her to the party, and
when she didn't, Judy should have told her mother.

Ted: I disagree with Billy when he said that Judy's little brother
was six and her little sister was seven. I think the girl was
about three and the brother would be about four.

(Several pupils talk at once)

Billy: (Keeps talking after the others stop) She said that she had to
see that they got home safely after school, so I think they
would probably be six or seven.

(Several pupils begin, "I think. . .")

Sam: I think the car they had was sort of a jalopy and it was about
1930 or '49.

Phil: I disagree with you, Sam, because this story seems like it was
about 1900 or something like that, and they couldn't have a
1930 automobile if it was in about 1900. They had a Model A
or something like that.

Mike: Margie, weren't you trying to say something?

Margie: I believe that they finally found a place cheap enough and
got enough money and bought the place and stayed there.

III. Small Groups Reporting: (All names used are fictitious)

Janie Reporting: Why do you think Judy did especially good work in
school on the day of Gloria's party? We thought
because she was happy and was going to the party.
Allen?

Allen: Well, she did especially good work because if she didn't she
might have had to stay a little bit after school and get some
of her work done.

Janie Reporting: What do the statements that Judy brought Miss Norris,
the teacher, some flowers and didn't forget about
her little brother and sister after school, tell us
about Judy? We thought that she wasn't only thinking
about herself.

Clara Reporting: Do you think Gloria and her friends disliked Judy
mainly because she was older and bigger? Well, we
thought that maybe that was it too, but she was a
migrant and her father and mother moved from place
to place. Sue?

Sue: And it said in the story that some of them didn't like her
       because she was poor.

Clara: Jim?

Jim: Because word probably got around town that her father and mother
       got fired.

Clara Reporting: What do you think Gloria should have done? We thought
                   she should have helped out some way by inviting her
                   to the party and making her happier. To help her out
                   in school or to get her something; I mean, to make her
                   feel like they wanted her to feel.

Clara Reporting: Do you think that disappointments are sometimes good
                   for people? We thought that if they didn't have
                   disappointments, they probably wouldn't know what it
                   felt like or what to do if it came up.

Howard Reporting: Do you think it helped Judy to forget her hurt
                    feelings by moving away? We thought, Yeah.

Ruby (in the same group):   I'd say no, because she could have made
                            friends again and she wouldn't have to face
                            disappointments so much.

Howard Reporting: What do you think Judy learned from this experience?
                    We thought that to go to parties you have to have
                    shoes and money and better clothes and that you
                    have to be invited to a party.

Kent Reporting: What do you think friendship means? Well, our group
                  thought that friendship means when you like a few
                  other people and the other people like you.

APPENDIX E

PUPIL QUESTIONNAIRE

<u>DO</u> <u>NOT</u> <u>WRITE</u> <u>YOUR</u> <u>NAME</u> <u>ON</u> <u>THIS</u> <u>PAPER</u>

Group: _____   Boy or Girl: _____

I. How much did you enjoy the type of class discussion we had?

    <u>Mark</u> <u>one</u>:

    1. I enjoyed it very much: _____
    2. I enjoyed it somewhat: _____
    3. I did not enjoy it very much: _____
    4. I did not enjoy it at all: _____

II. Which type of story or literature did you enjoy the most and which
    type did you enjoy the least?

    1. I enjoyed _____ (write letter) the most.
    2. I enjoyed _____ (write letter) the least.

    <u>TYPES</u>:

    A. Historical Fiction---<u>Rifles for Watie</u>
    B. Myths---<u>Just So Stories</u> "How the Rhinoceros Got His Skin"
    C. Family Life---<u>Mama's Bank Account</u>
    D. Adventure---<u>Call It Courage</u>
    E. Mystery---<u>Homer Price</u> "The Case of the Sensational Scent"
    F. History---<u>New Found World</u>
    G. Science Fiction---<u>Stowaway to the Mushroom Planet</u>
    H. Social Problems---<u>Judy's Journey</u>
    I. Selected Poems
    J. Classic---<u>King Arthur and His Knights</u>

GIRLS

RESULTS OF THE QUESTIONNAIRE

I. How much do you enjoy the type of discussion we had?

Group:	A	B	C	D	E	F	Totals
1. I enjoy it very much:	13	11	12	12	12	12	72
2. I enjoy it somewhat:	2	2		2	1	6	13
3. I do not enjoy it very much:							0
4. I do not enjoy it at all:							0

II. Which type of story or literature do you enjoy the most and which type do you enjoy the least?

Group:	A		B		C		D		E		F		Totals	
	M	L	M	L	M	L	M	L	M	L	M	L	M	L
1. Historical Fiction	2	1	1			1					2	3	5	5
2. Myths		2	1	1		2		3	1	2	2	1	4	11
3. Family Life			2	2	2		3		3		3	2	13	4
4. Adventure	3		1	1		1		1		2		1	4	6
5. Mystery	3		3		2	1	2	1	5		3		18	2
6. History			6	1	7	1	5	4	2	1		8	3	34
7. Science Fiction	4		2				5	1	2		4	1	19	2
8. Social Problems	1	1	1	1	6		2		2	2	1	1	13	5
9. Poetry		3		1		2		3		3		2	0	14
10. Classics	1		1				2	1		2	4		8	3

BOYS

RESULTS OF QUESTIONNAIRE

I. How much do you enjoy the type of discussion we had?

	Group: A	B	C	D	E	F	Totals
1. I enjoy it very much:	12	18	12	12	15	12	81
2. I enjoy it somewhat:	4	1	1	1	4	2	13
3. I do not enjoy it very much:			2	1		1	4
4. I do not enjoy it at all:							0

II. Which type of story or literature do you enjoy the most and which type do you enjoy the least?

	A		B		C		D		E		F		Totals	
	M	L	M	L	M	L	M	L	M	L	M	L	M	L
1. Historical Fiction	4	1	2	1	1	1		2				1	7	6
2. Myths		3				2	1	2		4		2	1	13
3. Family Life		2	4	2				2	1	1		1	5	8
4. Adventure	2	1	1		1		2		2	1	1		9	2
5. Mystery			2	3	2		4		5		6		19	3
6. History	1			8	1	4	2			3		5	4	20
7. Science Fiction	8		6	1	5		1	3	5		2		27	4
8. Social Problems		3		1		1		2	1	3		4	1	14
9. Poetry		6	1	3		2		4		6		1	1	22
10. Classics	1		3		2		4	1	5	1	6		21	2