This book is a general report on aspects of group processes in elementary and secondary schools with reference to appropriate research. Group processes are defined as changes in the social unit known as the group that take place over a period of time; the expected changes occur in three domains--cognitive, psychomotor, and affective. The book covers the informal structure and functioning of the group, the teacher and the group (with discussions of leader behavior), and group influences and individual learning. Basic ideas for teacher use are suggested, and there is a brief bibliography. (JA)
Group Processes in Elementary and Secondary Schools

Louis M. Smith
The "What Research Says to the Teacher" Series

is published to provide classroom teachers and prospective teachers with concise, valid, and up-to-date summaries of educational research findings and their implications for teaching.

Each pamphlet in the series is designed to serve two prime functions: to suggest principles and practical procedures that may be applied directly by the classroom teacher and to provide a springboard for further study and use of research findings.

To serve the first purpose, authors of booklets in the series select from each field those research findings that promise to be of most help to the classroom teacher. However, research has not yet provided scientifically valid findings on many aspects of teaching. In such cases, the best that can be offered is expert opinion.

It is impossible, of course, to provide a complete summary of research in any field in 32 pages. To help teachers further explore research findings, selected references are listed at the end of each booklet in the series.

The series was initiated in 1953 by the Department of Classroom Teachers (now Association of Classroom Teachers) and the American Educational Research Association under the leadership of Frank W. Hubbard, in his capacities as director of the Research Division, secretary-treasurer of the AERA, and assistant executive secretary of the NEA. Beginning in 1966, the Department of Classroom Teachers assumed full responsibility for publication of the series, with the assistance of the NEA Publications Division.

One measure of the success of the series is the use of approximately two million copies of the booklets by educators in the United States and throughout the world.

New titles and revisions of existing titles are published each year. See the outside back cover for a list of current booklets.

SIDNEY DORROS, Series Editor
Group Processes in Elementary and Secondary Schools

CONTENTS

EXPLANATION ................................................................. 2

THE UNIQUENESS OF THE SCHOOL GROUP ....................... 4

THE INFORMAL STRUCTURE AND FUNCTIONING OF THE GROUP 6
The Sociometric Tests .................................................. 6
Cliques and Subgroups ................................................ 7
Acceptance, Isolation, and Rejection ............................ 9
Special Roles .......................................................... 11
Group Functioning ..................................................... 11

THE TEACHER AND THE GROUP ........................................ 13
Leader Behavior ....................................................... 14
Implications for Teachers ........................................... 15
Leader Behavior and the Classroom Group .................. 18

GROUP INFLUENCES AND INDIVIDUAL LEARNING .............. 19
Knowledge and Intellectual Skills ................................. 19
Other Individual Learning .......................................... 22

BASIC IDEAS FOR USE .................................................. 23
Topics for Further Study ............................................. 24

SELECTED RESEARCH REFERENCES .............................. 27

GENERAL REFERENCES ................................................ 29
EXPLANATION

The author has drawn from research materials on teaching group processes in the elementary and secondary school those items which promise to be of most help to classroom teachers. This is not a complete summary of research. In some instances opinion has been given which is believed to represent the views of most experts. The interpretation and recommendations are those which the author, Louis M. Smith, Assistant Professor of Education, Graduate Institute of Education, Washington University, St. Louis 5, Missouri, believes to be soundly supported by research. Dr. Smith wishes to express his indebtedness to his students and colleagues at Washington University for provocative criticism and suggestions. The original manuscript was reviewed by Stephen M. Corey, Professor of Education, Teachers College, Columbia University, New York 27, New York. Changes were made by the author on the basis of the suggestions of the reviewers and of the staffs of the AERA and the NEA Division of Publications.
ALTHOUGH SOCIAL psychologists have theoretical disagreements as to the nature of a group, most would agree with the substance of the following definition: "A group is a social unit which consists of a number of individuals who interact with each other, who hold a common set of values, and who are interdependent."

Webster gives several definitions of process, of which the most applicable is: "... any phenomenon which shows a continuous change in time."

Group processes, then, are the changes in this social unit—the group—that take place over a period of time. As these are described in this pamphlet, concepts of group structure, roles, norms, and activities will be introduced to give further meaning to the definition. For our purposes the classroom teacher and his pupils will constitute the "classroom group," and the discussion will attempt to draw generalizations about the functioning of the classroom group.

Quite often in educational discussions one finds reference to group processes separate and apart from serious teaching problems; it is considered the "frosting on the cake." Our view here will be that group processes are an important and useful resource as teaching brings about changes in individual pupil behavior.

A recently proposed classification scheme suggests three areas of pupil change expected to occur as a consequence of instruction. First, there are changes in the cognitive domain, including additions and elaborations in knowledge and developments in intellectual skills, such as the ability to evaluate ideas in terms of relevant criteria; second, changes in the psychomotor domain, including changes in reading, writing, and laboratory skills; and third, the affective domain, including, among other facets, basic attitude changes, development of a philosophy of life, and improved mental health. Research in group processes must be re-
lated to individual pupil changes in specific aspects under all three domains.

THE UNIQUENESS OF THE SCHOOL GROUP

The classroom group is unique in that it differs from many informal groups about which much research has centered. The classroom group is established by the community to accomplish certain changes in the pupils. Many nonschool groups do not have such imposed goals and, consequently, have considerably more freedom of operation than does a school group.

A school class has other restrictions. It is part of larger organizations; the school building with additional grades and classes, and the several additional buildings which make up a community school system. The classroom group, as a part of this larger totality, is different from the informal boys' club or street gang.

Although every teacher realizes that his behavior in the management of his class varies according to external conditions, there has been little systematic research specifying the important outside influences. An example from a recent study illustrates the principle and significance of the classroom group as a part of the larger system or organization. In the school under investigation a rumor, alleged to be true as all rumors are, stated that the principal had a "little black book" in which he recorded the number of students each teacher sent to him for disciplinary reasons. The rumor also stated that high referrals would have

The classroom is affected by the larger social system.
negative effects on future promotions and salary increases. Over a three-year period classroom evictions dropped from 160 to 81, and finally to 60. The repercussions within the classroom, although not analyzed in detail, were interpreted as requiring more personalized leadership and absorption of conflict by the teacher. In short, principles relevant to the formation, development, and operation of informal isolated groups have often been inappropriately extended to the classroom group which is a part of a larger social system.

An additional uniqueness of the classroom is that the classroom teacher is an adult who has been given responsibility and authority by the community for the group of children. In the language of the social psychologist, the children expect the teacher's behavior to fit their broad concept of adult behavior, as this is limited by ideas of what adults with authority are supposed to do and their special concept of what teachers are like. It behooves the teacher to know and understand these pupil expectations, for as he departs from them there will be confusion and misunderstanding on the part of the pupils and, quite likely, difficulty in the smooth functioning of the classroom. The teacher's status imposes a structure on the group, defines some of the previously mentioned role and status relationships, and forces careful and critical consideration of the applicability of non-school research.

The classroom group is unlike many other groups in that the members of the class, even though they may desire to do so, cannot easily leave the group and join another.

Since the group has many of its basic goals and activities set by outside forces, and since these goals lie heavily in the academic domain, a premium lies with the child who is bright, industrious, well motivated, and receptive of the goals, yet able to work independently toward them. As individual children with other characteristics, attitudes, and abilities enter the group, the rewards and satisfactions will often be less for them because of the nature of the system.

In brief, these points are raised because classroom teachers often try to utilize or have urged upon them research results, evidence, and interpretations from groups totally unlike school classroom groups. Since these generalizations often do not make
sense and lead to classroom difficulties, all research and theory are rejected as impractical. The first major suggestion, then, is that teachers must be wary of broad principles of group action for these may be based on groups not comparable to those found in schools.

THE INFORMAL STRUCTURE AND FUNCTIONING OF THE GROUP

For the moment one might omit the influences of the classroom teacher and the formal nature of the school system and look to the group as the teacher might expect to find it when he enters the room. Are there typical patterns in the organization and functioning of children's groups? Are there individual differences among groups of children? How can one discover the nature of the group?

The Sociometric Tests

Beginning 30 years ago two groups of investigators, working independently, developed and formalized the beginnings of what has come to be called sociometry. In one instance groups of children were asked to state their preferences for work and play companions. These nominations were then plotted into figures called sociograms, showing the interrelationships among children's choices. At about the same time a religious-education inquiry concerning the nature and development of children's character was being undertaken. The investigators asked children to "Guess Who?" among their classmates fit social and behavioral descriptions such as, "Who is the most honest boy?" and "Who works the hardest?"

From both lines of inquiry have come a succession of important studies indicating structure of the classroom group, roles of the members, and norms possessed by groups. Research shows also that a few teachers have almost no ability in identifying children's choices. The majority of teachers perceive a few of the important aspects of group structure but also miss some of it. Research has not established why some teachers are better at
perceiving and analyzing the elements of group structure than are others. Figure I shows the first, second, and third choices of an elementary-school group studied by the writer. Because of space restrictions not all the girls have been included (page 10).

Cliqués and Subgroups

An immediate finding is that within a total classroom there are usually several informal, small clusters of students who like each other, who interact a good deal inside and outside of class, and who hold common beliefs about matters important to the children. The very real implication for the teacher is that his classroom group, in one sense, consists of many groups.

Several factors have been discovered which account for the cleavage into small groups. First, boys usually choose their friends among boys, and girls usually choose girls. This situation is true at all levels, but particularly so in the middle elementary grades. As illustrated in Figure I, only one boy and five girls chose one of the opposite sex. Second, the subgroups within the classroom will, as the students grow older, increasingly resemble the groupings within the community. Thus we find that the racial, religious, and socioeconomic differences of the community also occur in the classroom. Investigations in many areas of the country, in all kinds of schools, and at various age levels show children's subgroups defined in terms of adult distinctions in social level and community institutions. Research also indicates that the cleavages and cliques are often made on the basis of personality traits. Finally cliques and subgroups may tolerate each other.

Individuals become more effective in cooperative group work
work well together, or be openly hostile. In Figure I, the class was asked to choose seating companions. The "cliques," in this instance, reflect school policy in that the boys in the left-hand group are the "6 Lows" and those in the right group are "7 Highs." The school system's semi-annual promotions often cause a class to be constituted of two grade levels.

Several practical suggestions for the teacher's work have grown out of this knowledge and have been tested empirically. One writer has described "reassignment therapy" or, more simply, reseating the children in the classroom. For example, when a classroom contained a group of "disciplinary problems," the teacher had some ideas as to the individuals involved; the sociograms helped identify the closely attached clique and also indicated a few of the nonproblem children liked by the problem children. The teacher regrouped his class so that each child could sit near a few of his friends but not near those involved in the difficulties. The class settled down and worked well after this.

Reports, prepared by teachers trying to develop racial and religious tolerance, often point to the information about cleavages gained through use of sociometry as a measuring device, just as an achievement test gives evidence on accomplishment. Such information has been instrumental in planning future lessons, activities, and action.

A final suggestion made by classroom teachers who use small group activities and projects is that groups formed on a friendship basis often work very well and produce more outstanding work than groups formed on other bases. The word "often" in the last sentence has not been clearly analyzed in educational literature; however, several studies of adults in business and industry indicate that work groups formed in this way are highly productive when the group accepts the goals of management, and very unproductive compared to other ways of forming groups when the group members are opposed to the goals of management. The findings seem quite striking and appropriate to the classroom. The present writer saw this vividly demonstrated with a clique of four girls from the same class as the boys in Figure I. These girls were bright, had IQ's of 115 to 135, were good students, had report cards almost all E's and S's, and were well motivated. Their independent work on a social studies project was original, valuable, and productive.
Acceptance, Isolation, and Rejection

Another very typical research finding is the existence of individual differences among children who are liked or disliked. Differences in social acceptance seem less widely known than those in intelligence and reading achievements, for example. The writer has asked sixth-grade pupils to list the five or more children they like best and also the five or more children with whom they do not get along. A few children have had as many as 20 or 25 positive choices with no negative nominations, and others may have had just as many negative choices with no positive nominations. Typically, the range is much less.

In several studies the constancy of this social ranking has been investigated. Although individual choices often change, the relative order is quite constant. One investigator reports that the ranking of children as they moved from second, to third, and then to fourth grade was as stable as the ranking in achievement and intelligence. Such stability, its desirability, and the indications for the eventual adjustment of the individual child have not been completely analyzed.

Investigations of the correlates and reasons for one child being highly accepted or well liked, another being isolated, and a third being rejected, are numerous and reasonably consistent in results. "Acceptance" is positively correlated with intelligence, special abilities and skills, school achievement, socioeconomic status, and majority status in race and religion. The major relationships, however, are with personality characteristics indicative of good mental health and adjustment. Generally the well-liked children are adequately meeting life's problems and are respon-

We do not know fully why children are accepted or rejected
sible, independent, pleasant, and happy; such descriptions have been obtained from classroom teachers and also from the peers of pupils. The rejected children tend to have a variety of personal and social problems with which they are not coping successfully.

In Figure I, pupil 12 is highly accepted, a star. Pupils 2 and 6 are isolates. Teacher reports indicate that pupil 12 is literally one of the centers of attraction in the class, as well as being average in ability and a good worker. Pupil 2 has had a severe reading problem for a number of years and pupil 6 recently came to the United States from Germany. Although not presented in Figure I, pupil 2 received three negative nominations and pupil 14, three. Pupil 9 is clearly outside the class, and pupil 14 is a very controversial individual.

**ELEMENTARY CLASSROOM SOCIOGRAM**

---

**Figure I.**

![Socioagram Diagram](image)
Within the limits of the stability of social ranking there is some evidence that teachers who work with isolated and rejected children do obtain some improvement. The techniques revolve around the assignment of classroom tasks which bring the individual into favorable interaction with his classmates; assignment for group activities with any mutual choices or those whom he chooses, and for the moment at least, not with those who reject him; and participation by the child in activities in which his special skills can operate.

Special Roles

The term "role" is applied to the behavior of a given individual in the scheme of interrelations within a group. In all groups, as individuals begin to interact and work toward common goals, certain responsibilities, behavior, and activity tend to be expected of particular individuals in the group. Just as this is true of siblings in large families and children in informal play and gang groups, it is true of classroom groups, and incidentally, of the subgroups within the classroom group. A teacher who is to understand individual behavior must look at the kinds of roles in the group, the satisfaction the roles bring to the individuals, the conflicts as to who is to play each role, and the specific behavioral prescriptions entailed by the roles.

Investigations of gangs, summer camps, and school classrooms have revealed the diversity of roles open to individuals and indicated the group agreement regarding the individual child who fills each role. "Guess Who" nominations, careful observation, and interviews with children suggest who is regarded as the popular child, the leader, the athlete, the "brains," the clown, the sissy, the dummy and the scape-goat. Most of these "roles" appear in all, or nearly all, classrooms. Even though some of the roles are not desirable in the teacher's set of values, some peer recognition of whatever kind may be better than no recognition at all.

Group Functioning

Although much investigation remains to be done in the area of internal group functioning, a few results of investigations of "contagion" will indicate the possibilities of research findings, as
well as the possibilities of the critical application of group concepts by the teacher in thinking about her own classroom. Behavioral contagion is "the spontaneous pickup or imitation by other children of a behavior initiated by one member of the group, where the initiator did not display any intention of getting the others to do what he did." By interrelating judgments regarding "who is able to influence the other fellow," and by direct observation of group behavior, investigators have found: contagion spreads more frequently from high-influence children; children who perceive another individual as powerful are most likely to be influenced by the other individual (as well as to accept direct attempts at influence); low-power members initiate nondirective influence attempts, and initiate deferential, approval-seeking behavior toward high figures. A teacher with such knowledge can understand and predict some of the group processes in his particular classroom.

Just as contagion is an immediate phenomenon appearing in all classrooms, so is the phenomenon of conformity and deviation. A teacher often will ask himself why Johnny shifts his behavior independently of his teacher's wishes or the wishes of the parents. Frequently the answer lies with the interpersonal interaction of the class members. As described earlier, most children belong to subgroups in the class. As these subgroups formulate points of view about how the members in general and the child in particular should behave, then the child must acquiesce and conform. The verb "must" is used deliberately because of the consequences if the child does not conform. Research indicates that as a person deviates from the group standard, the group members initiate many direct attempts to influence him; the members soon terminate interaction and comment that the deviate is not wanted or wanted less (rejection); and finally, the more closely knit the group and the more critical the issue the more pronounced the influence attempts and rejection become. In effect, the group controls a good many rewards and punishments in the life of the child.

A final comment on the dynamics of the small group suggests an area requiring further analysis and application of research findings to classrooms. Teachers and group workers have commented frequently, "... it depends on the person or the personality of the individual pupil." If personality can be considered
in a simplified manner as the constellation of motives and other
dispositions to behave, several observations are in order. When
individuals vary in their need for achievement, doing well, com-
peting, succeeding, and need for affiliation, it would be expected
that these individuals would show differences in their reaction
to groups, and groups would react differently to them. Such is
the case. For instance, college students in a laboratory study vary
in their responsiveness to appeals by a friend to slow down in a
work situation. Students with strong needs to be friendly and
gregarious and weak needs to do well and achieve are influen-
ced the most. Similarly, another investigation finds that some
students prefer a competent stranger as a work partner and others prefer
a less competent individual but one they know as a friend.
These preferences are related to personality differences described
above—high desire to succeed versus high desire for friendly rela-
tionships. The major recommendation to the classroom teacher
follows logically from these results: he must have a carefully
acquired concept of human personality and be alert to its expres-
sion in individual pupils if he is to understand the relation of the
individual to the group.

By viewing the classroom group in terms of cleavages and
subgroups, acceptance and rejection, special roles and individual
personalities, the teacher can approach day-to-day problems with
more understanding, resourcefulness, and success. However,
dealing with children individually and with groups is a skill,
just as golf or tennis is a skill; and just as these require long
and arduous practice, so does the application of knowledge about
groups.

THE TEACHER AND THE GROUP

Teachers are members of the classroom group, but they are
very special members. As described earlier, classroom groups
differ from many other kinds of groups by virtue of the teacher,
who is older, more knowledgeable, and more responsible than the
30-odd other members of the group. In general, the teacher is
expected by the community, the principal, and the pupils to
“manage” or “control” his group and to institute a program, about which he has varying degrees of choice, which will culminate in the several kinds of individual learning mentioned previously. He has different roles to play than do the other members of the group. The classroom group, staff group, and parent group, in turn, have expectations, sometimes conflicting, about what he should do and how he should behave by virtue of his position in the group. These common expectations, as they are held by the group members, are called group norms.

There have been a number of attempts to describe the roles teachers fill, or should fill, in interacting with the class. Such terms as democratic, autocratic, pupil-centered, teacher-centered, permissive, integrative, strict, soft, and so on indicate the conceptual confusion, emotionally loaded symbols, and concern which virtually everyone in our society (parents, classroom teachers, school administrators, professional educators, and psychological theorists) sees in the relationship between the teacher and his group. Such concepts suggest also that no easy prescription is forthcoming. The writer would suggest concepts which he has found fruitful both in organizing the research findings and in clarifying troublesome classroom problems.

Leader Behavior

Because of the nature of the situation, the teacher is the leader of the group. Leadership is viewed here not in terms of personality, but in terms of two major roles, initiating structure and consideration.

Initiating structure refers to the following kinds of behaviors: makes the way he feels clear to the group, tries out new ideas, criticizes poor work, and emphasizes deadlines. In short, the leader, and the classroom teacher as a leader, is directive, takes action, coordinates work, makes decisions, and “initiates structure.” As one writer has expressed it, this is the “get the work out” dimension. The evidence supporting the importance of this dimension comes most heavily from sources other than the educational literature. In studies of college department chairmen, commanders of bombing groups, and executives in business firms, individuals who had the highest over-all ranking and reputation tended to fill this role very well.
Good leaders, in these same investigations, also were found to fill the second role, consideration. This aspect has been called the “human relations” dimension of leader behavior and is typified by high ratings on such items as doing little things to make it pleasant to be a member of the group, finding time to listen to group members, explaining his actions, treating members as equals, being willing to make changes, getting group approval before going ahead, and looking out for the personal welfare of individual members. Here is a picture of a leader who is concerned about his group members as individuals and takes their ideas, interests, and feelings into account; the members, in effect, have self-determination within the total organizational structure.

Leaders who are high in the dimensions of *initiating structure* and *consideration* have “good” groups; that is, groups which reach their goals and groups which contribute satisfactions to the members. This generalization is one of the most important findings of psychological research in the group process area. When the generalization is viewed superficially, it may seem too pat, self-evident, and obvious to be of concern. There is, however, considerable clinical evidence from consulting psychologists who helped develop the concepts that many business and educational leaders and school administrators, when quizzed about their actions and manner of operation, have seen for the first time their under- or over-emphasis of one role or the other. As a result of such discussion, the insight and change in their perception of themselves was quite startling.

**Implications for Teachers**

A few examples of research findings will help extend the meaning of the leader behavior concept for the classroom situation. Shortly after World War II, the managers of a dress factory found that they had to make certain changes in their operational procedures and their product to meet the competition of other companies in the field. The supervisors received instructions about the changes and had to implement them with the men and women in the factory. Neither the supervisors nor workers could alter the basic fact that changes were to be made. It can be argued that this kind of event is quite similar to an educational situation where curriculum or texts or other aspects of the pro-
gram were changed, and the individual teacher and his class must accept such changes. In the manufacturing plant, such changes were usually worked out by management, a new piece rate established, and the changes explained to the group. The consequences were typically a rise in labor turnover, restriction of production, conflict with the engineers, and hostility toward the supervisor.

In groups where the leadership was not only high in initiating structure, as above, but also high in consideration, the results were quite different. High consideration in this study was an increase in the participation of the group in dealing with the "inevitable" changes which were coming. The changes were presented dramatically by the staff; all operators, instead of a few, were studied by the time-and-motion experts; and suggestions were solicited from the individual workers for ways to make the new procedures effective. By taking account of the individuals within the group, turnover dropped and production quickly rose to a point higher than before and was maintained at this higher level. No hostility toward fellow workers and supervisors appeared. The implications for the motivation of school children are clear.

The implications for "discipline" in the school classroom seem to fall into perspective from the leadership framework. Although some research emphasizes one dimension rather than another, both aspects of teacher behavior are important. At the high-school level one investigator grouped teachers into those who had serious problems in "classroom control" and those who had groups which moved along easily and well. He found the classes of the latter were characterized by vital and enthusiastic presentation of material, use of all available equipment and aids to enrich a lesson, and routine organization of procedures for mundane tasks such as distributing paper. Another study of discipline at the elementary level examined the teacher's behavior in handling specific but serious "disciplinary" problems during the course of the day. The teachers who had received high prior ratings as having cooperative, interested, and hard-working classes tended to interact with the children in a manner reflecting nonpunitiveness, concern with the discovery of the difficulty, and cooperative analysis and solution of the problem.

Other findings from club groups and classroom groups indicate that leaders who are high in initiating structure and very low on
consideration are perceived as being autocratic and dominating. Such leaders produce high conformity in some groups and open rebellion in others. On occasion the same group will alternate between rebellion and conformity. When the leader is present such groups often are highly work-oriented, but when the leader is not present they rapidly lose their work orientation. The members of these groups show considerable interpersonal friction, scapegoating, and hostility toward other groups.

There have been several research illustrations of leaders who are high on consideration and low on initiating structure. From one study we summarize the outline of a graphic description; a picture of the learning situation and pupil-teacher relationship was obtained from evaluation sheets filled out by the pupils. The total impression was one of an impartial and cooperative teacher who helped the learners to get some new ideas, but who, despite the pleasant interpersonal relationships, did not help them sufficiently in identifying new problem areas and did not help them visualize the action possibilities arising from such problems. This teacher did not adequately structure the situation for the learners so that they could identify and work upon problems that were challenging to them and pertinent to their interests. Members of the class, in their evaluation scales, often wrote that they wasted their time and were bored, thereby indicating that the lack of structuring by the teacher frustrated many of them. The teacher seems to have related herself as an individual to the majority of the pupils, but this satisfactory social relationship failed to meet the needs and expectancies of the learners insofar as problem solving and learning activities were concerned. (See research reference §16.)

When leaders are low in both dimensions, confusion and misbehavior seem to be the major results. Some investigators have found structure arising within the group when the nominal leader is out of the room.

In completing this analysis of leader roles, several additional generalizations should be pointed out. First, in studies where the same individual has played differing leader roles with different groups, the groups responded to the role he took, not to other components of his personality. This raises important issues for both preservice and inservice teacher training. Second, in several instances at least, teachers tended to play the same roles from the
beginning of the year to the middle of the year. In the cliché of the profession, "They didn't start strict and then relax." Finally, these same teachers tended to behave in the same way from one year to the next even though the groups of children changed.

Leader Behavior and the Classroom Group

In our first comments about classroom groups and suggestions for teacher action we have implicitly assumed that the teacher will fulfill the leader behavior roles described in this second section. These are general principles and must be modified continually if they are to be applicable to any individual setting. Research should clarify increasingly the subtleties in the application of generalizations. In the group process area research is only beginning to do this.

For instance, within business groups and the armed services, there is evidence that superiors in the organization expect their immediate subordinates (small group leaders) to be higher in initiating structure while the members of the small groups expect the leaders to be higher in consideration. The generalizing ability of such findings to principals, classroom teachers, and pupils seems feasible but is not known. Also, the place of the parent in such a scheme is not clear from available evidence.

There has been little research in desirable variations of leader behavior with different groups. The common teacher observation such as, "... my fifth-hour group is like no other group I've had ..." implies that the group differs from others and the teacher should behave in a different manner. Precisely how this group differs and the corresponding necessary changes in the teacher's actions are important but virtually unanalyzed questions. In one very interesting study the investigators measured teachers on consideration, and had pupils rate the adequacy of the teachers. In those classes where the pupils were more task-oriented and had high needs for achievement, there was no relationship between the good teacher and amount of consideration. In those classes where the pupils were more person-oriented and had high needs for affiliation, the teachers with high consideration scores were rated as better.

Similar questions can be raised concerning groups which vary in age and maturity and in intellectual ability and socioeco-
nomic status. As the classroom composition of cliques, conflicting roles, and personalities vary, the most appropriate alternatives might also vary. The influence of different activities and subject-matter on the role of the teacher, and on the expectations of the pupils, the principal, and the parents also pose challenging questions. In short, group-process research points to many generalizations about teacher-leader behavior, but the gaps in knowledge remain wide in many significant areas.

GROUP INFLUENCES AND INDIVIDUAL LEARNING

Although an efficient and effective group is desirable, the ultimate objective of educational theory and practice is the production of individual student learning in the cognitive, affective, and psychomotor domains. An extensive analysis of learning is not within the scope of this discussion; however, some indications of group effects on individual learning can be sketched briefly.

Knowledge and Intellectual Skills

The proponents of teacher behavior and group structure, other than the typical or traditional pattern, have a difficult time justifying their procedures on the basis of increased gains in pupil knowledge. Similarly, the proponents of "traditional" procedures cannot criticize various "group" approaches on the grounds that less knowledge is acquired by the students in the nontraditional

Behavior and school success often stem from the individual's relation to the group
approaches. Finally, it is important to realize that researchers and practitioners often have not clearly specified the kinds of changes they were introducing and why these changes should produce greater increments in knowledge.

Some light can be obtained from a study of high-school students made over a period of years. (See research reference #6.) The students in the "experimental" program did not take a narrowly prescribed high-school course of study; they exercised more initiative in course selection and class planning, they had more freedom in class activities, and they pursued a variety of problems, individually and in groups. The differences were slight in the knowledge acquired between these students and those in the traditional program.

In what have been called "core curriculum" classes, the results indicate, first, that teacher behavior, student roles, group interaction, and activities vary greatly from classroom to classroom; and, second, that the acquisition of knowledge is the same or possibly slightly greater in favor of core classes. At the college level, teachers of introductory psychology, stimulated by the progressive education movement, client-centered therapy, and the group dynamics movement have engaged in many experiments with modified teaching approaches. Once again it is difficult to describe consistently just what the teacher does in these classes, but generally there is more pupil direction in setting goals, interaction is more informal, and activities depart from the traditional textbook orientation. In these research studies the measurable knowledge acquired by the experimental and control groups was essentially the same.

When the tests used to measure academic achievement require critical analysis, synthesis, evaluation, and application of knowledge to new situations, the results tend to favor classes taught by informal group processes rather than those taught by formal lectures and recitations. Comparison of activity programs and traditional programs in one large investigation showed the pupils in traditional schools to be slightly higher in knowledge acquired. However, the pupils in the activity programs showed significantly higher skills in reading tables and locating information; drawing conclusions from statistical tables, graphs, and logical arguments; and applying generalizations to new problems in social studies and science. Competent persons in educational psychology inter-
pret such changes in pupils as resulting from increased motivation aroused by extensive participation, more extensive involvement, practice in utilizing knowledge and skills, and more immediate and obvious confirmation of successful and unsuccessful attempts. Teachers who are high in \textit{consideration} are more prone to favor and allow participation and involvement in the classroom. We must recognize, however, that special skill and effort are required of the teacher if the \textit{initiating structure} role of direction, clarity, organization, and control is to be maintained.

Research has given support to the idea that the group, structured by teacher expectations for problem solving and major participation, can help the individual pupil develop skills in critical and independent thought. This point of view has been an underlying assumption in much educational writing supporting "group work." A further basic assumption, not so carefully analyzed, is that this freedom of thought and judgment in the developing child is freedom from excessive dependence on adults and freedom from the traditional authority of the textbook. Apparently—and here the writer has no evidence—individuals who have looked to the benefits of this kind of freedom have seen it as the most critical and difficult problem in the intellectual development of children. These individuals believe that the classroom group can give the child strength and training in moving toward more mature judgment.

Other writers think that the peer group may be a serious obstacle facing the individual in the development and maintenance of independent thought and action. That the group can have a negative effect on simple individual judgments has been shown in one careful study. The investigator instructed eight individuals to judge simple perceptual relations; that is, to match a given line with one of three unequal lines. In the course of making an oral report of his judgment, one individual found himself contradicted by each of the preceding seven members. This contradiction was repeated again and again in the experiment. The other seven members who had been instructed to behave in the "wrong way" were all consistent in their statements and unanimously and clearly contradicted the judgment of the one individual. The results indicate that one-third of the estimates made by the last member became errors in the direction of the majority. Those who remained independent did so with considerable...
conflict and stress. Those who yielded were of several types: some yielded without realizing they were yielding; some yielded with self-doubt about their own perception; and some yielded, not because they doubted themselves, but because they were reluctant to deviate overtly. If this compromising of judgment occurs one-third of the time in simple perceptual judgments, what are the consequences when dealing with more abstract and ambiguous intellectual problems? Can the peer group come to exercise a tyranny over the individual as well as free him from more traditional authority?

Other Individual Learning

The effects of group experience upon the content of one’s values and ideology is pervasive and thorough. Beyond the ever-present data from culture to culture and social class to social class, there have been many research and case study reports of a group’s influence on attitudes and personal-social behavior. This learning or socialization process involves an initial awareness and knowledge of the group norms and social values. As the child interacts with group members, this awareness of outside values shifts to an internalization and an acceptance of the values. Social psychologists describe the process as following certain steps: (1) in group relations the child comes to see that rules or norms are based on mutual agreements; (2) he finds that rules can be changed or new rules can be made; and (3) as he begins to take part in the process of changing and making the rules, they become his own rules. The key factor in acceptance of rules or norms is participation in the process and actions of the group. (See general reference #6.)

By such a process as the one described the child comes to develop a set of attitudes and values characteristic of the group. In the classroom the possible influences of the subgroup norms and teacher attitudes are apparent, as are the possible conflicts among various influences.

As one might expect, practice and training in group discussion skills teach individuals how to be more effective in cooperative group work. An eighth-grade experimental group was allowed to develop its own social studies curriculum, while a control group utilized the previously worked out program. In the once-a-week
homeroom situation, the teacher-experimenter found the experimental group much more resourceful. This group initiated and carried out four substantial group projects in the 30 weeks as compared with none for the control group. The ideas and the organization of effort were largely contributed by low-status members. In short, the total group participated in considerable cooperative planning and work effort; they had learned important group skills.

**BASIC IDEAS FOR USE**

The generalizations suggested to the classroom teacher by research in group processes can be briefly summarized as follows:

1. The classroom can be considered a group, albeit a special kind of group, with goals involving the accomplishment of certain tasks as well as intragroup harmony and personal satisfaction. The group tasks eventually resolve into individual pupil learning.

2. Although the classroom group is a single group, it also contains a number of subgroups which may or may not be in harmony. Within each classroom there is variability in acceptance and rejection of individual members. There are various roles, special patterns of behavior filled by specific individuals.

3. The interaction of the classroom teacher with the group is most aptly described by the concept of leadership. The good leader fills two major roles: initiating structure and consideration. In terms of these roles the teacher gives direction, sets standards, organizes activities, and is involved in all phases of group activities; and the teacher respects pupil ideas, suggestions, opinions, and personalities. An inability or refusal to meet these roles results in a classroom beset with interpersonal difficulty and lack of accomplishment of group tasks and work.

4. Specific individual learning is dependent, of course, on the content of the activities instituted by the classroom teacher, but also on the nature of the group and the teacher's leadership behavior. The group and the leader exert influences directly on
pupil motivation, action, and learning. That group influences directly affect behavior is especially clear in critical thinking, attitude development, and social skills.

Topics for Further Study

The formal study of group processes is one of the newer areas of educational investigation. The reader is referred to the general summaries in the Encyclopedia of Educational Research, the periodic reviews in the Review of Educational Research, and specific research articles in such periodicals as the Journal of Educational Psychology and the Journal of Abnormal and Social Psychology. This section raises specific questions which research has tried to answer. The numbers in the parentheses refer to the citations listed under "Selected Research References" on pages 27 and 28.

1. Is it really possible to measure accurately such intangibles as classroom climate, group structure, and leadership? Such measurements are required in almost all studies of group processes. Special attention to these problems has occurred in the Ohio State University studies in leadership and group functioning (11, 17), and by such investigators as Anderson (1) and Withall (20).

2. Do influences outside the classroom influence class functioning? Cornell and others (8) found that suburban classes contrasted with rural classes functioned differently in terms of teacher-pupil and pupil-pupil interaction as well as in the content and organization of activities. No differences were found in classroom climate. The investigators did not isolate the reasons for the similarities and differences nor the possible effects of other types of communities.

3. Does the out-of-school group make a difference in the pupil behavior in school? Whyte's (19) early study of street corner gangs clearly indicated that the "norms" regarding school achievement of the out-of-school groups varied from gang to gang. In some gangs the emphasis was on "getting ahead" in the outside society, going to college, and so forth, while in other gangs the emphasis was on more immediate pleasures and satisfactions.
In the latter groups the members took part in school life as little as possible and dropped out as soon as possible.

4. Does isolation and rejection by classmates indicate personality problems and mental ill health? Northway (15), among others, finds that many of the elementary children who are "outsiders" have problems due to excessive fighting, boasting, and intolerance, or tend to be withdrawing, unhappy, and odd. Some outsiders seem adjusted but have individual interests rather than social interests.

5. Does the teacher need to look at the uniqueness of each group he teaches? One of the basic truths about group processes is that groups differ just as individuals do. Nonetheless, just as the individual's uniqueness can be considered a function of his intelligence, his motives, and his habits, groups can be analyzed in terms of their structure, roles, morale, and functioning, and their uniqueness can be determined, understood, and utilized (11).

6. Do individual teachers generally develop characteristic and stable ways of interacting with pupils? Anderson's (1) early study with elementary-school pupils would lead one to say "yes." The desirability of this as groups change and as teachers try to reach varying goals has been questioned by Anderson, but has not been carefully answered in further work.

7. Does differential leader behavior produce differential results in group functioning? In a classic study (18), the investigators categorized leader behavior as democratic, autocratic, or laissez-faire. The amount of work accomplished, the group morale, and individual satisfactions all changed as the leader's style changed. The leader's ability to change roles from time to time has not been carefully investigated in the classroom. The effects of different kinds of teacher behavior on different groups also has just begun to be considered (9).

8. Does pupil-teacher planning help in obtaining group cooperation and interest? A number of investigations (6, 7, 13), over a long period of years, indicate that almost all classes wherein teachers actively sought the suggestions and ideas of the class members improved in group morale and student motivation.
SELECTED RESEARCH REFERENCES


GENERAL REFERENCES


WHAT RESEARCH SAYS SERIES

1. Teaching Reading (Arthur I. Gates)
2. Teaching Arithmetic (Herbert F. Spitzer)
3. Teaching Spelling (Ernest Hara)
4. Teaching Handwriting (Don W. Andersen)
5. Personality Adjustment of Individual Children (Ralph H. Ovinnon)
6. The Learning Process (William Clark Trow)
7. Evaluating and Reporting Pupil Progress (John W. M. Rathney)
8. Guided Study and Homework (Ruth Strong)
9. Teaching Secondary School Mathematics (Kenneth B. Henderson)
10. Teaching High-School Science (J. Dorrell Barnard)
11. Reading in the High School (Leo C. Fay)
12. Science in the Elementary Schools (Gerald S. Craig)
13. Class Organization for Instruction (J. Wayne Wrightston)
14. Educational Media (Gerald M. Torkelson)
15. Juvenile Delinquency (William C. Kvarceus)
17. The Gifted Child in the Elementary School (James J. Gallagher)
18. Teaching Composition (Alvina T. Burrows)
19. Group Processes in Elementary and Secondary Schools (Louis M. Smith)
20. Teaching the Social Studies (Jonathan C. McLendon and Findlay C. Penna)
21. Understanding Intergroup Relations (Jean D. Grams)
22. Nursery School and Kindergarten (Sarah Hammond Leppin)
23. Art Education in the Elementary School (Hilda P. Lewis)
24. Mental Health (Robert F. Peck and James V. Mitchell, Jr.)
25. The Educable Mentally Retarded Child in the Elementary School (Herbert Goldstein)
26. Physical Fitness (Paul Hunsicker)
27. Physical Education in the Elementary Schools (Anna S. Espenschade)
28. Creativity (E. Paul Torrance)
29. Listening (Stanford E. Taylor)
30. Anxiety as Related to Thinking and Forgetting (Frederick F. Lighthall)
31. Improving Classroom Testing (Max D. Engelhart)
32. Controlling Classroom Misbehavior (William J. Gnagey)
33. Teaching the Disadvantaged (Gertrude Noor)
34. Motivation in Teaching and Learning (Don E. Homachek)