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ABSTRACT

Learning in small groups is a practical way to bring about behavior change. The inquiry learning process is perceived to be the most natural and scientific way of learning. Skills developed include those of problem-solving task analysis, decision-making, value formation and adaptability. The art of small group interaction is developed. Factual learning is equal to or greater than that resulting from other methods. Conceptual learning and knowledge retention resulting from this method are superior to that of others. Attitudes, interests, differing learning styles, and feelings are provided for in an effective and meaningful way. The two units presented are designed to assist the teacher in implementing the process. Facilitative worksheets are included. An annotated bibliography provides support for the propositions. The units have been used with students in the third, fifth, eighth, tenth, eleventh, and twelfth grades. (Author)

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ABSTRACT.. LEARNING IN SMALL GROUPS IS A PRACTICAL WAY TO BRING ABOUT BEHAVIOR CHANGE. THE INQUIRY LEARNING PROCESS IS PERCEIVED TO BE THE MOST NATURAL AND SCIENTIFIC WAY OF LEARNING. SKILLS DEVELOPED INCLUDE THOSE OF PROBLEM-SOLVING TASK ANALYSIS, DECISION-MAKING, VALUE FORMATION AND ADAPTABILITY. THE ART OF SMALL GROUP INTERACTION IS DEVELOPED. FACTUAL LEARNING IS EQUAL TO OR GREATER THAN THAT RESULTING FROM OTHER METHODS. CONCEPTUAL LEARNING AND KNOWLEDGE RETENTION RESULTING FROM THIS METHOD ARE SUPERIOR TO THAT OF OTHERS. ATTITUDES, INTERESTS, DIFFERING LEARNING STYLES, AND FEELINGS ARE PROVIDED FOR IN AN EFFECTIVE AND MEANINGFUL WAY. THE TWO UNITS PRESENTED ARE DESIGNED TO ASSIST THE TEACHER IN IMPLEMENTING THE PROCESS. FACILITATIVE WORKSHEETS ARE INCLUDED. AN ANNOTATED BIBLIOGRAPHY PROVIDES SUPPORT FOR THE PROPOSITIONS. THE UNITS HAVE BEEN USED WITH STUDENTS IN THE THIRD, FIFTH, EIGHTH, TENTH, ELEVENTH, AND TWELFTH GRADES.

SIP 005 925

SMALL GROUP INQUIRY

by

Martin M. Koller

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The classroom teacher who wishes to implement a teaching program that combines learning with feeling development needs tools with which to do the job. If the goal is to bring about behavior and attitude modification as a result of classroom experience, traditional methods may prove inadequate.

The purpose of this paper is to present a set of techniques that were developed to meet these needs. The two units included are based on the premise that the inquiry process combined with the small group interaction process will provide a practical and yet efficient way of attaining relevant feeling education.

Used with teachers and students, this material has been revised according to the reaction in the field and as a result of a review of the literature on the subject. (See attached annotated bibliography.)

The basic inquiry steps are as follows:

- A. Defining and clarifying the topic.
- B. Researching the background of the topic.
- C. Generalizing from the findings.

- D. Using data and logic in proposing solutions.
- E. Attempting to apply the proposed solutions.

The small group process requires that one's feelings and ideas are acted upon by fellow group members. The basic experiences are as follows:

- A. Individual ideas acted upon by a small group.
- B. Small group feedback to individual members.
- C. Democratic decision-making.
- D. Individual cooperation as a part of the group function.
- E. Small group interaction as a part of large group function.

Implicit in the inquiry process is a structure that lends itself to scientific study while providing the student with the organization needed for security and for an understanding of the process. The group interaction process provides the learner with an opportunity to try out ideas and abilities with the accompanying satisfaction of immediate feedback. The individual can develop his ability to function in a social group while gaining experience in approaching little known situations. This experience should prove useful in future living.

Generally speaking, it is suggested that the inquiry steps be followed in the order presented. It is also recommended that the small group consist of between four and eight heterogeneous students. In using a teaching format such as this, the students should be briefed on the method and the objectives.

The outlines presented on the following pages ("Small Group Inquiry Steps" and "Small Group Inquiry Grading") have been used as handouts when introducing units based on this plan.

SMALL GROUP INQUIRY STEPS

- A. Defining and clarifying the situation
 1. Individuals list words that describe
 2. Small group combines lists of members
 3. Small groups share - develop master list
 4. Small groups sub-divide words
- B. Researching background
 1. Individuals research a sub-area
 2. Individuals share with small group
 3. Small group develops a report composed of several parts
 4. Small groups share with large group
 5. Large group interacts with small group
 6. Findings are generalized by teacher
- C. Making propositions
 1. Individuals research a sub-area
 2. Individuals share with small group
 3. Small group develops propositions
 4. Small groups share with large groups
 5. Large group interacts with small group
 6. Propositions are generalized by teacher
- D. Action
 1. Small groups decide direction
 2. Individuals make commitment
 3. Individuals report to small group
 4. Small group reports to large group

SMALL GROUP INQUIRY * GRADING

- A. Grade when small group shares with large.
(Grade during part B. and C.)
1. (1/3) Each individual is graded on their presentation and ability to respond to questions.
 2. (1/3) Each group gets a grade. (This part of the individual's grade depends upon group cooperation)
 3. (1/3) Each individual asking a question or making a positive comment to the small group presenter receives credit each time he does so.

- B. Example based upon a 100 point unit.
A student (Bob?) as a member of a small group does a good job by considering his area in depth and with a good use of logic and facts. He receives 31 points. His group does a fair job and receives 22 points for each member. Bob, as a member of the large group asks 7 good questions (5 points each). For this he receives the maximum allowed, or 34 points. His total score would equal 31 plus 22 plus 34 or, 87/100.

Small Group Inquiry: A Teaching Unit

Goal: To provide the techniques needed to teach via the inquiry method and when using a small group structure.

This unit is divided into six components each with an accompanying objective and an outline of the suggested procedures. Supportive worksheets (Appendix A) are included. The components are designed to provide the students with limits or parameters within which to operate. At the same time the components should cause the learners to use the inquiry process and small group process. The objectives are derived from the inquiry steps while the procedures relate to small group interaction.

It will be noted that certain tasks are accomplished individually and others collectively. Research activities are most worthwhile when undertaken by individuals. The findings are found to be more basic and pertinent when subjected to group feedback. Learner commitment is enhanced when he sees that his unique potential is needed by his group in order to accomplish the task.

Objective 1. The group will recognize, clarify, and define a problem or topic. The teacher and/or students may choose a topic such as the race problem, American colonization, drug abuse, pollution, or war/peace.

Choosing Descriptor Words (Worksheet A, page 17):

Each student will prepare a list of words that describe the topic. The members of the group will combine their descriptor words. Each group will then share their list of descriptors with all other groups so that a large group master list results; each student should receive a copy of the master list.

Clarifying and Defining (Worksheet B, page 18):

The small groups will separate the words on the master list into categories. (For example, words describing the racial problem may be listed under economic, social, political, and cultural subheadings.) Descriptors that don't fit or that are not important will be dropped; others may be added.

(If students have difficulties at this stage, it helps to allow a member of each group to visit the other groups.)

Objective 2. The background of the problem or topic will be analyzed.

Task Assignment (Worksheet C, page 19):

In a give-and-take session the small group will decide upon procedures and roles needed in order to cooperatively study the background facts. Often the group members will simply assign each student a part of the descriptor words with instructions to find the needed information in that area.

Commitment (Worksheet C, page 19):

Each member agrees to carry out his part. The group writes down their plan of operation for the teacher.

Individual Research (Worksheet D, page 20):

Information is gathered with the intent of sharing so that all in the group have knowledge of other areas. Students may need assistance in securing relevant information. The length of time allotted will depend upon depth of the study and seriousness of the participants.

Objective 3. Background findings are shared to provide each group member with an understanding of all the background facts studied.

Individual Reports:

In a "go-around" each member informs the group of his findings. Sharing is complete when all members feel adequately informed concerning the entire background of the topic.

Developing the Presentation (Worksheet E, page 21):

Through "give-and-take" dialogue the group will decide the following: (a) which findings should be presented to the large group; (b) the form in which the presentation will be given; and (c) each member's function in the presentation.

Presentation (Worksheet J, page 26):

The small group will present findings in respect to the background of the topic in a manner acceptable to the teacher and the group. The presentation can take many forms such as role playing, oral reports, slide presentation, etc. The large group is to be encouraged to interact freely with constructive comments and criticisms after the initial presentation.

- Objective 4.** The small group utilizing the large group's comments will plan a search for information needed for proposing solutions.

Task Assignment (Worksheet F, page 22):

In a "give-and-take" session each group will decide upon the procedures and member roles needed to cooperatively gather the information required for developing propositions. Often the group members will wish to follow-up in the area that they had studied for background facts.

Commitment (Worksheet C, page 19):

Each member agrees to carry out his assigned function. The commitments of all group members are given to the teacher. A schedule and deadline are set.

- Objective 5.** The various parts of the topic will be studied in order to provide facts and logic needed in proposition construction.

Individual Research (Worksheet G, page 23):

Information is gathered with the intent of providing the other group members with adequate insight into each area. Students may need assistance in securing relevant information. The time allotment will depend upon depth of the study and the seriousness of the participants.

Objective 6. A single report of the propositions of the groups will be developed by the group and shared with the class.

Developing the Presentation (Worksheet H, page 24):

Through a "give-and-take" dialogue the group will decide upon the following: (a) which findings should be presented to the large group; (b) the form in which the presentation will be given; and (c) each member's function in the presentation.

Presentation (Worksheet J, page 26):

The small group will present their propositions to the large group in a manner satisfactory to the teacher. The large group is urged to interact freely with constructive comments and criticisms after the initial presentation.

Free Session (Worksheet I, page 25):

The teacher allows the large group or small group to generalize (draw conclusions). He may also wish

to encourage discussion of problems arising with inquiry steps or with the small group process. It may be that group relations need to receive special attention. This session should be held whenever the processes seem to be breaking down.

Small Group Interaction: A Teaching Unit

Goal: To provide the tools needed in bringing about student understanding relative to feeling-behavior-communication relationships.

The facilitator of small groups will often find that satisfactory progress cannot be made because of interpersonal relations of group members. Even if small group inquiry is not the objective, the teacher may wish to assist the students in improving their social and personal relations. In either case, small groups can provide the forum needed when the relationships between feelings and behavior are being investigated. Without adequate avenues for communication and feedback, such investigation lacks depth and meaning. The interplay between feelings and behavior can be understood and applied through many techniques. Those presented in this unit have been used with unskilled workers and students in grades three through eight.

Objective 1. To understand and recognize the characteristics of a good group member.

Behavior:

Individual recognition of good group member characteristics.

Pooling of characteristics.

Large group chooses the fifteen characteristics of a good group member.

Identifying the Characteristics:

Each individual lists the member characteristics he sees as important to the success of the group. Each

member then shares his list with the members of his group. A master list is compiled for the whole class.

Ranking the Characteristics:

Each member is asked to rank order the fifteen characteristics that he feels are most important. A tally is made and a list of the "Fifteen Characteristics of a Good Group Member" is printed and distributed. (See Appendix B, page 27.)

Objective 2. To internalize the characteristics of a good group member.

Behavior:

Individuals recognize positive personal traits.
Individuals recognize negative personal traits.
Members decide to develop certain characteristics.

Self-Other Appraisal:

In a "go-around" each group member selects one characteristic of a good group member which he feels best fits each of his fellow members. He then informs all members of his choices.

Improving as a Group Member:

Each member chooses one characteristic of a good group member and notifies the group that he will try to develop that characteristic. The group accepts or rejects his choices until all members have identified an area in which they are to improve.

Partners:

The members, having chosen or been assigned to develop a characteristic of a good group member, choose a partner. Each partner is to assist each other in their personal development.

Objective 3. Group members are to develop the ability to communicate more effectively.

Behavior:

Rules for "good listening" are identified.
Rules for "good speaking" are identified.
Individuals sharpen their communication skills through practice.

Choosing the Rules:

Each individual lists the rules of good speaking and good listening that he sees as important to the success of the group. Each member then shares his list with the members of his group. A master list is compiled for the whole class.

Ranking the Rules:

Each member is asked to rank order the ten rules for good speaking and the ten rules for good listening that he feels are most important. A tally is made, and a list of the ten rules for good speaking and a list of the ten rules for good listening are printed and distributed. (Appendix B, page 28.)

Speaking and Listening Laboratory (Cue Cards):

One group member is designated a "talker" and one a

"listener." The two sit in the center of their group facing a row of "talker's helpers" on one side and the "listener's helpers" on the other. The talker describes his attempt to develop a characteristic of a good group member. His partner reacts. The "helpers" suggest improvements in communication by indicating perceived needs with the appropriate cue card (one rule on each). Listener and speaker roles are rotated until each group member has functioned in each role.

Objective 4. To actualize the ability to develop, agree upon, and utilize a set of rules appropriate to small group learning.

Behavior:

Rules essential to group cooperation are identified. Pooling of rules results in a master list. Ranking of rules results in a list of essential rules.
Group commitment to self-improvement.

Identification of Necessary Rules:

Each member is asked to list the rules he feels are essential to small group cooperation. These rules are then shared with his group members. Each small group shares their list with the class and a master list is compiled.

Ranking the Rules:

Each member is asked to rank order the ten rules.

A tally is made and a list of the ten rules essential to small group cooperation is printed and distributed. (See Appendix B, page 29.)

Assessment:

At any stage of group interaction the members are each asked to identify the two rules best followed by his group and the two rules least followed by his group. The findings are pooled and the group decides which two rules it will attempt to improve upon in the future. The small group informs the other groups of their decision.

APPENDIX A

Small Group Inquiry -- Worksheet A

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,

3. _____, 4. _____, 5. _____,

6. _____, 7. _____, 8. _____.

Topic of Concern: _____

List as many words as you can think of that relate to the topic.

1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____

Small Group Inquiry -- Worksheet B

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

Using the list of descriptor words from Worksheet A, divide the subject into major areas and list the words in the area they fit.

Area I.	Area II.	Area III.	Area IV.

Small Group Inquiry -- Worksheet C

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

Decide, as a group, upon the accepted answer to the following questions.

1. Which group members will be responsible for studying the background causes for each of the areas described in Worksheet B?

Area I. _____

Area II. _____

Area III. _____

Area IV. _____

2. When will the results be reported to the group?
3. When will the group results be reported to the class?
4. How will the results be reported to the class?

Small Group Inquiry -- Worksheet D

Topic of Concern: _____

Sub-Area: _____

Members working on this area: _____

Outline of Findings:

A.

1.

2.

3.

B.

1.

2.

3.

C.

1.

2.

3.

D.

1.

2.

3.

How does this area fit into the rest of the topic?

Small Group Inquiry -- Worksheet E

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

A. What is presently hindering _____?
(desired goal)

1.

2.

3.

4.

5.

6.

7.

B. How serious are these concerns? (Rank order)

1.

2.

3.

4.

Small Group Inquiry -- Worksheet F

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

Decide, as a group, upon the accepted answers to the following questions.

1. How can we help each other with this concern?

2. What can each of us do?

Name _____

Name _____

Name _____

Name _____

Name _____

Name _____

Name _____

Name _____

Small Group Inquiry -- Worksheet G

Topic of Concern: _____

Sub-Area: _____

Members working in this area: _____

Outline of Suggestions:

A.

1.

2.

3.

B.

1.

2.

3.

C.

1.

2.

3.

D.

1.

2.

3.

How do these proposals and suggests fit with the findings of other group members?

Small Group Inquiry -- Worksheet H

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

1. What can we do to change _____?
(area in which action is needed)

a.

b.

c.

d.

e.

f.

2. How will these suggestions be put into effect?

a.

b.

c.

d.

e.

Small Group Inquiry -- Worksheet I

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,

3. _____, 4. _____, 5. _____,

6. _____, 7. _____, 8. _____.

Topic of Concern: _____

Decide, as a group, upon several answers to the following questions.

1. How well have we worked as a group?
2. What can we do to improve our group relationships?
3. Did we each do our part?
4. What are our specific needs?
5. How can we improve our ability to inquire?
6. With what concerns do we need more help?

Small Group Inquiry -- Worksheet J

Topic _____ Name _____

Group Reporting _____

A. Major ideas that you agree with.

- 1.
- 2.
- 3.
- 4.

B. Major ideas that you disagree with.

- 1.
- 2.
- 3.
- 4.

C. Unusual information presented.

- 1.
- 2.
- 3.

D. Information presented that seemed incorrect.

- 1.
- 2.
- 3.

E. Overall reaction (-) 1 2 3 4 5 6 7 8 9 (+)

APPENDIX B

CHARACTERISTICS OF A GOOD GROUP MEMBER
By Twining Fifth Grade

1. They do their share of the work
2. They stay in their group
3. They accept the decisions of their group
4. They respect the rights of others
5. They are cheerful and happy
6. They cooperate and work together
7. They want others to be happy
8. They know when to be serious
9. They share their ideas
10. They are alert to what is happening
11. They have good manners and are courteous
12. They are good sports
13. They take their turn
14. They are eager
15. They listen carefully to others

CHARACTERISTICS OF A GOOD SPEAKER

By Twining Eighth Grade

1. Speaks with feeling
2. Uses examples
3. Checks if listener understands
4. Watches listener's physical actions
5. Demonstrates
6. Doesn't repeat himself using the same words
7. Asks listeners to imagine themselves in a similar situation
8. Doesn't preach

CHARACTERISTICS OF AN ACTIVE LISTENER

1. Checks to see if they understand
2. Doesn't interrupt
3. Picks up the feeling
4. Watches the speaker's actions
5. Respects the feelings of the speaker
6. Asks the speaker to clarify
8. Asks the speaker why they feel that way
9. Asks the speaker why they think that way
10. Doesn't argue with the speaker

RULES ESSENTIAL TO GROUP COOPERATION

By Eielson Eighth Grade

1. Choose a good leader
2. Help each other
3. Contribute suggestions and ideas
4. Lend a helping hand
5. Get work done on time
6. Allow freedom of expression
7. Respect each other
8. Debate relevant issues
9. Do your best
10. Pay attention to others
11. Take turns speaking
12. Listen to each other's feelings

ANNOTATED BIBLIOGRAPHY

Adams, John C., Jr. "The Effectiveness of Small Group Interaction As Opposed to Teacher Centered Instruction." American Personnel and Guidance Association, Washington, D. C. (ERIC ED 041 319 MF \$0.25 HC \$0.70) 12. 1970.

The author offers a simple rationale for small group instruction based upon his experience and upon personal observation. Using a low-key approach and a moderate vocabulary, he presents a strong case for the small group method if the goals are interest, motivation, creativity, intellectual growth (concepts), and emotional growth. In suggesting a generalized procedure, Adams indicates that a group of six to eight heterogeneous type students form a unit. Instructions and follow-through must be clear and consistent. Teacher pressures should be at a minimum. Cooperation and individual endeavor can be planned for and rewarded (grades) using this approach.

Ball, Jerald T. "The Pentagonal Principle for Self-Oriented Classes." (ERIC ED 032 866 MF \$0.25 HC \$1.00) 18. 1969.

Utilizing a rather structured group process, the author finds learning and motivation are increased as compared to the lecture method. Ball gives a clear description of the methods, role responsibilities, and procedures used with the pentagonal groups studying mathematics. Basically, each unit is divided into five or six parts with each student responsible for teaching the rest of his group about his area. If a student is unable to perform, his group is responsible for his part. The group verifies all steps.

Burke, R. L., and Bennis W. G. "Changes in Perception of Self and Others During Human Relations Training." Human Relations 14:165-181. 1961.

This report indicates that changes in perceptions of self and others do take place in a T-group laboratory setting. Utilizing a semantic differential evaluation scheme and the technique of factor analysis, the authors attempted to prove five hypotheses. Changes in perception were indicated by an increased consistency between one's perceived actual and ideal selves, and by a perceived change as observed by others that was considerably greater than self perceived change. Other changes

in perception are also indicated. It is further noted that a T-group seems to emphasize changes in social perceptions as compared with a therapy group which emphasizes greater changes in perception of self.

Deep, Samuel D. "Use of Management Training Simulations in a University Educational Administration Program; the Program of Exercises for Management and Organizational Development." Paper presented at American Association of School Administrators Annual Convention, Atlantic City, N. J. (ERIC ED 050 446 MF \$0.65 HC \$3.29) 5. 1971.

This is a programmed approach to human interaction based upon a need for behavioral change. Since deep-seated beliefs and attitudes are held to be modifiable by behaviorally confronting tasks that are personally incongruent, this approach utilizes the small group feedback technique. Decisions are made individually in respect to a specific case study; then a small group consensus is reached; analysis of personal and group processes used are studied; and, finally, the experiences are shared. Eleven separate areas are approached using this technique. These areas are chosen to provide specific insights into the human interaction process. All of the exercises are presented in booklet form.

Durham, Lewis L., and Others. "A Bibliography of Research, Explorations, Human Relations Training and Research." National Training Labs., Washington, D. C. (EDRS ED 014 016 MF \$0.25 HC \$1.52) 36. 1967.

This set of annotations on the subject of personality and human relations is most thorough. The paper includes a review of 100 research articles and books. Subject areas covered include T-groups, group structure and dynamics, interpersonal relationship, self-concepts, behavior and attitude change, and organizational change. Materials reviewed were selected from the years 1947 through 1967.

Eberlein, Larry. "A Process Approach to Teaching Teachers." Paper presented to the American Educational Research Association, Minneapolis, Minn. (ERIC ED 037 410 MF \$0.25 HC \$0.90) 16. 1970.

When teaching educational courses, especially educational psychology, college instructors usually are found to lecture on the subject of human dynamics and interaction. Eberlein presents a well-planned group approach which he has used effectively in combining cognitive and affective learning. Information input is

derived from past learning experience of the students, classroom observation, and from readings on the subject. Student goals are utilized in conjunction with the instructors' objectives in arriving at course objectives. Random groups are formed with a member chosen to a representative group that provides feedback and has goal modifications power. Each group makes a collective presentation, and each student makes an individual project report. The case study is used to focus divergent interests within a group. Periodic assignments also help to keep student activities within the broad parameters of the course. Unusually bright students are found to be most anxious in the setting. Three out of four students are reported to feel unusually enhanced.

Glatthorn, Allan A. "Learning in the Small Groups." Institute for Development of Educational Activities, Dayton, Ohio. (ERIC ED 043 567 MF \$0.25 HC \$1.05) 19. 1968.

Seven different types of learning groups (task, didactic, tutorial, discursive, brainstorming, heuristic, and maieutic) are examined in respect to their organization and function. This discussion is deemed beneficial to one whose objectives are clear and who wishes to utilize the small group style most congruent with the objectives. Even more useful, in the view of the reviewer, is the introduction which includes a rationale, supported by research, for the use of small groups. Utilizing learning, motivation, and social change theory, Glatthorn makes a very positive case for this method of learning.

Gordon, Thomas. "What Is Gained by Group Participation?" Educational Leadership 7:220-226. 1950.

Interested in the effect of group participation upon changes in the members' behavior and changes in attitude towards self, Gordon reports the findings of a study of this nature. The results indicate that members (1) became more self-accepting, (2) increasingly searched their attitudes and abilities concerning goal success or failure, (3) had to shift a whole constellation of attitudes and beliefs to effect behavior change, and (4) developed increased perception of the reliance upon self or others dichotomy. Gordon used the technique of analyzing the recordings of a non-directive interview as an assessment device. He finds the technique to have reinforcement qualities as well as evaluatory properties.

Halvorson, Richard B. "A Report on the Cognitive (Systems-Analysis) Approach to Teaching Introductory Sociology

Versus the Traditional Lecture-Discussion Method." Spokane Community College, Washington Dept. of English. (EDRS ED 040 092 MF \$0.25 HC \$1.60) 30. 1969.

The object of this experiment was to provide students with a program designed to incorporate all of the levels of cognitive learning as defined by Bloom. Small groups were formed and a carefully planned program was carried out in this project. Using GPA as a criterion, no significant changes in objective learning were found. The program plan incorporates a number of worthwhile features of the learning process such as time lines, assignment setting, and the identification of objectives.

Hoehn, Lilburn P. (ed.). "Teaching Behavior Improvement Program." HEW, Washington, D. C. (EDRS ED 034 719 MF \$1.00 HC \$12.75) 253. 1969.

This document explains the procedure used over a three-year period with the intent of changing teaching behavior. Beginning with the variable of teacher behavior instead of teacher attitudes or teacher knowledge, the program is laid out so as to involve the in-service personnel in self-change. Using a design-trial-evaluate-redesign cycle, educators are encouraged to seek out dissonance, confront the source, plan action to be taken, react, and evaluate. Several of these steps are to be taken in a small group setting because feedback is seen as essential in modifying behavior. The authors present a complete plan, step by step, for the implementation of in-service units of this nature. The document is a rich source of information concerning materials, procedures, and results.

House, Robert J. "T-Group Education and Leadership Effectiveness: A Review of the Empiric Literature and a Critical Evaluation." Personal Psychology 20:1-32. 1967.

The author's carefully documented concern relates to the intrapersonal effect of T-group upon the individual. Since an effective T-group is found to be a powerful means of changing perceptions and behavior, House feels that there is a grave need to analyze the overt and possibly latent effects. Studies cited indicate, for example, that when one becomes more open and questioning as a result of such training, he may have difficulty working with his peers and superiors. House suggests that the power to cause one to modify his behavior leads to the query of "in what direction?" Furthermore, since the psychic therapeutic qualities of T-group training are known, one needs to consider the consequences of the use of the technique by those who are not highly trained in clinical psychology.

Hrivnak, Joseph T. "The Use of Interaction and Feedback in an Inservice Education Model." Doctoral dissertation submitted to the University of Pittsburgh School of Education. (EDRS ED 050 036 MF \$0.65 HC \$6.58) 118. 1970.

The author believes that most existing in-service programs for educators have minimal success because immediate and varied feedback along with a supportive climate are absent. In order to remedy this, he utilized small group interaction with the group members providing the following: (1) development and planning of new competencies, (2) trial runs and observations, (3) feedback discussion, (4) modification and/or adjustment, and (5) continued development. It is suggested that the number of competencies to be attempted be realistically related to other resources, especially to that of time. Program evaluation indicates that the provision for interpersonal interaction and feedback results in positive behavior and attitude modification.

Olmstead, Joseph A. "Theory and State of the Art of Small-Group Methods of Instruction." Human Resources Research Organization, Alexandria, Va. (EDRS ED 040 345 MF \$0.25 HC \$2.95) 57. 1970.

This report attempts to evaluate the more common small group methods in terms of their effectiveness in teaching adults. It includes a rationale for small group instruction, description of methods, and an assessment based on existing research findings. It was concluded that small group methods enhance motivation, cause the participant to have more positive attitudes, and improve his use of problem-solving skills. Information retention is not correlated negatively or positively with small group instruction. The rationale rests upon the premise that learning is partly a function of attitudes; education or training is a matter of overcoming resistance to change. The most effective learning technique is seen as a small group designed as a learning culture. Such a culture is seen to assist in providing learning that involves a change in behavior rather than a simple transmission of knowledge. Olmstead's ability to synthesize psychological and sociological findings and theory into a practical far-reaching approach to education is incisive. Studies reviewed, in general, showed that small group instruction as compared to the lecture methods was as follows: (1) equal in terms of knowledge acquisition, (2) superior in terms of long-term knowledge retention, (3) superior in developing problem-solving skills, (4) superior in developing positive attitudes towards course work, and (5) superior in changing content specific attitudes.

Randolph, Norma, Howe, William, and Atherman, Elizabeth. Self Enhancing Education: Communication Techniques and Processes That Enhance -- A Training Manual. Stanford Press, Palo Alto. 1968.

This manual presents field tested strategies for improving the communication skills used in personal relations. The intent of the program is to enable the participant to gain self-confidence and increased feelings of worth as he learns. The authors found that improved communications were essential to the learner's total growth. The processes presented are basically those of reflective listening, modeling, congruent (owning) message sending, confrontation, mediation, problem-solving, and setting stable limits. The techniques are presented with objectives, the rationale underlying the objectives, a description of the technique, and examples. The manual has been widely used with educators and others (e.g., businessmen) throughout the United States and in foreign countries. The authors who use the manual when providing in-service workshops have revised it several times.

Rogers, Carl R. Carl Rogers on Encounter Groups. Harper & Row, New York. 1970.

This book was written by a psychologist who has been interested and involved in group therapy and related activities for thirty-five years. It is a handbook that evolved from the author's personal experiences. Rogers entertains no doubts as to the relatively untapped potential of the encounter (T, sensitivity, task-oriented, Gestalt, etc.) group in respect to its therapeutic and related change producing possibilities. Starting with a review of work in this area (especially Lewin), he proceeds to describe the process of the group. Following this is an especially worthwhile discussion of the facilitative roles of the members, including the leader. Considerations such as the weight of counter-claims, some areas of application, and the development of facilitative skills are also included. The author's personal feelings concerning the whole area of human nature are interlaced with the rest of the subject matter.

Sampson, Edward E. Social Psychology and Contemporary Society. John Wiley & Sons, Inc., New York. 238-274. 1971.

An incisive review of research as it is related to the various theories of planned change, this work relates directly to the problems and concerns of modern society.

The issue of cooperation versus competition is used as a framework for an indepth discussion of the findings and perceived merits or failings of the group interaction process. A broad spectrum of relevant topics are considered along with a specific treatment of the T-group as an instrument of planned change.

Shatz, Eunice and Others. New Careers of Generic Issues in the Human Services: A Sourcebook for Trainers. Manpower Administration, Washington, D. C. (EDRS ED 025 468 MF \$0.50 HC \$3.75) 73. 1968.

Designed for use by trainers in preparing unskilled workers with minimum education for entry as nonprofessionals in human services, this manual is organized to increase one's understanding of individual and group behavior. Suggested unit plans and the training program rest on the premise that all people in the area of human service need growth in four broad areas: (1) the world of work, (2) people, (3) the community, and (4) oneself. Feedback from the trainee's core group is considered an essential ingredient of behavior modification. Results obtained from analysis of drop-out rates, commitment, etc. indicate that this confluent process utilizing small group techniques is unusually worthwhile.

Solomon, Lawrence N., Berzon, Betty, and David, David P. "A Personal Growth Program for Self-Directed Groups." The Journal of Applied Behavioral Science 6:427-450. 1970.

The authors, working with a group of "vocationally handicapped" students, report the procedures utilized and the results of a two-year attempt to enhance the individual's ability to make fuller use of his social and vocational potential. Specifically, the attempt was made to enable the participant to experience an awareness of the following: (1) his own feelings, (2) how his feelings affect his behavior, (3) how his behavior affects another's feelings, (4) how another's behavior affects his behavior, and (5) how another's behavior affects his own feelings. Small group techniques and processes used are presented. Evaluation was quite well done and extensive. The data indicates significantly increased sensitivity to others, self-acceptance, and self-motivation.

Thelen, Herbert, and Dickerman, Watson. "Stereotypes and the Growth of Groups." Educational Leadership 6:309-316. 1949.

This report is an attempt to outline the stages of development individuals go through as participants in small group problem-solving processes. The information

is based upon firsthand experience in the activities of the First and Second National Training Laboratories in Group Development held in 1947 and 1948. The authors found that in stage one the members find a place in the leadership hierarchy; in stage two members are frustrated and anxious as a result of concept conflict; in stage three the group is characterized by a determination to provide harmony; and the fourth stage is characterized by a cooperative goal seeking orientation. The authors found that most groups failed to reach stage four, that of group productivity. An understanding of this process is felt to be useful in providing for meaningful group growth.

Thelen, H. A., and Others. Role Perception and Task Performance of Experimentally Composed Small Groups. The University of Chicago, Chicago, Illinois. 1969.

As a part of a five-year study in respect to small group effectiveness, the authors attempt to find the relationships between fifteen personal variables (e.g., dependency) and three major group functions (task work, group maintenance, and individual involvement). Based on a conviction that the small group provides for personal growth needs in quite beneficial ways, the goal was to determine what types of personalities are most likely to provide the optimal setting in simple or complex task settings. Related data, test forms, procedures, and the like are carefully delineated. Among the many conclusions drawn, these seemed especially pertinent: (1) a seemingly incompatible group was found to function quite well when the task was complex; (2) emotional characteristics were very important factors in relation to production; and (3) groups composed of several members wanting control and not receiving it related negatively with productivity.

Walton, Richard E. "A Problem-Solving Workshop on Border Conflicts in Eastern Africa." Journal of Applied Behavioral Science 6:453-489. 1970.

The United Nations supported the proposal of three Yale University social scientists who hoped to utilize small group techniques in the resolution of international conflicts. Non-governmental personnel from Somalia, Ethiopia, and Kenya (N = 18) met with the Yale group and the author for a two-week workshop. The plan was to develop bonds of trust through interpersonal activities and the implementation of simulation, T group, and related techniques. The purpose underlying the humanistic communication was to provide the framework and climate

necessary for group decision-making concerning international problems. The small group process seems to have been quite successful in bringing about a good cross-section of cooperative endeavor between members of the different nations, but failed to provide for accommodation of intra-nation conflict. The session failed to provide a consensual proposal. The day-to-day account of activities and progress indicates that this session was, at the least, very meaningful to the participants. It is likely that many beneficial "latent" effects could result.











Ward, William T. "Increasing Teacher Effectiveness Through Better Use of Scientific Knowledge." Address given to National Federation for Improvement of Rural Education, Denver, Colorado. (EDRS ED 034 735 MF \$0.25 HC \$1.30) 24. 1969.

Concerned with the application of research findings on the subject of teacher behavior as related to student behavior, Ward presents a precise and concise case for the inquiry method of instruction. Included are descriptions of the inquiry process, the supportive classroom climate, the nature of learning by discovery, and the psychological aspects of individual growth needs. The basic purpose of the author was to show that teacher behavior can be changed as a result of scientific planning in the pre- or in-service stages. A rationale and model for such a program is included.

Webb, Neil J., and Grib, Thomas F. "Teaching Process As a Learning Experience -- The Experimental Use of Student-Led Discussion Groups." Saint Norbert Coll., West De Pere, Wis. (EDRS ED 019 708 MF \$0.75 HC \$5.24) 129. 1967.

The objective of this study was to test the effectiveness of small learning groups in many different college courses with unselected students of varying ability. Two of the six experimental groups made significant achievement gains as compared to control groups. In no case did the control groups achieve significantly more. Gains were indicated in respect to higher level cognitive processes and in respect to motivation, interest, and student responsibility. Many examples of the innovative techniques utilized in the program are included. Grouping, grading, and objective setting techniques are examples of the topics considered. Teacher behavior changed from attempting to provide for anticipated needs to an attempt to assist students in fulfilling expressed needs. Also presented was a booklet entitled Manual for Student-Led Discussions.

(Color D)

31  YES NO	36  YES NO
32  YES NO	37  YES NO
33  YES NO	38  YES NO
34  YES NO	39  YES NO
35  YES NO	40  YES NO

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ABSTRACT.. LEARNING IN SMALL GROUPS IS A PRACTICAL WAY TO BRING ABOUT BEHAVIOR CHANGE. THE INQUIRY LEARNING PROCESS IS PERCEIVED TO BE THE MOST NATURAL AND SCIENTIFIC WAY OF LEARNING. SKILLS DEVELOPED INCLUDE THOSE OF PROBLEM-SOLVING TASK ANALYSIS, DECISION-MAKING, VALUE FORMATION AND ADAPTABILITY. THE ART OF SMALL GROUP INTERACTION IS DEVELOPED. FACTUAL LEARNING IS EQUAL TO OR GREATER THAN THAT RESULTING FROM OTHER METHODS. CONCEPTUAL LEARNING AND KNOWLEDGE RETENTION RESULTING FROM THIS METHOD ARE SUPERIOR TO THAT OF OTHERS. ATTITUDES, INTERESTS, DIFFERING LEARNING STYLES, AND FEELINGS ARE PROVIDED FOR IN AN EFFECTIVE AND MEANINGFUL WAY. THE TWO UNITS PRESENTED ARE DESIGNED TO ASSIST THE TEACHER IN IMPLEMENTING THE PROCESS. FACILITATIVE WORKSHEETS ARE INCLUDED. AN ANNOTATED BIBLIOGRAPHY PROVIDES SUPPORT FOR THE PROPOSITIONS. THE UNITS HAVE BEEN USED WITH STUDENTS IN THE THIRD, FIFTH, EIGHTH, TENTH, ELEVENTH, AND TWELFTH GRADES.

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SMALL GROUP INQUIRY

by

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The classroom teacher who wishes to implement a teaching program that combines learning with feeling development needs tools with which to do the job. If the goal is to bring about behavior and attitude modification as a result of classroom experience, traditional methods may prove inadequate.

The purpose of this paper is to present a set of techniques that were developed to meet these needs. The two units included are based on the premise that the inquiry process combined with the small group interaction process will provide a practical and yet efficient way of attaining relevant feeling education.

Used with teachers and students, this material has been revised according to the reaction in the field and as a result of a review of the literature on the subject. (See attached annotated bibliography.)

The basic inquiry steps are as follows:

- A. Defining and clarifying the topic.
- B. Researching the background of the topic.
- C. Generalizing from the findings.

D. Using data and logic in proposing solutions.

E. Attempting to apply the proposed solutions.

The small group process requires that one's feelings and ideas are acted upon by fellow group members. The basic experiences are as follows:

A. Individual ideas acted upon by a small group.

B. Small group feedback to individual members.

C. Democratic decision-making.

D. Individual cooperation as a part of the group function.

E. Small group interaction as a part of large group function.

Implicit in the inquiry process is a structure that lends itself to scientific study while providing the student with the organization needed for security and for an understanding of the process. The group interaction process provides the learner with an opportunity to try out ideas and abilities with the accompanying satisfaction of immediate feedback. The individual can develop his ability to function in a social group while gaining experience in approaching little known situations. This experience should prove useful in future living.

Generally speaking, it is suggested that the inquiry steps be followed in the order presented. It is also recommended that the small group consist of between four and eight heterogeneous students. In using a teaching format such as this, the students should be briefed on the method and the objectives.

The outlines presented on the following pages ("Small Group Inquiry Steps" and "Small Group Inquiry Grading") have been used as handouts when introducing units based on this plan.

SMALL GROUP INQUIRY STEPS

- A. Defining and clarifying the situation
 1. Individuals list words that describe
 2. Small group combines lists of members
 3. Small groups share - develop master list
 4. Small groups sub-divide words
- B. Researching background
 1. Individuals research a sub-area
 2. Individuals share with small group
 3. Small group develops a report composed of several parts
 4. Small groups share with large group
 5. Large group interacts with small group
 6. Findings are generalized by teacher
- C. Making propositions
 1. Individuals research a sub-area
 2. Individuals share with small group
 3. Small group develops propositions
 4. Small groups share with large groups
 5. Large group interacts with small group
 6. Propositions are generalized by teacher
- D. Action
 1. Small groups decide direction
 2. Individuals make commitment
 3. Individuals report to small group
 4. Small group reports to large group

SMALL GROUP INQUIRY * GRADING

- A. Grade when small group shares with large.
(Grade during part B. and C.)
1. (1/3) Each individual is graded on their presentation and ability to respond to questions.
 2. (1/3) Each group gets a grade. (This part of the individual's grade depends upon group cooperation)
 3. (1/3) Each individual asking a question or making a positive comment to the small group presenter receives credit each time he does so.
- B. Example based upon a 100 point unit.
A student (Bob?) as a member of a small group does a good job by considering his area in depth and with a good use of logic and facts. He receives 31 points. His group does a fair job and receives 22 points for each member. Bob, as a member of the large group asks 7 good questions (5 points each). For this he receives the maximum allowed, or 34 points. His total score would equal 31 plus 22 plus 34 or, 87/100.

Small Group Inquiry: A Teaching Unit

Goal: To provide the techniques needed to teach via the inquiry method and when using a small group structure.

This unit is divided into six components each with an accompanying objective and an outline of the suggested procedures. Supportive worksheets (Appendix A) are included. The components are designed to provide the students with limits or parameters within which to operate. At the same time the components should cause the learners to use the inquiry process and small group process. The objectives are derived from the inquiry steps while the procedures relate to small group interaction.

It will be noted that certain tasks are accomplished individually and others collectively. Research activities are most worthwhile when undertaken by individuals. The findings are found to be more basic and pertinent when subjected to group feedback. Learner commitment is enhanced when he sees that his unique potential is needed by his group in order to accomplish the task.

Objective 1. The group will recognize, clarify, and define a problem or topic. The teacher and/or students may choose a topic such as the race problem, American colonization, drug abuse, pollution, or war/peace.

Choosing Descriptor Words (Worksheet A, page 17):

Each student will prepare a list of words that describe the topic. The members of the group will combine their descriptor words. Each group will then share their list of descriptors with all other groups so that a large group master list results; each student should receive a copy of the master list.

Clarifying and Defining (Worksheet B, page 18):

The small groups will separate the words on the master list into categories. (For example, words describing the racial problem may be listed under economic, social, political, and cultural subheadings.) Descriptors that don't fit or that are not important will be dropped; others may be added. (If students have difficulties at this stage, it helps to allow a member of each group to visit the other groups.)

Objective 2. The background of the problem or topic will be analyzed.

Task Assignment (Worksheet C, page 19):

In a give-and-take session the small group will decide upon procedures and roles needed in order to cooperatively study the background facts. Often the group members will simply assign each student a part of the descriptor words with instructions to find the needed information in that area.

Commitment (Worksheet C, page 19):

Each member agrees to carry out his part. The group writes down their plan of operation for the teacher.

Individual Research (Worksheet D, page 20):

Information is gathered with the intent of sharing so that all in the group have knowledge of other areas. Students may need assistance in securing relevant information. The length of time allotted will depend upon depth of the study and seriousness of the participants.

Objective 3. Background findings are shared to provide each group member with an understanding of all the background facts studied.

Individual Reports:

In a "go-around" each member informs the group of his findings. Sharing is complete when all members feel adequately informed concerning the entire background of the topic.

Developing the Presentation (Worksheet E, page 21):

Through "give-and-take" dialogue the group will decide the following: (a) which findings should be presented to the large group; (b) the form in which the presentation will be given; and (c) each member's function in the presentation.

Presentation (Worksheet J, page 26):

The small group will present findings in respect to the background of the topic in a manner acceptable to the teacher and the group. The presentation can take many forms such as role playing, oral reports, slide presentation, etc. The large group is to be encouraged to interact freely with constructive comments and criticisms after the initial presentation.

Objective 4. The small group utilizing the large group's comments will plan a search for information needed for proposing solutions.

Task Assignment (Worksheet F, page 22):

In a "give-and-take" session each group will decide upon the procedures and member roles needed to cooperatively gather the information required for developing propositions. Often the group members will wish to follow-up in the area that they had studied for background facts.

Commitment (Worksheet C, page 19):

Each member agrees to carry out his assigned function. The commitments of all group members are given to the teacher. A schedule and deadline are set.

Objective 5. The various parts of the topic will be studied in order to provide facts and logic needed in proposition construction.

Individual Research (Worksheet G, page 23):

Information is gathered with the intent of providing the other group members with adequate insight into each area. Students may need assistance in securing relevant information. The time allotment will depend upon depth of the study and the seriousness of the participants.

Objective 6. A single report of the propositions of the groups will be developed by the group and shared with the class.

Developing the Presentation (Worksheet H, page 24):

Through a "give-and-take" dialogue the group will decide upon the following: (a) which findings should be presented to the large group; (b) the form in which the presentation will be given; and (c) each member's function in the presentation.

Presentation (Worksheet J, page 26):

The small group will present their propositions to the large group in a manner satisfactory to the teacher. The large group is urged to interact freely with constructive comments and criticisms after the initial presentation.

Free Session (Worksheet I, page 25):

The teacher allows the large group or small group to generalize (draw conclusions). He may also wish

to encourage discussion of problems arising with inquiry steps or with the small group process. It may be that group relations need to receive special attention. This session should be held whenever the processes seem to be breaking down.

Small Group Interaction: A Teaching Unit

Goal: To provide the tools needed in bringing about student understanding relative to feeling-behavior-communication relationships.

The facilitator of small groups will often find that satisfactory progress cannot be made because of interpersonal relations of group members. Even if small group inquiry is not the objective, the teacher may wish to assist the students in improving their social and personal relations. In either case, small groups can provide the forum needed when the relationships between feelings and behavior are being investigated. Without adequate avenues for communication and feedback, such investigation lacks depth and meaning. The interplay between feelings and behavior can be understood and applied through many techniques. Those presented in this unit have been used with unskilled workers and students in grades three through eight.

Objective 1. To understand and recognize the characteristics of a good group member.

Behavior:

Individual recognition of good group member characteristics.

Pooling of characteristics.

Large group chooses the fifteen characteristics of a good group member.

Identifying the Characteristics:

Each individual lists the member characteristics he sees as important to the success of the group. Each

member then shares his list with the members of his group. A master list is compiled for the whole class.

Ranking the Characteristics:

Each member is asked to rank order the fifteen characteristics that he feels are most important. A tally is made and a list of the "Fifteen Characteristics of a Good Group Member" is printed and distributed. (See Appendix B, page 27.)

Objective 2. To internalize the characteristics of a good group member.

Behavior:

Individuals recognize positive personal traits.
Individuals recognize negative personal traits.
Members decide to develop certain characteristics.

Self-Other Appraisal:

In a "go-around" each group member selects one characteristic of a good group member which he feels best fits each of his fellow members. He then informs all members of his choices.

Improving as a Group Member:

Each member chooses one characteristic of a good group member and notifies the group that he will try to develop that characteristic. The group accepts or rejects his choices until all members have identified an area in which they are to improve.

Partners:

The members, having chosen or been assigned to develop a characteristic of a good group member, choose a partner. Each partner is to assist each other in their personal development.

Objective 3. Group members are to develop the ability to communicate more effectively.

Behavior:

Rules for "good listening" are identified.
 Rules for "good speaking" are identified.
 Individuals sharpen their communication skills through practice.

Choosing the Rules:

Each individual lists the rules of good speaking and good listening that he sees as important to the success of the group. Each member then shares his list with the members of his group. A master list is compiled for the whole class.

Ranking the Rules:

Each member is asked to rank order the ten rules for good speaking and the ten rules for good listening that he feels are most important. A tally is made, and a list of the ten rules for good speaking and a list of the ten rules for good listening are printed and distributed. (Appendix B, page 28.)

Speaking and Listening Laboratory (Cue Cards):

One group member is designated a "talker" and one a

"listener." The two sit in the center of their group facing a row of "talker's helpers" on one side and the "listener's helpers" on the other. The talker describes his attempt to develop a characteristic of a good group member. His partner reacts. The "helpers" suggest improvements in communication by indicating perceived needs with the appropriate cue card (one rule on each). Listener and speaker roles are rotated until each group member has functioned in each role.

Objective 4. To actualize the ability to develop, agree upon, and utilize a set of rules appropriate to small group learning.

Behavior:

Rules essential to group cooperation are identified. Pooling of rules results in a master list. Ranking of rules results in a list of essential rules.
Group commitment to self-improvement.

Identification of Necessary Rules:

Each member is asked to list the rules he feels are essential to small group cooperation. These rules are then shared with his group members. Each small group shares their list with the class and a master list is compiled.

Ranking the Rules:

Each member is asked to rank order the ten rules.

A tally is made and a list of the ten rules essential to small group cooperation is printed and distributed. (See Appendix B, page 29.)

Assessment:

At any stage of group interaction the members are each asked to identify the two rules best followed by his group and the two rules least followed by his group. The findings are pooled and the group decides which two rules it will attempt to improve upon in the future. The small group informs the other groups of their decision.

APPENDIX A

Small Group Inquiry -- Worksheet A

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

List as many words as you can think of that relate to the topic.

1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____

Small Group Inquiry -- Worksheet B

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

Using the list of descriptor words from Worksheet A, divide the subject into major areas and list the words in the area they fit.

Area I.	Area II.	Area III.	Area IV.

Small Group Inquiry -- Worksheet C

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

Decide, as a group, upon the accepted answer to the following questions.

1. Which group members will be responsible for studying the background causes for each of the areas described in Worksheet B?

Area I. _____

Area II. _____

Area III. _____

Area IV. _____

2. When will the results be reported to the group?
3. When will the group results be reported to the class?
4. How will the results be reported to the class?

Small Group Inquiry -- Worksheet D

Topic of Concern: _____

Sub-Area: _____

Members working on this area: _____

Outline of Findings:

A.

1.

2.

3.

B.

1.

2.

3.

C.

1.

2.

3.

D.

1.

2.

3.

How does this area fit into the rest of the topic?

Small Group Inquiry -- Worksheet E

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

A. What is presently hindering _____?
(desired goal)

1.

2.

3.

4.

5.

6.

7.

B. How serious are these concerns? (Rank order)

1.

2.

3.

4.

Small Group Inquiry -- Worksheet F

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

Decide, as a group, upon the accepted answers to the following questions.

1. How can we help each other with this concern?

2. What can each of us do?

Name _____

Name _____

Name _____

Name _____

Name _____

Name _____

Name _____

Name _____

Small Group Inquiry -- Worksheet G

Topic of Concern: _____

Sub-Area: _____

Members working in this area: _____

Outline of Suggestions:

A.

1.

2.

3.

B.

1.

2.

3.

C.

1.

2.

3.

D.

1.

2.

3.

How do these proposals and suggests fit with the findings of other group members?

Small Group Inquiry -- Worksheet H

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

1. What can we do to change _____?
(area in which action is needed)

- a.
- b.
- c.
- d.
- e.
- f.

2. How will these suggestions be put into effect?

- a.
- b.
- c.
- d.
- e.



Small Group Inquiry -- Worksheet I

Instructions: This sheet should be completed in duplicate with a copy kept by the group and a copy for the teacher.

Members: 1. Leader _____, 2. Secretary _____,
3. _____, 4. _____, 5. _____,
6. _____, 7. _____, 8. _____.

Topic of Concern: _____

Decide, as a group, upon several answers to the following questions.

1. How well have we worked as a group?
2. What can we do to improve our group relationships?
3. Did we each do our part?
4. What are our specific needs?
5. How can we improve our ability to inquire?
6. With what concerns do we need more help?

Small Group Inquiry -- Worksheet J

Topic _____ Name _____

Group Reporting _____

A. Major ideas that you agree with.

- 1.
- 2.
- 3.
- 4.

B. Major ideas that you disagree with.

- 1.
- 2.
- 3.
- 4.

C. Unusual information presented.

- 1.
- 2.
- 3.

D. Information presented that seemed incorrect.

- 1.
- 2.
- 3.

E. Overall reaction (-) 1 2 3 4 5 6 7 8 9 (+)

APPENDIX B

CHARACTERISTICS OF A GOOD GROUP MEMBER
By Twining Fifth Grade

1. They do their share of the work
2. They stay in their group
3. They accept the decisions of their group
4. They respect the rights of others
5. They are cheerful and happy
6. They cooperate and work together
7. They want others to be happy
8. They know when to be serious
9. They share their ideas
10. They are alert to what is happening
11. They have good manners and are courteous
12. They are good sports
13. They take their turn
14. They are eager
15. They listen carefully to others

CHARACTERISTICS OF A GOOD SPEAKER

By Twining Eighth Grade

1. Speaks with feeling
2. Uses examples
3. Checks if listener understands
4. Watches listener's physical actions
5. Demonstrates
6. Doesn't repeat himself using the same words
7. Asks listeners to imagine themselves in a similar situation
8. Doesn't preach

CHARACTERISTICS OF AN ACTIVE LISTENER

1. Checks to see if they understand
2. Doesn't interrupt
3. Picks up the feeling
4. Watches the speaker's actions
5. Respects the feelings of the speaker
6. Asks the speaker to clarify
8. Asks the speaker why they feel that way
9. Asks the speaker why they think that way
10. Doesn't argue with the speaker

RULES ESSENTIAL TO GROUP COOPERATION

By Eielson Eighth Grade

1. Choose a good leader
2. Help each other
3. Contribute suggestions and ideas
4. Lend a helping hand
5. Get work done on time
6. Allow freedom of expression
7. Respect each other
8. Debate relevant issues
9. Do your best
10. Pay attention to others
11. Take turns speaking
12. Listen to each other's feelings

ANNOTATED BIBLIOGRAPHY

- Adams, John C., Jr. "The Effectiveness of Small Group Interaction As Opposed to Teacher Centered Instruction." American Personnel and Guidance Association, Washington, D. C. (ERIC ED 041 319 MF \$0.25 HC \$0.70) 12. 1970.
The author offers a simple rationale for small group instruction based upon his experience and upon personal observation. Using a low-key approach and a moderate vocabulary, he presents a strong case for the small group method if the goals are interest, motivation, creativity, intellectual growth (concepts), and emotional growth. In suggesting a generalized procedure, Adams indicates that a group of six to eight heterogeneous type students form a unit. Instructions and follow-through must be clear and consistent. Teacher pressures should be at a minimum. Cooperation and individual endeavor can be planned for and rewarded (grades) using this approach.
- Ball, Jerald T. "The Pentagonal Principle for Self-Oriented Classes." (ERIC ED 032 866 MF \$0.25 HC \$1.00) 18. 1969.
Utilizing a rather structured group process, the author finds learning and motivation are increased as compared to the lecture method. Ball gives a clear description of the methods, role responsibilities, and procedures used with the pentagonal groups studying mathematics. Basically, each unit is divided into five or six parts with each student responsible for teaching the rest of his group about his area. If a student is unable to perform, his group is responsible for his part. The group verifies all steps.
- Burke, R. L., and Bennis W. G. "Changes in Perception of Self and Others During Human Relations Training." Human Relations 14:165-181. 1961.
This report indicates that changes in perceptions of self and others do take place in a T-group laboratory setting. Utilizing a semantic differential evaluation scheme and the technique of factor analysis, the authors attempted to prove five hypotheses. Changes in perception were indicated by an increased consistency between one's perceived actual and ideal selves, and by a perceived change as observed by others that was considerably greater than self perceived change. Other changes

in perception are also indicated. It is further noted that a T-group seems to emphasize changes in social perceptions as compared with a therapy group which emphasizes greater changes in perception of self.

Deep, Samuel D. "Use of Management Training Simulations in a University Educational Administration Program; the Program of Exercises for Management and Organizational Development." Paper presented at American Association of School Administrators Annual Convention, Atlantic City, N. J. (ERIC ED 050 446 MF \$0.65 HC \$3.29) 5. 1971.

This is a programmed approach to human interaction based upon a need for behavioral change. Since deep-seated beliefs and attitudes are held to be modifiable by behaviorally confronting tasks that are personally incongruent, this approach utilizes the small group feedback technique. Decisions are made individually in respect to a specific case study; then a small group consensus is reached; analysis of personal and group processes used are studied; and, finally, the experiences are shared. Eleven separate areas are approached using this technique. These areas are chosen to provide specific insights into the human interaction process. All of the exercises are presented in booklet form.

Durham, Lewis L., and Others. "A Bibliography of Research, Explorations, Human Relations Training and Research." National Training Labs., Washington, D. C. (EDRS ED 014 016 MF \$0.25 HC \$1.52) 36. 1967.

This set of annotations on the subject of personality and human relations is most thorough. The paper includes a review of 100 research articles and books. Subject areas covered include T-groups, group structure and dynamics, interpersonal relationship, self-concepts, behavior and attitude change, and organizational change. Materials reviewed were selected from the years 1947 through 1967.

Eberlein, Larry. "A Process Approach to Teaching Teachers." Paper presented to the American Educational Research Association, Minneapolis, Minn. (ERIC ED 037 410 MF \$0.25 HC \$0.90) 16. 1970.

When teaching educational courses, especially educational psychology, college instructors usually are found to lecture on the subject of human dynamics and interaction. Eberlein presents a well-planned group approach which he has used effectively in combining cognitive and affective learning. Information input is

derived from past learning experience of the students, classroom observation, and from readings on the subject. Student goals are utilized in conjunction with the instructors' objectives in arriving at course objectives. Random groups are formed with a member chosen to a representative group that provides feedback and has goal modifications power. Each group makes a collective presentation, and each student makes an individual project report. The case study is used to focus divergent interests within a group. Periodic assignments also help to keep student activities within the broad parameters of the course. Unusually bright students are found to be most anxious in the setting. Three out of four students are reported to feel unusually enhanced.

Glatthorn, Allan A. "Learning in the Small Groups." Institute for Development of Educational Activities, Dayton, Ohio. (ERIC ED 043 567 MF \$0.25 HC \$1.05) 19. 1968.

Seven different types of learning groups (task, didactic, tutorial, discursive, brainstorming, heuristic, and maieutic) are examined in respect to their organization and function. This discussion is deemed beneficial to one whose objectives are clear and who wishes to utilize the small group style most congruent with the objectives. Even more useful, in the view of the reviewer, is the introduction which includes a rationale, supported by research, for the use of small groups. Utilizing learning, motivation, and social change theory, Glatthorn makes a very positive case for this method of learning.

Gordon, Thomas. "What Is Gained by Group Participation?" Educational Leadership 7:220-226. 1950.

Interested in the effect of group participation upon changes in the members' behavior and changes in attitude towards self, Gordon reports the findings of a study of this nature. The results indicate that members (1) became more self-accepting, (2) increasingly searched their attitudes and abilities concerning goal success or failure, (3) had to shift a whole constellation of attitudes and beliefs to effect behavior change, and (4) developed increased perception of the reliance upon self or others dichotomy. Gordon used the technique of analyzing the recordings of a non-directive interview as an assessment device. He finds the technique to have reinforcement qualities as well as evaluatory properties.

Halvorson, Richard B. "A Report on the Cognitive (Systems-Analysis) Approach to Teaching Introductory Sociology

Versus the Traditional Lecture-Discussion Method." Spokane Community College, Washington Dept. of English. (EDRS ED 040 092 MF \$0.25 HC \$1.60) 30. 1969.

The object of this experiment was to provide students with a program designed to incorporate all of the levels of cognitive learning as defined by Bloom. Small groups were formed and a carefully planned program was carried out in this project. Using GPA as a criterion, no significant changes in objective learning were found. The program plan incorporates a number of worthwhile features of the learning process such as time lines, assignment setting, and the identification of objectives.

Hoehn, Lilburn P. (ed.). "Teaching Behavior Improvement Program." HEW, Washington, D. C. (EDRS ED 034 719 MF \$1.00 HC \$12.75) 253. 1969.

This document explains the procedure used over a three-year period with the intent of changing teaching behavior. Beginning with the variable of teacher behavior instead of teacher attitudes or teacher knowledge, the program is laid out so as to involve the in-service personnel in self-change. Using a design-trial-evaluate-redesign cycle, educators are encouraged to seek out dissonance, confront the source, plan action to be taken, react, and evaluate. Several of these steps are to be taken in a small group setting because feedback is seen as essential in modifying behavior. The authors present a complete plan, step by step, for the implementation of in-service units of this nature. The document is a rich source of information concerning materials, procedures, and results.

House, Robert J. "T-Group Education and Leadership Effectiveness: A Review of the Empiric Literature and a Critical Evaluation." Personal Psychology 20:1-32. 1967.

The author's carefully documented concern relates to the intrapersonal effect of T-group upon the individual. Since an effective T-group is found to be a powerful means of changing perceptions and behavior, House feels that there is a grave need to analyze the overt and possibly latent effects. Studies cited indicate, for example, that when one becomes more open and questioning as a result of such training, he may have difficulty working with his peers and superiors. House suggests that the power to cause one to modify his behavior leads to the query of "in what direction?" Furthermore, since the psychic therapeutic qualities of T-group training are known, one needs to consider the consequences of the use of the technique by those who are not highly trained in clinical psychology.

Hrivnak, Joseph T. "The Use of Interaction and Feedback in an Inservice Education Model." Doctoral dissertation submitted to the University of Pittsburgh School of Education. (EDRS ED 050 036 MF \$0.65 HC \$6.58) 118. 1970.

The author believes that most existing in-service programs for educators have minimal success because immediate and varied feedback along with a supportive climate are absent. In order to remedy this, he utilized small group interaction with the group members providing the following: (1) development and planning of new competencies, (2) trial runs and observations, (3) feedback discussion, (4) modification and/or adjustment, and (5) continued development. It is suggested that the number of competencies to be attempted be realistically related to other resources, especially to that of time. Program evaluation indicates that the provision for interpersonal interaction and feedback results in positive behavior and attitude modification.

Olmstead, Joseph A. "Theory and State of the Art of Small-Group Methods of Instruction." Human Resources Research Organization, Alexandria, Va. (EDRS ED 040 345 MF \$0.25 HC \$2.95) 57. 1970.

This report attempts to evaluate the more common small group methods in terms of their effectiveness in teaching adults. It includes a rationale for small group instruction, description of methods, and an assessment based on existing research findings. It was concluded that small group methods enhance motivation, cause the participant to have more positive attitudes, and improve his use of problem-solving skills. Information retention is not correlated negatively or positively with small group instruction. The rationale rests upon the premise that learning is partly a function of attitudes; education or training is a matter of overcoming resistance to change. The most effective learning technique is seen as a small group designed as a learning culture. Such a culture is seen to assist in providing learning that involves a change in behavior rather than a simple transmission of knowledge. Olmstead's ability to synthesize psychological and sociological findings and theory into a practical far-reaching approach to education is incisive. Studies reviewed, in general, showed that small group instruction as compared to the lecture methods was as follows: (1) equal in terms of knowledge acquisition, (2) superior in terms of long-term knowledge retention, (3) superior in developing problem-solving skills, (4) superior in developing positive attitudes towards course work, and (5) superior in changing content specific attitudes.

Randolph, Norma, Howe, William, and Atherman, Elizabeth. Self Enhancing Education: Communication Techniques and Processes That Enhance -- A Training Manual. Stanford Press, Palo Alto. 1968.

This manual presents field tested strategies for improving the communication skills used in personal relations. The intent of the program is to enable the participant to gain self-confidence and increased feelings of worth as he learns. The authors found that improved communications were essential to the learner's total growth. The processes presented are basically those of reflective listening, modeling, congruent (owning) message sending, confrontation, mediation, problem-solving, and setting stable limits. The techniques are presented with objectives, the rationale underlying the objectives, a description of the technique, and examples. The manual has been widely used with educators and others (e.g., businessmen) throughout the United States and in foreign countries. The authors who use the manual when providing in-service workshops have revised it several times.

Rogers, Carl R. Carl Rogers on Encounter Groups. Harper & Row, New York. 1970.

This book was written by a psychologist who has been interested and involved in group therapy and related activities for thirty-five years. It is a handbook that evolved from the author's personal experiences. Rogers entertains no doubts as to the relatively untapped potential of the encounter (T, sensitivity, task-oriented, Gestalt, etc.) group in respect to its therapeutic and related change producing possibilities. Starting with a review of work in this area (especially Lewin), he proceeds to describe the process of the group. Following this is an especially worthwhile discussion of the facilitative roles of the members, including the leader. Considerations such as the weight of counter-claims, some areas of application, and the development of facilitative skills are also included. The author's personal feelings concerning the whole area of human nature are interlaced with the rest of the subject matter.

Sampson, Edward E. Social Psychology and Contemporary Society. John Wiley & Sons, Inc., New York. 238-274. 1971.

An incisive review of research as it is related to the various theories of planned change, this work relates directly to the problems and concerns of modern society.

The issue of cooperation versus competition is used as a framework for an indepth discussion of the findings and perceived merits or failings of the group interaction process. A broad spectrum of relevant topics are considered along with a specific treatment of the T-group as an instrument of planned change.

Shatz, Eunice and Others. New Careers of Generic Issues in the Human Services: A Sourcebook for Trainers. Manpower Administration, Washington, D. C. (EDRS ED 025 468 MF \$0.50 HC \$3.75) 73. 1968.

Designed for use by trainers in preparing unskilled workers with minimum education for entry as nonprofessionals in human services, this manual is organized to increase one's understanding of individual and group behavior. Suggested unit plans and the training program rest on the premise that all people in the area of human service need growth in four broad areas: (1) the world of work, (2) people, (3) the community, and (4) oneself. Feedback from the trainee's core group is considered an essential ingredient of behavior modification. Results obtained from analysis of drop-out rates, commitment, etc. indicate that this confluent process utilizing small group techniques is unusually worthwhile.

Solomon, Lawrence N., Berzon, Betty, and David, David P. "A Personal Growth Program for Self-Directed Groups." The Journal of Applied Behavioral Science 6:427-450. 1970.

The authors, working with a group of "vocationally handicapped" students, report the procedures utilized and the results of a two-year attempt to enhance the individual's ability to make fuller use of his social and vocational potential. Specifically, the attempt was made to enable the participant to experience an awareness of the following: (1) his own feelings, (2) how his feelings affect his behavior, (3) how his behavior affects another's feelings, (4) how another's behavior affects his behavior, and (5) how another's behavior affects his own feelings. Small group techniques and processes used are presented. Evaluation was quite well done and extensive. The data indicates significantly increased sensitivity to others, self-acceptance, and self-motivation.

Thelen, Herbert, and Dickerman, Watson. "Stereotypes and the Growth of Groups." Educational Leadership 6:309-316. 1949.

This report is an attempt to outline the stages of development individuals go through as participants in small group problem-solving processes. The information

is based upon firsthand experience in the activities of the First and Second National Training Laboratories in Group Development held in 1947 and 1948. The authors found that in stage one the members find a place in the leadership hierarchy; in stage two members are frustrated and anxious as a result of concept conflict; in stage three the group is characterized by a determination to provide harmony; and the fourth stage is characterized by a cooperative goal seeking orientation. The authors found that most groups failed to reach stage four, that of group productivity. An understanding of this process is felt to be useful in providing for meaningful group growth.

Thelen, H. A., and Others. Role Perception and Task Performance of Experimentally Composed Small Groups. The University of Chicago, Chicago, Illinois. 1969.

As a part of a five-year study in respect to small group effectiveness, the authors attempt to find the relationships between fifteen personal variables (e.g., dependency) and three major group functions (task work, group maintenance, and individual involvement). Based on a conviction that the small group provides for personal growth needs in quite beneficial ways, the goal was to determine what types of personalities are most likely to provide the optimal setting in simple or complex task settings. Related data, test forms, procedures, and the like are carefully delineated. Among the many conclusions drawn, these seemed especially pertinent: (1) a seemingly incompatible group was found to function quite well when the task was complex; (2) emotional characteristics were very important factors in relation to production; and (3) groups composed of several members wanting control and not receiving it related negatively with productivity.

Walton, Richard E. "A Problem-Solving Workshop on Border Conflicts in Eastern Africa." Journal of Applied Behavioral Science 6:453-489. 1970.

The United Nations supported the proposal of three Yale University social scientists who hoped to utilize small group techniques in the resolution of international conflicts. Non-governmental personnel from Somalia, Ethiopia, and Kenya (N = 18) met with the Yale group and the author for a two-week workshop. The plan was to develop bonds of trust through interpersonal activities and the implementation of simulation, T group, and related techniques. The purpose underlying the humanistic communication was to provide the framework and climate

necessary for group decision-making concerning international problems. The small group process seems to have been quite successful in bringing about a good cross-section of cooperative endeavor between members of the different nations, but failed to provide for accommodation of intra-nation conflict. The session failed to provide a consensual proposal. The day-to-day account of activities and progress indicates that this session was, at the least, very meaningful to the participants. It is likely that many beneficial "latent" effects could result.

Ward, William T. "Increasing Teacher Effectiveness Through Better Use of Scientific Knowledge." Address given to National Federation for Improvement of Rural Education, Denver, Colorado. (EDRS ED 034 735 MF \$0.25 HC \$1.30) 24. 1969.

Concerned with the application of research findings on the subject of teacher behavior as related to student behavior, Ward presents a precise and concise case for the inquiry method of instruction. Included are descriptions of the inquiry process, the supportive classroom climate, the nature of learning by discovery, and the psychological aspects of individual growth needs. The basic purpose of the author was to show that teacher behavior can be changed as a result of scientific planning in the pre- or in-service stages. A rationale and model for such a program is included.

Webb, Neil J., and Grib, Thomas F. "Teaching Process As a Learning Experience -- The Experimental Use of Student-Led Discussion Groups." Saint Norbert Coll., West De Pere, Wis. (EDRS ED 019 708 MF \$0.75 HC \$5.24) 129. 1967.

The objective of this study was to test the effectiveness of small learning groups in many different college courses with unselected students of varying ability. Two of the six experimental groups made significant achievement gains as compared to control groups. In no case did the control groups achieve significantly more. Gains were indicated in respect to higher level cognitive processes and in respect to motivation, interest, and student responsibility. Many examples of the innovative techniques utilized in the program are included. Grouping, grading, and objective setting techniques are examples of the topics considered. Teacher behavior changed from attempting to provide for anticipated needs to an attempt to assist students in fulfilling expressed needs. Also presented was a booklet entitled Manual for Student-Led Discussions.