Social Science Education Project

A REVIEW OF

Teaching of Social Science Material in the Elementary School

A Progress Report

The University of Michigan
Center for Research on Utilization of Scientific Knowledge
Institute for Social Research
EXPLANATORY NOTE

This booklet reports the activities that have occurred during the developmental stages of the Michigan Social Science Education Project. The techniques and designs reported herein are tentative; in fact, much of what this includes has already been revised.

This year (1964-1965) the Social Science Project is working in collaboration with Science Research Associates. The first package of materials will not be finally completed before September, 1965. These materials include:

1. An orientation package; a one meeting overview of the methods and techniques of the elementary Social Science material. (Most probably a filmstrip will be used).

2. Self-training teacher skill packages; includes concepts, skill techniques required to teach Social Science.

3. Children's Units; includes teacher guide, records, children's readings booklet and workbook. Unit topics are:
   Social Science and the Social Scientists
   Friendliness--Unfriendliness
   People and Groups Different From Ourselves
   Getting Work Done in Groups.

All of these above materials will be ready for pilot testing in the schools in February, 1965. They should be ready for distribution by September, 1965.

In February, 1965 we will begin development of three more children's units;
   Social Influence
   Personal and Group Development
   Decision Making

Projections for the future include the development of materials for junior and secondary high schools. These materials will be ready for field testing in the 1965-1966 school year.

While this booklet contains the basic orientation to Social Science Education it does not include the many revisions and changes which will be evident in our later materials.
A REVIEW OF
TEACHING OF SOCIAL SCIENCE
IN THE ELEMENTARY SCHOOL

by

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In Collaboration With

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Selections from the final report:
TEACHING OF SOCIAL SCIENCE MATERIAL
IN THE ELEMENTARY SCHOOL

A Report on
Cooperative Research Project #E-011
United States Office of Education
Department of Health, Education, and Welfare

June, 1964
The primary objective of this pilot project has been to check the feasibility and to lay the groundwork for more extensive development of curriculum methods and materials for the teaching of certain aspects of the social sciences in elementary schools. This is a progress report in the sense that the activities and findings here reported are already out of date, and are serving at this time as the basis for further developmental work. Nevertheless, it seems wise to report these efforts as a benchmark, for the major conclusion from this project has been that social science education for the elementary grades is a project highly deserving of the attention of the social scientist and the educator.

This project has been conducted under a developmental grant from the Cooperative Research Branch of the U. S. Office of Education (Project #E-011) covering the period June, 1963 through February, 1964. Robert S. Fox and Ronald Lippitt were principal investigators. John E. Lohman served as field social scientist and research assistant. Mrs. Peggy Lippitt and Mrs. Patricia Schmuck were demonstration teachers and coordinators of inservice training activities. Marie Basalone, Shearon Dudley and Mrs. Anita Lohman
were assistants in research. Mrs. Josephine Brokaw, serving as curriculum materials assistant during the summer, was also principal of the Mack School in which a number of the participating teachers worked. George Sproule served as documentation specialist with the project and collaborated with Irvine Millgate, President of Impcommation Corporation, of New York in photographing and recording and producing audio-visual documentation materials.

Particular thanks are due to the many classroom teachers (whose names are listed in Chapter II of the report), whose collaboration was an essential part of the project. The facilitating efforts of the principals of Holmes School in Willow Run, Mr. Glenn Spurlock, and The University School in Ann Arbor, Dr. William Mills, as well as those of Mrs. Brokaw, were most supportive.

Special thanks are due the secretaries who helped to type and process this report--Mrs. Karen Donahue and Miss Karen Bergemann.
Learning through active participation in inquiry has become an increasingly important aspect of biological and physical science education for elementary and secondary school pupils. Children have an opportunity for direct experience with real life phenomena--objects and processes similar to those studied by the research scientist. Even more important, they learn to apply, in simple ways, the elements of scientific method, the tools and designs of systematic inquiry. The pupil is helped in the early years of school to develop an image of what the scientists do, what kinds of scientists there are, and how one can pursue the quest for answers to one's curiosity about the world of things and organisms.

But the term "social science" or "behavioral science" rarely enters the vocabulary of instruction during these early years of schooling. "Social studies" with its emphasis on cultural heritage, citizenship, and geography has not focused on the scientific study of human behavior, nor on the activities of social scientists.

It seems particularly important that scientific education about human behavior and human relations should begin early. The young ones should have an opportunity to develop accurate images of who the social scientists are, and what they do, just as they develop comparable images of physical and biological scientists. Of even greater importance
is the fact that the solution of many of today's critical problems of teaching and learning depends on the learner's understanding and internalization of certain basic facts about motivation, learning, individual differences, human development, bases of irrationality and personal defensiveness, and the dynamics of group problem solving. The young child, immersed in a complex social culture, constantly required to interact wisely with his classmates, his older or younger siblings, his parents, teacher, and other adults, has a pressing need to develop an understanding of social processes and to perfect appropriate interpersonal skills. This need has not been systematically dealt with by the school curriculum.

Increasing concern for revision and improvement of the social studies curriculum is being expressed both by curriculum specialists and scientists from the various social science fields. Knowledge in the behavioral sciences has increased extensively in the past quarter-century, as has knowledge in the physical sciences. But little change has occurred in the teaching of the social studies, either at the elementary or secondary school levels. High school social studies curricula are still dominated by history and are restricted to a review of subject matter through verbal techniques. Elementary programs, while more generally utilizing experience units and the school classroom as a laboratory for social learning, have, nevertheless been only superficially concerned with the broad range of the behavioral sciences. Unlike recent attempts in the physical sciences curriculum revision programs, the social studies have generally failed to develop in the student an appreciation of the method of scientific problem solving or to provide opportunities for creating or utilizing the skills and tools of scientific activity. Basic concepts
from economics, sociology, political science, anthropology, and psychology have been thought too complex for the precollege age child, even though he is immersed in an environment which daily presents him with phenomena relevant to all of these fields.

More specifically, it appears that the current social studies program is characterized by the following shortcomings:

1. History dominates; emphasis is on the past rather than on the contemporary world; on the culture of Western countries and the United States, rather than on the full range of world cultures. Certainly history is a core subject, but more balance is needed.

2. Emphasis is on description and memorization of facts and concepts rather than on the reflective understanding and use of concepts, and the creative use of scientific method in exploring social processes.

3. Learning sequences which integrate conceptual, emotional, and behavioral learning are largely unexplored or are unsupported with adequate resource materials.

4. Attention to the "socialization" or behavioral aspects of the social studies has been primarily "extra curricular," with little focus on systematic development of content or skills in this area.

5. Interrelationships between the social sciences have not been explored sufficiently, nor are they reflected in the social studies curriculum.

6. Current curriculum revision efforts in the social studies appear to be moving toward greater rigidity (more required courses, focus on developing a sequence) rather than on exploring a variety of patterns.
7. Relatively little use of the "laboratory" method of learning has been made in social science education, as contrasted to the physical and biological sciences.

In view of these problems, the following assumptions, upon which we are basing our particular approach to curriculum development, may be understood:

1. It is fully as important to teach the young student applications of scientific methodology to the study and understanding of human phenomena as it is to the study of biological and physical phenomena.

2. There is a need to include in the social studies curriculum materials on human behavior and motivation, social interaction, and group behavior. To complement the traditional offerings in history, geography, and social problems there should be curriculum opportunities from such fields as psycho-social development, interpersonal relations, social interaction, and the behavior of small groups (i.e., psychology, social psychology, microsociology, and anthropology). These very rapidly developing fields of scientific knowledge and specialization are highly relevant to general education, and to the scientific training and personal development of the student.

3. Some of the learnings in these areas of subject matter have general relevance to the effectiveness of the students' learning activities in all areas of knowledge (e.g., such topics as conformity behavior, how we learn, intergenerational relations, group decision-making).

4. It is particularly important in the social sciences, as contrasted with the physical sciences, to help the child distinguish between the objective analysis and interpretation of phenomena, and the making of value judgments about the phenomena.
5. Selecting the concepts and generalizations to teach from these areas of the behavioral sciences requires the development and use of criteria for selecting concepts and theories which have (a) core significance in these disciplines, and (b) at the same time have meaningful relevance to the student's current experience, interests, and level of development.

6. The units which are developed for use in this process of curriculum revision and supplementation need to be flexible units that can be fitted into a wide variety of curriculum sequences and adaptable to various age levels.

7. We must strike a balance between diffuse "interdisciplinary matter" and narrow specialization of the selected content to be taught.

8. Resource materials on content and procedure for the teacher and the students should be well structured, while, at the same time, open to adaptation by the teacher and to creative involvement by the students.

At the present stage of development of the social studies curriculum we believe a variety of patterns of utilization of social science content are likely to evolve.

At the elementary school level some teachers and school systems are likely to add a few units of social science to the current social studies curriculum. Whether the teachers can feel comfortable with teaching them will be a major factor in determining whether this experimentation continues and expands. In other schools the idea that this is science education will be seen as the key fact. This orientation is more likely to lead to a more basic curriculum revision, with more careful planning of a new continuity of social science education.
At the secondary school level the difficult questions will be—whether some of the current emphasis on history and social problems should be changed to include new offerings from the behavioral sciences, and whether these new offerings should be discipline-focused or multidisciplinary, or some effort at a problem focus that will integrate the resources of the various disciplines.

Our own work at the elementary level to date has led us to conclude that it is important to develop a focus on certain "core phenomena" that have been the object of study by psychologists, social psychologists, and sociologists, as the basis for the learning of concepts and methods of the different disciplines. In our work to date we have been exploring the idea that one cluster of disciplines for curriculum integration in this manner would be psychology, social psychology, and microsociology; another cluster would focus around economics, macro-sociology, and geography; and a third would have political science as core with aspects of sociology, geography, and history. We are exploring the idea that anthropology would contribute a comparative perspective as a learning resource in all the clusters.

In relating the core phenomena for study in the pilot units we have been developing, we have used the following criteria:

The first criterion is that the focus will be on some interpersonal phenomenon or intrapersonal process which has core significance as a focus for study by the scientist and at the same time has salience in the lives of the classroom learners.

A second principle is that the behavioral contexts chosen for study will be an existential part of the lifespace of the learners.
A third principle is that we will always have a double focus on human behavior as content and on scientific method as content.

With these principles in mind the units already taught on a pilot basis, or planned are:

A. **Units with Self, and Self-Others as Focus**
   1. Angry feelings (frustration-aggression, etc.)
   2. Friendly feelings (reciprocation of trust, positive feedback, etc.)
   3. Growing up (phases of personal development, perspective on maturity)
   4. Deciding and acting (passivity and initiative; decision making; goals and commitment, etc.)
   5. Learning new things

B. **Units With Social Psychology and Socialization Process as Focus**
   6. Relations between olders and youngers (i.e., cross-age sib and peer relations) (e.g., teasing, scapegoating, nurturing, helping, etc.)
   7. Relations between like age peers (e.g., cooperative-competitive, resource exchange, etc.)
   8. Relations between boys and girls (e.g., sex role differences, complementary resources and functions, collaboration vs. avoidance, etc.)
   9. Relations between grownups and children (e.g., learner role with teacher, parents, patterns of avoidance, alienation, dependence, collaboration, etc.)
   10. Being a part of many groups and relationships (e.g., the multiple loyalty situation, patterns of coping, etc.)

C. **Units with Sociological Emphasis**
   11. People and groups different from ourselves (e.g., stereotypes, scapegoating, resource potential, etc.)
   12. Getting work done in groups (e.g., leadership, membership, goal setting, evaluation)
   13. Social conformity pressures and individuality

We plan to subject these selections to the analysis of a multidisciplinary panel of colleagues for critical review before moving beyond the developmental stage.
We are clearly in the early stages of what became an active ferment of revision of the social studies and experimentation with social science education. We have found the following publications helpful in our thinking.

There have been three recent summaries of research on the teaching of social studies. All three confirm our conclusion that there is an absence of work in the particular area of social science on which we are focusing (psychology, social psychology, and sociology). The work on human relations education and mental health education has emphasized personal problem solving and value education rather than scientific method and analytic inquiry. These three summaries are:


None of these reviews reveals any major trend toward the systematic inclusion of behavioral science theory and recent knowledge in the social studies curriculum, nor any trend toward defining "inter-disciplinary clusters" that might make natural units of integrated course content or of learning sequences. And underlying most of the studies seems to be the assumption that conceptual learning or cognitive mastery are the major criteria of successful teaching of the social sciences to the young pupils.
A convenient perspective on some of the recent creative work or curriculum improvement in the physical and biological sciences, and mathematics is present in:


Another important aspect of our program of work is the crucial area of inservice teacher training and the introduction of teaching innovations. Several of our own staff have focused on this area, as indicated by such recent publications as:


In doing preparatory thinking about the pilot work in secondary education the staff has been very stimulated by:


This latter paper provides an example of cross-disciplinary integration of concepts when focusing on the phenomena of socialization and development which would be a major focus of our work with secondary students.
Clarify problem. Set goals. Make design for study.

1

Children look for clues to determine why things turn out the way they do.

3

Theories about causation

4

Children try to understand why things happen.

By Carrie Venema
A BASIC APPROACH TO THE TEACHING OF SOCIAL SCIENCE

The elementary school social studies program has made considerable use of activities units--projects organized around a problem or a major topic. Pupils have been involved in a great variety of reading, writing, acting, observing, and sharing activities. From these they have learned a good deal of information, have formulated some attitudes, and have improved a variety of skills.

In addition, teachers have been concerned with managing the classroom so that pupils live and learn together harmoniously. When behavior problems arise, they have been handled by teacher exposition of a more acceptable model of behavior and/or the imposition of controls. Relatively little emphasis has been given, however, to the scientific study of human behavior as a part of the curriculum.

The Scientific Approach

The scientist works on a problem by observing the phenomenon, formulating hypotheses, gathering data, analyzing it and drawing conclusions, and testing these findings against reality in a variety of other settings. In the social sciences the same general procedures are used, even though the study of human behavior presents some complications. A greater range of variables may be present, and the need to deal with samples from the more extended variety of behavior, complicates nearly all social science investigation.
Nonetheless, it is our proposition that elementary school children can and should utilize the methods of the social scientist so that they may not only develop their own skills in examining and solving social or interpersonal problems, but so they can appreciate more fully the findings and contributions of the sociologist, the anthropologist, the psychologist, and other social scientists.

**Phases of a Unit**

So that this laboratory approach to learning about human behavior may be implemented in the elementary school classroom a systematic plan for dealing with a problem has been devised. Eleven phases or stages are proposed, which serve as a framework upon which a meaningful sequence of activities can be organized. These phases have served, also, as the basis for organizing the teacher resource materials (see copy of teacher resource unit on "Relations between Older and Younger Children" in the Appendix).

**Phase 1: Warming up to the topic.**

The problem area is identified. Pupils explore its relevance to their own concerns. Examples from personal experience are cited.

**Phase 2: Developing a behavior specimen for study.**

As the physical scientist isolates a limited portion of the world about him to study in detail within his laboratory, so the teacher and her pupils may prepare and present a specimen of behavior which sharply presents the phenomenon or problem to be studied. It takes the form of a brief role-playing episode. In addition, plans are laid for the collection of data from the presentation. Data collection tools are prepared; data collection tasks are assigned.
Phase 3: Collecting data.

The role-playing episode is presented. The interaction is observed; participants in the episode are interviewed to obtain additional data and to check the validity of the observers' inferences.

Phase 4: Analyzing data.

Data collection teams organize their findings and present their data to the class. The findings presented by various groups are summarized.

Phase 5: Interpreting causal dynamics.

Causes for behavior are explored. Through class discussion a "theory" for the behavior is developed.

Phase 6: Evaluating consequences.

Objective data collection and analysis are kept separate from the placing of value upon them. In this phase opportunity is provided for children to propose and defend their judgments as to the desirability or undesirability of the consequences produced in the behavior episode. Alternative consequences judged to be more desirable are proposed.

Phase 7: Experimenting with alternative causal sequences.

Hypotheses about alternative behavioral sequences which would result in more desirable consequences are developed. These alternative sequences are tried out, possibly through additional role-playing. Results are evaluated.

Phase 8: Summarizing learnings

Children and teacher draw conclusions from the study of the behavior they have produced and examined. Generalizations are listed.

Phase 9: Utilizing social science resources

Question is raised as to how social scientists have studied these same questions. The research is examined (in a form re-written to the child's level), and the relationship of the findings reported in the research to the findings of the children through their classroom exploration, is explored.
Phase 10: Exploring relevance of classroom discoveries to other life situations

Here problems of application and transfer are explored. Pupils may illustrate these application situations by anecdote and role-playing episodes. They may go forth to the playground, to the student council, or to other classes as laboratories for the application of generalizations. When possible, field work is facilitated by the teacher; follow-up activities are important.

Phase 11: Evaluating the unit.

The teacher gathers data about the changes of the pupils relative to the objectives of the unit. Major emphasis is upon the evaluation of progress toward becoming more scientific in dealing with problems of human relationships. Evaluation findings are discussed by the class.

This framework for the teaching of a unit has been utilized for the various topics explored so far. Its usefulness for children at different age levels is being examined; and the extent to which flexibility in coverage of all phases, in the sequence of the phases, or in relative emphasis upon them, can be permitted while retaining the basic orientation toward a laboratory approach to learning about interpersonal behavior, is being studied.

The Development of Resource Units

A first, essential step in making it possible for classroom teachers to collaborate with us in the testing of these ideas about teaching social science to elementary children was to describe in some detail how the teacher and her class might proceed through the various phases of a specific unit. This description and collection of resource materials was formulated as a teacher resource unit. Two such pilot resource units were developed as part of the project being reported in this document, one on "Relations between Older and Younger Children," and a second on "Angry Feelings."
A copy of one of these units, that dealing with olders and youngers, is included in the Appendix as a sample of the form of material produced so far. It must be recognized that the project is in its early developmental stage and that these materials have already undergone the first of many revisions that will inevitably take place as the project staff and classroom teachers gain experience in the use of the materials in a variety of situations.

Included in this initial resource unit are background concepts and theory for the teacher, step by step suggestions regarding the conduct of the various phases, description of the recommended behavior episodes, tools for diagnoses and for measurement of change, and reports, written at children's level, of some of the relevant research conducted by social scientists on the topic. Since this latter type of material is of particular interest, and since very little research on the relationships between older and younger children has been reported in the journals that seemed appropriate for this unit, there has also been included in the Appendix a sample of the Phase 9 materials (the findings of social scientists) prepared for the second resource unit, that on "Angry Feelings."

It is envisioned that additional ideas for extension, enrichment, and variation of the basic activities covered in this original resource unit will be added in subsequent revisions. A wealth of such ideas is already being gathered in our files as a result of suggestions made, and adaptations devised by the classroom teachers who have been collaborating with us.
Testing of a Unit in the Classroom

So that the reader may gain a clearer idea of how the ideas and materials described in this report are actually utilized in the classroom, a brief description is here provided of what happened when a fourth grade teacher and her class engaged in a study of "Relations between Older and Younger Children." We shall call the teacher Mrs. Smith. Mrs. Smith worked with the resource unit which is included in the Appendix of this report. She reserved about a half-hour, three times a week, for her unit on social science.

Introduction to the class of the concept of social science.

When the class was assembled in an intimate discussion group near the teacher, Mrs. Smith began talking to them about something with which they were familiar--the number of chapters in each of their library books. She held up a large cardboard on which was printed the title, "The Wonder Book of Sciences."

"If we were to write a book like this, how many chapters would we have? How many sciences do you know about?"

The class mentioned several. Someone added, "Social science." They talked about what the word "social" meant. She led them to the idea that social science was the study of the way people interacted, the way they behaved. The class thought that "to behave" meant "to be good". So she recalled the day they had watched two cats out the window. How they had acted was neither "good" nor "bad". Their behavior, or the way they were acting--climbing on the sill, hiding under the cars--was just "cat-like".

"Social scientists don't use test tubes, as some scientists do", continued Mrs. Smith. "Here are some of the tools they use."
On another cardboard she had drawn a wide-awake eye, a sleepy eye, two ears, a head, a pencil and paper. "Which eye," she asked, "do you suppose social scientists use?" They discussed how the other tools would be used.

She asked how many children had older or younger brothers and sisters. All hands went up. "A good place for us to start using our tools as social scientists might be to see how older and younger children behave together."

Many children volunteer data: "My brother and I are real pals. We fish together."

"My fifth grade brother always picks on me."

"My sister slaps me and kicks me."

"What a lot of different ways of behaving." commented Mrs. Smith. "I think it will be fun to study how people act." The class nodded assent.

**Presenting and observing a specimen of behavior.**

The class came back next day with reports on what they had observed on the playground and at home about how older and younger interacted. Mrs. Smith told them that just as scientists studying rocks or chemicals look at specimens, so they, as social scientists, should have a specimen of behavior that all the class could look at. They would all be able to see the same thing, and then could discuss it.

She picked four boys who were high status with their peers to act out a specimen of behavior for the rest to observe.

The incident to be presented (taken from the teacher's resource unit in the Appendix) was as follows:
Suggested Behavioral Specimen for Observation in
Unit on Younger-Older Relations

Characters--Tom and Jim    Pete and Fred
Older boys                Younger boys

Scene: A street running past Pete's House.

Two 3rd graders (Pete and Fred) are sitting on the steps of Pete's house trying to mend a broken bat. Pete has gotten some tape from the kitchen drawer. They are not having any success and have made a mess out of the tape. It has been raining. The sun is out now, but there are puddles in the street. Two older boys (6th grade) Tom and Jim come up the street, hurrying to get to a vacant lot to play ball. They have a bat, ball and glove. They are talking about how glad they are it isn't raining and how little time they have left to play before dinner. Fred sees the bigger boys and says he's going to ask them to help fix the bat. Pete says they won't help smaller boys about their "baby bat" and what a mess they've made trying to fix it. The second older boy, Jim, wants to get to the ball field. He doesn't want to be bothered with little kids. Tom is enjoying teasing the younger ones. He takes the broken pieces of the bat over to show his older friend. The younger boys try to get it back. Pete steals around behind Tom and snatches the bat. Tom runs after him and Fred gets in front of Tom and stamps in a puddle, getting the big boy wet. Both smaller boys run into the house. Jim, the second biggest boy, urges Tom to come along and not bother with little kids. Tom yells toward the house where the younger boys are, "Just wait till I get you for this." He goes off up the street to play ball.

Briefing the actors. At recess she had a meeting with the four boys to discuss their roles. She emphasized that they were different from the characters they were to act. She gave them briefing sheets which explained what each was like, how he felt about the others, and some of the reasons why he felt this way. As they went over this, she added details, using their character's names:

"Tom, you like to tease little kids. It makes you feel big. What sort of look do you think would be on your face when you see a little kid? How would you walk? Do you think you'd take bigger steps when you are around little kids to show them who was bigger?"
"Fred," Mrs. Smith continues, "you think big boys are always helpful to little kids. Do you see already we are about to have a problem?"

She turns to Jim. "Jim, you don't think little kids are worth bothering with. What would you be urging Tom to do if he were teasing?"

Jim says, "To stop it."

"Yes," Mrs. Smith agrees, "Not because you were sorry for the little kids, but because he is just wasting time."

Each took his individual briefing sheet home to read over.

At the next briefing session she told them the story of the actual episode with lots of possible dialogue. They then rehearsed the action.

At the end of two more short rehearsals they were ready. Mrs. Smith's next job was to get the class ready to observe them.

**Briefing the group leaders.** Mrs. Smith decided to have five observation groups, one to watch interaction, and each of four others to watch one of the characters to answer the following questions:

- What did he plan to do in the beginning?
- Did he really do what he planned?
- How did his actions cause others to do and feel?
- How did he feel about what finally happened?

So that there might be leaders for each observation group, she briefed five of her class who were natural leaders, a few minutes after school the day before the class was to observe the behavior specimen. She went over the questions for each group with them and reminded them of one of the qualities of a good leader--that all opinions of the members must be recognized and noted.
Actual presentation of the specimen. Mrs. Smith read the names of the children and the leader for each observation group. The episode was played through so all could see it. It was acted a second time after each group was given one special character to observe. After the second time the episode was played, each group leader was given a list of the questions. They took their groups with their chairs to different parts of the room to discuss the questions. The leaders read the questions and the members offered their ideas. After five minutes of small group discussion, they came back together for a general discussion. Mrs. Smith said that other people might have noticed different things about an individual character than those the group assigned to watch him might mention, so to speak up if there were any other or different ideas from those reported by the group leaders.

On the board she had written the questions, one under the other. In five columns to the right of the questions she had written summarizing comments. For example:

<table>
<thead>
<tr>
<th>Question</th>
<th>Tom</th>
<th>Jim</th>
<th>Pete</th>
<th>Fred</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. How did he feel about what finally happened?</td>
<td>Likes getting even</td>
<td>Puzzled</td>
<td>Mad, bad, scared</td>
<td>Scared</td>
<td>Olders unfriendly four times. Youngers unfriendly to olders two times. Olders friendly to youngers, twice.</td>
</tr>
</tbody>
</table>

The participant observers were eager to express ideas. The discussion moved along without teacher pushing.

Suddenly one boy said, "This isn't real."
Mrs. Smith asked him for an example of something that had happened to him that was real.

He told about his sister making him do work at home.

"If we acted that out would it be real to the rest of the boys and girls?" asked Mrs. Smith. He thought it would. "Perhaps this situation of the bat and the quarrel happened to someone else," explained the teacher. "We can only look at one situation at a time. We are looking at this one now."

Other teachers use separate groups and group recorders to collect data. Two other fourth grade teachers in the same school used the group recorders and divided their class into observation groups. These were not as successful as were those in Mrs. Smith's class. Mrs. Atkins was the first to try it. She gave the recording job to the five people who could do the very best at expressing ideas and writing them down. The members of the groups led by these capable pupils, realized they were the smartest and accepted the recorders' ideas with not much group discussion. The reporting back was just that, with no discussion from the floor on the opinions the group leaders reported. The class didn't have a chance to express differences of opinion. Mrs. Atkins, realizing this, had the class meet after recess for a free discussion in which other children had a chance to talk.

Mrs. Blossom picked her leader-recorders at random. They had no experience in leading a group. In two observer groups this lack was evident. One little boy began filling out the answers with no reference whatever to the other members of his group. One little girl became very bossy with her group and wrote only her own ideas in spite of what they said. Since the teachers in the project met each week to discuss
procedure, and also observed one another whenever possible, Mrs. Smith had a chance to profit from the experience of others before reaching this phase with her class. Thus, she selected her group leaders carefully and briefed them on their responsibilities.

The concept of cause and effect.

Before they reached the phase of interpreting cause and effect relationships from the data gathered from their behavioral specimen, Mrs. Smith wanted to help the pupils understand the concept of cause and effect. This took ten minutes at the end of another subject period and was unrelated to Social Science in the minds of the children:

"All eyes up here, please. Here is your arithmetic assignment." She wrote, "Arithm----". The chalk slipped out of her hand and fell to the floor. "My goodness! What caused that chalk to fall? (Silence) Come on, you scientists. What caused it to fall?"

"You were writing too fast."

"Air pushed it down."

"You were writing the wrong way."

"You let go of it."

"Did something scare you?"

Somebody said, "Gravity."

Mrs. Smith said, "It might have looked as if these things caused it to fall. But it would not have fallen if it had not been for gravity."

This seemed to be an excellent way to spark the pupils' interest in cause and effect. But in discussing it later with the others in the
It was decided that it would have been more helpful to have used this incident to illustrate the concept of "multiple causality."

So the next day Mrs. Smith reminded the pupils of the incident. She said they were right about gravity being one reason the chalk fell, but there are many causes for things happening.

"Here, Teddy," She threw the chalk to him. "Now drop it. Now what are some reasons it fell?"

"Gravity," one child responded.

"He dropped it."

"The teacher told him to drop it."

"I'll tell you another reason my chalk fell when I was writing," continued Mrs. Smith. "I wanted you to learn about cause and effect and thought this was a good way to show you about it."

This illustration of the chalk, but with a multiple causation emphasis, has been used successfully in other third and fifth grade classes since then.

Interpreting cause and effect in the behavioral specimen.

At the beginning of this session every child was given a sheet that looked like this, except it took a whole page so there was room to write many causes beside each number in the cause column.

<table>
<thead>
<tr>
<th>CAUSE</th>
<th>EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fred asks _______ _______.</td>
</tr>
<tr>
<td>2.</td>
<td>Tom _______ and takes ___ ___ .</td>
</tr>
<tr>
<td>3.</td>
<td>Pete _________ bat.</td>
</tr>
<tr>
<td>4.</td>
<td>Tom _______ Pete.</td>
</tr>
<tr>
<td>5.</td>
<td>Fred ________ Tom.</td>
</tr>
<tr>
<td>6.</td>
<td>Tom shouts &quot;________ ___ ___!&quot;</td>
</tr>
</tbody>
</table>
Several children were asked to read the sentences with the blanks. The children guessed the word that goes in each blank. This procedure helped the poor readers participate. The children wrote the words in the blanks. Then there was a discussion of the causes of each statement: Why did Fred ask for help? Tom tease and take bat? Pete snatch the bat? Tom chase Pete? Fred splash Tom? and Tom shout "I'll get even"? Mrs. Smith wrote the causes on the board. Each child copied them on his or her individual papers.

Among the causes given were:

1. **Why did Fred ask for help?**
   - He realized Tom was older.
   - He thought olders would like to help.
   - He wanted to play ball.
   - He trusted his big brother.

2. **Why did Tom tease and take the bat?**
   - Can tease youngers safely.
   - To act big and be smart.
   - Tom's big brother teased him.

3. **Why did Pete snatch the bat?**
   - Pete's bat in the first place.
   - Felt he shouldn't be teased.
   - Wanted to get even.

4. **Why did Tom chase Pete?**
   - To get bat back.
   - Did not like grabbing.

**Placing values on consequences.**

Mrs. Smith drew eight cartoon stick figure pictures with captions which she used in the opaque projector to review the episode as a kick off for placing values on consequences. A different child read each caption.

"Some things that happened we like. Others we did not like. Can you decide what you liked and did not like and why?" asked Mrs. Smith.
She passed out dittoed papers to each child. They read:

<table>
<thead>
<tr>
<th>Things we liked</th>
<th>Can we tell why?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Things we did not like</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

The front board was arranged in the same columns as the papers. Mrs. Smith wrote the children's remarks under the appropriate headings.

"I liked Fred splashing Tom."

"Why?"

"Because it was funny. He didn't know what to do."

"You mean you liked it because he got even?"

A nod.

"I didn't like Tom's teasing."

A discussion of "why" followed.

Another boy said, "I didn't like Fred's splashing Tom."

They found it interesting that people's opinions differed. Some of the "Whys" were why they thought the characters acted that way rather than why they liked or didn't like it. Mrs. Smith tried to help them. "I'm not asking at this point why it happened, but did you like what happened and why." She called a little girl to her and skipped around the room with her. "I don't want you to tell me why I am skipping, but do you like it and why do you, if you do?"

A child spoke up. "You might be friends."
Mrs. Smith tried to interpret what she was saying. "You like to see friends go around with other friends? It's a friendly thing to do?"

There was general agreement. One dissenting voice said, "What if I didn't like it because Debbie was my friend and I didn't like to see my friend with somebody else?"

The boys sitting back of him leaned forward. "You have to like it."

The first boy turned around. "I do not have to like it," he retorted.

The recess bell rang. No one jumped up. Everyone wanted to continue talking. This had been a very good discussion of the children's own opinions.

Mrs. Atkins, in her treatment of this phase, led the children's discussion along the lines of "results we like," "results we don't like," and "things we think are important to keep," leaving out the "why" step emphasized by Mrs. Smith. She was disappointed in her results, however, because she felt this procedure led to verbalizing of what the children thought were the teacher's values rather than forming value criteria through discussion and assessment of values held by the children themselves.

We need more thinking on ways of developing with the children criteria for determining values and deciding action on the strength of values held. To this end both Mrs. Smith and Mrs. Atkins expressed a desire for working on a unit on decision-making for next year.
Exploring alternative behavioral consequences.

Before tackling the phase on alternative behavior, Mrs. Smith thought the children should be presented with the concept that there may be many "correct" ways to accomplish one's ends, not just to use one solution that is always the best. In arithmetic class they discussed how many correct number combinations can be found that make 18. Many answers were discovered: 9 X 2, 3 X 6, 16 plus 2, 20 minus 2, etc.

Then they had a discussion of "What is the shortest way home?" They decided that it depended on what you wanted to do. If you wanted to walk home with a friend to his house the shortest way to your house would be past his. If you wanted to go to the store right after school it would be shorter to choose the street that went past the store than to go all the way home and then back to the store.

In their social science class the children concluded they did not like the way the behavioral episode ended, the feelings everyone had inside, and the results of the actions.

"If we changed the actions would the outcome be different?" asked Mrs. Smith. "Whose actions could we change?"

"We could change Fred. Fred wouldn't have to ask."

"But Pete and Fred would never get their bat fixed that way," objected a classmate.

"Jim could pull Tom away."

"They'd call him chicken."

"Jim could say Fred's big brother would beat them up if they teased Fred."
"Jim could say, 'I don't want to play baseball if Tom teases.'"

Mrs. Smith wondered what would happen if the younger boys refused to be teased by Tom's actions. They decided to act out some alternatives next time to see if they would result in better feelings all the way around.

(During the summary of learnings phase, one child said he learned that we could change people. Mrs. Smith was concerned because she had not wanted to give them the idea that all you had to do was to change people. This was not very realistic. Maybe if she had said during this alternative discussion, "Who could change his actions?" instead of "Whose actions could we change?" the idea that if there is to be change the individual himself must change would have been clearer. In some units there have been places where other classmates give the actors advice on how they can behave so as to see if this would solve their problem better.)

**Acting out alternatives.**

For the session on the acting out of alternatives, Mrs. Smith wrote several suggested alternative ways of behaving on slips of paper. She divided the class into six groups of four each and named one member the leader. The leader drew a slip with an alternative out of the hat. No group opened their slips till all had drawn. The groups were made up of all boys or all girls. When it came time for the girls to act, Mrs. Smith explained that the girls were going to help the class look at another possible change. No one thought it odd when they put on the name tags of the four boys in the behavior specimen.
The alternatives which were acted out included:

Jim pulling Tom away and getting into a fight with Tom.
The younger boys refusing to be teased by Tom's actions.
Jim persuading Tom to come along and play ball.
Tom fixing the bat.
The younger boys not asking Tom to help them in the first place.
Jim going home when Tom began to tease.

The groups had ten minutes to discuss and plan their specimen of changed behavior. Before any of the changes took place the original cast played the episode just as they did it in the first place, to refresh everyone's mind as to the sequence of events and give them a little security in acting out different ways it might end up because of different actions of one person.

When the acting was over Mrs. Smith said, "Remember that day there was fighting on the playground and we were trying not to get angry about it? When Fred and Pete didn't get mad at being teased it made me think of that day. One little thing being different may change the whole thing. It's just something to think about."

Discussing the alternatives.

The next time the class met for social science they were given dittoed sheets that read:

We watched a behavioral situation and saw that it did not end with a happy feeling. The boys did not even do what they started out to do. We decided we could change the ending to make a better feeling. We did this by changing the actions of just one person.

The six alternatives were listed on the left hand side of the paper. A box in which to check "will" or "won't" was placed on the right hand side of the paper corresponding to each alternative.

The children were asked to mark which alternatives they thought would or would not make for better feelings all the way around. After
they marked their own papers, they voted on these with their heads down so as not to be influenced by each other. The last alternative—Jim went home when Tom began to tease—they discussed rather than voted upon. Different ideas as to what would result were expressed:

"Jim would be mad. Pete and Fred would still be teased."
"Tom might follow Jim if he had no one else to play with."
"Tom would have to like Jim a real lot to stop if Jim left."
"Tom might not do it again if he had no one to play with."

The project coordinator and Mrs. Smith felt it might have been better to discuss the other alternatives in the light of just who would have ended up with better feelings, rather than simply to have voted.

**Summarizing unit learnings; drawing generalizations.**

Mrs. Smith talked about the word "general". The class looked it up in their dictionaries. She looked up "generalization" in the big dictionary. They discussed that a generalization was composed of many facts and a "meeting point" which brought about a generalization. They began to discuss generalizations they had derived from facts learned in social science.

One girl said, "Your ways can be changed."

"How do you know?" asked the teacher.

"We did it and it changed the whole thing."

"You've learned people are able to change their ways?" Mrs. Smith asked.

"We've learned to change people around," said another boy.

"I'd hate to think I'd spend the rest of my life changing people," said the teacher. "We have discovered that if one person makes
a change in a situation it can change a lot of things, sometimes...but you are the one person over whom you have control. Are there any situations at home between you and older and younger brothers and sisters where the feelings are not so pleasant? What might you try to do differently that would make for better feelings?"

Two children reported on bickering situations between themselves and slightly older children. The teacher pointed out that the way they were telling these incidents seemed to show that the children really enjoyed the squabbling. One boy had a big brother who made him play basketball. He would beat him and make him play even when he was tired. There were some unrealistic pieces of advice from classmates which Mrs. Smith pointed out would not bring the desired results. She suggested that Joe be honest with his brother about not wanting to play and try to find other ways for his brother to feel big besides winning at basketball. She suggested he try it out and report back to the class.

Exploring relevance to other situations and applications to one's own life.

Three girls acted out a situation which seemed to bother many children in an "older" role about the bahavior of a younger. Two "older" girls were sewing on the ear of a stuffed dog. A little child came over and tried to touch the dog. Her efforts were regarded with distrust by the "older" whose dog it was. The olders told the little one to go away. She left, angry. Soon she came back and hit the bigger children. When the bigger ones went after her she said, "If you hit me I'll tell my mommie. You can't hit me. I'm younger than you."

"What do you think the little one wanted?" asked the teacher.
"She wanted to get hold of the dog."

"She tried to get them mad so they would chase her."

"I used to do that to my brother."

"When I was three I hit a girl who had a toy I wanted."

"Do little children understand as much as you do?" asked the teacher. "When you are little you are curious. Why might the younger one have wanted to get hold of the dog?"

"It was soft." "It was pretty." "She might have wanted to get it away to make her mad." were some of the responses.

"What could the olders have done?" asked the teacher.

"Offer her another toy. Give her somethings else," suggested a child.

"My brother knocks over something and I chase him. He complains to Mommie. What should I do?" asked a boy.

"What could David have done without chasing?" asked the teacher.

"He could let him play," said Bruce. "My brother, he gets water and masks and things when we play baseball. He thinks it's great. He can hit if we throw the ball real soft."

"My brother, he's six. He has to come with us all the time. He tripped over a rock and fell and told Mom I hit him. What can I do?" asked another boy.

"Maybe he thought you didn't want him to go and he was mad at you," suggested a girl.

"Find him someone his own age to play with," suggested a boy.

"My little brother doesn't want me to watch TV," said a girl.
"Sometimes he'll play with me," suggested a boy living next door. "Why don't you tell him to come over?"

"My sister's teacher told us a good game to have little kids play by themselves," volunteered another classmate. "Pretend the living room is water and take two pillows and step on them as if they were islands. Take one up and put it somewhere and step on it and then move the other one so as to keep dry. My brother plays that by himself for hours."

The teacher asked the children to try out ideas they had gotten from their discussion and report the results to the class. In about two-thirds of the cases they reported that what they had done had worked out well. Some, of course, did not.