

ED 030 159

By -Gold, Raymond L.

Sociology of the Classroom Project. Final Report.

Montana Univ., Missoula.

Spons Agency -Office of Education (DHEW), Washington, D.C. Bureau of Research.

Bureau No -BR -7 -8204

Pub Date 24 Mar 69

Contract -OEC -1 -7 -078204 -3974

Note -24p.

EDRS Price MF -\$0.25 HC -\$1.30

Descriptors -Classroom Observation Techniques, *Classroom Research, *Seminars, *Sociology, Teacher Education

This project formed small seminar groups of behavioral scientists and educators to study the sociology of the classroom. The groups observed classrooms in elementary schools, high schools, and universities in Montana. Library research and discussion were other methods of investigation used. It was concluded that the classroom is part of society's basic complex organizations and is influenced by its bureaucratic setting. In return, classroom activity tends to set certain professionalizing forces to work on the make-up of the school. Opposing tendencies toward alienation and commitment were also found in the classroom, and problems of categoric versus interpersonal interaction were noted with increasing frequency as observers moved from the primary grades to the higher grades. Several lines of follow-up research are suggested and implications for inservice training of teachers are noted. (NS)

ED030159

1

BR-7-8204
B/C 7-8204
PAZ4 OE-BR

FINAL REPORT

Project No. 7-8204

Contract No. 1-7-078204-3974

SOCIOLOGY OF THE CLASSROOM PROJECT

Raymond L. Gold

University of Montana

Missoula, Montana 59801

March 24, 1969

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

CG 004 148

FINAL REPORT

Project No. 7-8204

Contract No. 1-7-078204-3974

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

SOCIOLOGY OF THE CLASSROOM PROJECT

Raymond L. Gold

University of Montana

Missoula, Montana 59801

March 24, 1969

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

CONTENTS

	<u>Page</u>
SUMMARY	1
INTRODUCTION	2
METHODS	2
RESULTS AND FINDINGS	3
I. Seminar Goal #1 (Review of Literature)	4
II. Seminar Goal #2 (Interesting Behavioral Scientists in Sociological Study of the Classroom)	14
III. Seminar Goal #3 (Sharpening Seminar Members' Observa- tions and Analyses of Classrooms and Their Settings) .	15
IV. Seminar Goal #4 (Suggested Research Designs)	18
SIGNIFICANCE AND IMPLICATIONS	20

SUMMARY

1. The "problem" of the project was to begin bringing together findings and other information of value for developing a sociology of the classroom.
2. To investigate this problem, ad hoc seminar groups were formed in Montana and collectively designated "the seminar." The seminar reviewed pertinent literature, observed classrooms, and discussed resultant information. From these activities a sociological view of classroom interaction began to emerge.
3. The objectives of seminar activities were to sharpen the members' sensitivities to aspects of the school which are taken into account when doing a study of social interaction in the classroom, to disseminate these sensitivities through meeting with educators throughout Montana, and to suggest in the present report some avenues for further research and development concerning classroom interaction.
4. The methods of the seminar were library research, classroom observations, and wide-open discussions of resultant information. Observations of classrooms were made in elementary schools, high schools, and university units in several communities in Montana. Seminars were constituted in these communities, using both local personnel and core members from the University of Montana. These activities took place in the latter part of 1967 and at various times throughout the following year. They are continuing at the present writing, even though the project has formally ended.
5. Findings of the seminar included observations and analyses having to do with the fact that the classroom is part of one of society's basic complex organizations. As such, the classroom is influenced in various ways by its bureaucratic setting. In return, the main thrust of classroom activity tends to set certain professionalizing forces to work on the make-up of the school. Opposing tendencies toward alienation and commitment were also found in the classroom, and problems of categoric versus interpersonal interaction were noted with increasing frequency as observers moved from the primary grades to the higher grades of public schools and colleges.
6. Several lines of follow-up research were suggested, including a study of teachers in comparison with other groups (e.g., social workers and clergymen) who claim a right to intervene significantly in the lives of their clients.
7. Implications for preservice and inservice training of teachers were noted as were those for the professionalization of teaching.

INTRODUCTION

The general idea of the seminar on the sociology of the classroom was to provide a vehicle for moving in a rational and methodical way toward systematic behavioral study of the classroom. The plan was to gather into seminar groups of various sizes behavioral scientists and educators who were interested in classroom interaction and who were prepared to initiate organized observation, study, and discussion of the classroom. Sharing a common focus, members of the seminar were then to view the classroom as a miniature representation of both the school and the larger society and as a distinctive behavioral entity in its own right.

Formal objectives of the seminar were the following:

- (1) to review the educational and behavioral science literature which pertains and which can pertain to the sociology of the classroom;
- (2) to interest behavioral scientists at the University of Montana and elsewhere in the nation in studying the classroom (and, through it, other aspects of education);
- (3) to observe classrooms with a view to pooling and sharpening seminar members' analyses of such matters as the relation of classroom organization to teachers' and pupils' performances, ways of optimizing balance between effectiveness in role relationships and effectiveness in interpersonal relationships, and ways of ascertaining and integrating behaviors pertaining to the educational aims of teachers and pupils; and
- (4) to develop empirically sound, theoretically fruitful, and educationally sensible research proposals concerning behavior in the classroom and relations of classroom behavior to general social behavior in American society.

METHODS

In general three methods of obtaining information and advice were used: library research, seminar discussions, and classroom observations. The first, library research, speaks for itself. Appropriate professional and scientific publications were examined in order to bring together references to significant research and discussion concerning classroom interaction. The other two methods require some explanation.

Two kinds of seminars were held on the campus of the University of Montana. One of these was a regular academic seminar on the sociology of the classroom. It was designed for graduate students in sociology and education. Operated in the usual way, it enabled the students to earn regular academic credit for their contributions. This seminar was offered in autumn, 1967.

The other on-campus seminar was held on two occasions during the first half of 1968, when distinguished sociologists and educators were brought to the University of Montana to lead discussions of the sociology of the classroom. Attending the discussions were teachers and educational administrators from the Missoula area and elsewhere in the state and students from the University. The procedure was to start the meeting off with an address by the visiting sociologist, followed by discussion of his remarks by a panel of sociologists and educators, which, in turn, was followed by a question-answer dialogue between the panel (which included the visiting sociologist) and the audience. All of these utterances were tape recorded and transcribed for project use.

There were two forms of off-campus seminars. One was observational visits by project staff to elementary and junior high school classrooms, particularly to those conducted by three elementary and two junior high school teachers in an experimental teaching project in Butte. The five Butte teachers were (and still are) attempting to stress interpersonal and collective interactions in ways advocated by Osborn, Smith, Torrance, Parnes, and other students of creativity in teaching and learning. Conventional classrooms were also observed in other communities, including Anaconda, Billings, Dillon, Great Falls, and Missoula. Data from these observations were used to stimulate seminar discussions and to explore questions raised in the discussions.

The second form for off-campus seminars was meetings with the creativity project teachers and with other teachers in the above-mentioned cities who were brought together to discuss creativity and other dimensions of classroom behavior. These meetings were fruitful for comparing orthodox teaching with various nonorthodox teaching approaches, such as "creative" teaching and team teaching. They also served to disseminate directly to hundreds of teachers news of developments in both the Butte creativity project and the sociology of the classroom project.

Seminar staff met routinely to discuss notes on observations and to recount impressions of meetings. These discussions produced additional notes which became part of the project's data. The project director took responsibility for bringing together and analyzing notes and other information generated by the seminar's activities. He also assumed responsibility for organizing these data into the present report.

RESULTS AND FINDINGS

Results and findings will be presented in relation to the four formal objectives of the seminar. Following these presentations, the broad outlines of a sociological study of the classroom will be indicated and suggestions will be offered as to implications of such study for preservice and inservice training of teachers.

I. Seminar Goal #1 (Review of Literature)

The following is a bibliographical summary of a good example of the best published material pertaining to a sociology of the classroom. The materials have been arranged topically for the reader's convenience.

A. What is a sociology of the classroom?

Noteworthy book: Brookover, W. B., et al., Sociology of Education, American Book Company, 1955.

1. Brookover, W. B., "Sociology of Education: A Definition," American Sociological Review, 14:407-415, June, 1949.
2. Dreeben, R., "Political and Educational Ideas in the Writing of George Herbert Mead," Harvard Educational Review 25 No. 3:157-168, 1955.
3. Hughes, M. M., "Teaching is Interaction," Elementary School Journal, 58:457-464, May, 1956.
4. Jenkins, D. H., "Interdependence in the Classroom," Journal of Educational Research, 45:137-144, October, 1951.
5. Ottaway, A. R. C., "Educational Sociology of Emile Durkheim," British Journal of Sociology, 6:213-227, September, 1955.
6. Ryan, K., "Teaching Intern: A Sociological Stranger," Journal of Teacher Education, 17:185-191, Summer, 1966.
7. Zeleny, L. D., "Place of Sociology in Teacher Education," Sociology and Social Research, 31:382-388, May, 1947.
8. Jensen, G. E., "Social Structure of the Classroom Group: An Observational Framework," Journal of Educational Psychology, 46:362-374, October, 1955.

B. Socialization in the classroom.

Noteworthy book: National Education Association of United States Department of Classroom Teachers, 7th Yearbook, The Classroom Teacher and Character Education.

1. Egmond, E. Van, "Socialization Processes and Education; Classroom Culture," Review of Educational Research, 31:86-88, February, 1961.
2. Feffer, M. H., and Gorevitch, V., "Cognitive Aspects of Role-taking in Children," Journal of Personality, 28: 383-396, December, 1960.

3. Inkeles, A., "Social Structure and the Socialization of Competence," Harvard Educational Review, 36:265-283, Summer, 1966.
4. Stendler, C. B., and Young, N., "Impact of First Grade Entrance Upon Socialization of the Child: Changes After Eight Months of School," Child Development, 22:113-122, June, 1951.
5. Strauss, A. L., "Learning of Roles and of Concepts as Twin Processes," Journal of Genetic Psychology, 88:211-217, June, 1956.

C. Social factors in relation to the learning process.

Noteworthy book: Committee on the Dynamics of Instructional Groups, National Society for Study of Education, The Dynamics of Instructional Groups; Socio-Psychological Aspects of Teaching and Learning (Chicago: University of Chicago Press), 1960.

1. Brookover, W., "Social Roles of Teachers and Pupil Achievement," American Sociological Review, 8:389-393, August, 1943. Also Reply: A. Katona, American Sociological Review, 9:108-109, February, 1944.
2. Buswell, M. M., "Relationship Between the Social Structure of the Classroom and the Academic Success of the Pupils," Journal of Experimental Education, 22:37-52, September, 1953.
3. Cartwright, D. S., and Robertson, R. J., "Membership in Cliques and Achievement," American Journal of Sociology, 66:441-445, March, 1961.
4. DiVesta, F. J., "Meaningful Learning: Motivational, Personality, Interpersonal and Social Variables," Review of Educational Research, 31:511-521, December, 1961.
5. Hattwick, L. W., and Stowell, M., "Relation of Parental Over-attentiveness to Children's Work Habits and Social Adjustments in Kindergarten and the First Six Grades of School," Journal of Educational Research, 30:169-176, November, 1936.
6. Heise, G. A., and Miller, G. A., "Problem-solving by Small Groups Using Various Communications Nets," Journal of Abnormal and Social Psychology, 46:327-335, July, 1951.
7. Lehman, H. C., and Witty, P. A., "Second Study of Play in Relation to School Progress," Social Forces, 8:409-415, March, 1930.

8. McNeil, J. D., "Theory of Participation and Classroom Productivity," Journal of Educational Sociology, 32:379-380, April, 1959.
9. Perkins, H. V., Jr., "Effects of Climate and Curriculum on Group Learning," Journal of Educational Research, 44:269-286, December, 1950.
10. Schmuck, R., "Some Relationships of Peer Liking Patterns in the Classroom to Pupil Attitudes and Achievement," School Review, 71:337-359, Autumn, 1963.

D. Teacher-pupil contact and human relations in the classroom situation.

Noteworthy books: (1) Wickman, E. K., Children's Behavior and Teachers' Attitudes (New York: The Commonwealth Fund, Division of Publications), 1928; (2) Bush, Robert N., Teacher-Pupil Relationships (New York: Prentice-Hall), 1954.

1. Amidon, E., and Simon, A., "Teacher-Pupil Interaction; Teaching Patterns," Review of Educational Research, 35:131-133, April, 1965.
2. Benne, K. D., and Bennis, W. G., "Human-Relations Factor: Studying the Classroom as a Group," Phi Kappa Deltan, 39:274-279, March, 1958.
3. Cogan, M. L., "Theory and Design of a Study of Teacher-Pupil Interaction," Harvard Educational Review, 26:No.4:315-342, 1956.
4. Duncan, H. G., and Duncan, W. L., "Student-Teacher Relationships," Sociology and Social Research, 18:530-540, July, 1934.
5. Flanders, N. A., "Teacher-Pupil Contacts and Mental Hygiene," Journal of Social Issues, 15:No.1, 1959 (fourth article in the Glidewell Symposium on Mental Health in the Classroom, which constitutes an entire issue of this journal).
6. Flanders, N. A., and Havumaki, S., "Group Compliance to Dominative Teacher Influence," Human Relations, 13:No.1:67-82, 1960.
7. Jersild, A. T., et al., "Studies of Elementary School Classes in Action: Pupil Participation and Aspects of Pupil-Teacher Relationships," Journal of Experimental Education, 10:119-137, December, 1941.
8. Runkel, Philip J., "The Social Psychological Basis of Human Relations," Review of Educational Research, 29:318-331, October, 1959.

9. Shaw, J., et al., "Changes Occurring in Teacher-Pupil Attitudes During a Two-Weeks Guidance Workshop," Journal of Applied Psychology, 36:304-306, October, 1952.
 10. Zeleny, L. D., "Pupil-Teacher Relationships," Sociology and Social Research, 13:265-275, January, 1929.
- E. Unusual students: isolated, delinquent, promoted, gifted, overage etc.

Noteworthy reports: (1) Hayes, J. L., Classroom Disturbances of Eighth Grade Boys and Girls (New York: Teachers College), 1943; (2) Henry, T. S., "Classroom Problems in the Education of Gifted Children," in National Society for the Study of Education 19th Yearbook, Part 2, pp. 111-120, 1920; (3) Review of Educational Research, 36:1, entire issue: "Education of Exceptional Children."

1. Bedoian, V. H., "Social Acceptability and Social Rejection of the Underage, at Age, and Overage Pupils in the Sixth Grade," Journal of Educational Research, 47:513-520, March, 1954.
2. Epperson, D. C., "Some Interpersonal and Performance Correlates of Classroom Alienation," School Review, 71:360-376, Autumn, 1963.
3. Fenton, N., "Delinquent in the Classroom," in 47th Yearbook, National Society for the Study of Education, Part 1, pp. 48-65.
4. Gallagher, J. J., "Peer Acceptance of Highly Gifted Children in Elementary School," Elementary School Journal, 58:465-470, May, 1956.
5. Gnagey, W. J., "Effects on Classmates of a Deviant Student's Power and Response to a Teacher-Exerted Control Technique," Journal of Educational Psychology, 51:1-8, February, 1960.
6. Gold, H. A., "Classroom Isolate: An Additional Dimension for Consideration in the Evaluation of a Quality Education Program," Journal of Experimental Education, 31:77-80, September, 1962.
7. Iscoe, I., and Williams, M. S., "Experimental Variables Affecting the Conformity Behavior of Children," Journal of Personality, 31:234-246, June, 1963.
8. Kvaraceus, W. C., "Acceptance, Rejection, and Exceptionality," Exceptional Children, 22:328-331, May, 1956.
9. Laycock, S. R., "Adjustments of Superior and Inferior School Children," Journal of Social Psychology, 4:353-366, August, 1933.
10. Smith, G. H., "Sociometric Study of Best-liked and Least-liked Children," Elementary School Journal, 51:77-85, October, 1950.

11. Tallman, I., and Levine, S., "The Emotionally Disturbed Child in the Classroom Situation," Exceptional Children, 27:114-116, October, 1960.
12. Wilkins, W. L., "Social Adjustment of Accelerated Pupils," School Review, 44:445-455, June, 1936.
13. Wilson, F. T., "Salvaging Gifted Students in Regular Classrooms," Educational Administration and Supervision, 41:462-466, December, 1955.
14. Ziller, R. C., and Behringer, R. D., "Longitudinal Study of the Assimilation of the New Child in the Group," Human Relations, 14:No.2:121-133, 1961.

F. Values and bias in the classroom situation.

Noteworthy book: Dahlke, H. O., Values in Culture and Classroom, Harper, 1958.

1. Becker, H. S., "Social-Class Variations in the Teacher-Pupil Relationship," Journal of Educational Sociology, 25:451-465, April, 1952.
2. Blackowski, S., "Magical Behavior of Children in Relation to School," American Journal of Psychology, 50:347-361, 1939.
3. Cheong, G. S. C., and DeVault, M. V., "Pupils' Perceptions of Teachers," Journal of Educational Research, 59:446-449, July, 1966.
4. Goldberg, A., "Teacher Bias and Social Values," Clearing House, 31:94-96, October, 1956.
5. Hart, J. W., "Socially Mobile Classroom Teachers and Classroom Atmosphere," Journal of Educational Research, 59:166-168, December, 1965.
6. Rich, J. M., "How Social Class Values Affect Teacher-Pupil Relations," Journal of Educational Sociology, 33:355-359, May, 1960.
7. Ripple, R. F., "Affective Factors Influence Classroom Learning," Educational Leadership, 22:476-480, April, 1965.
8. Toby, J., "Orientation to Education as a Factor in the School Maladjustment of Lower Class Children," Social Forces, 35:259-266, March, 1957.
9. Webb, J., "Sociology of a School," British Journal of Sociology, 13:264-272, September, 1962.

10. Wodthke, K. H., et al., "Patterns of Needs as Predictors of Classroom Behavior of Teachers, Educational and Psychological Measurement, 23:569-577, Autumn, 1963.

G. Group dynamics in the classroom.

Noteworthy book: Bany, M. A., and Johnson, L. V., Classroom Group Behavior: Group Dynamics in Education (New York: Macmillan), 1964.

1. Cartwright, D., "Achieving Change in People: The Group Dynamics Approach," Human Relations, 4:381-392, 1951.
2. Flanders, N. A., "Diagnosing and Utilizing Social Structures in Classroom Learning," National Society for Study of Education Yearbook 1959, Part 2, pp. 187-217.
3. Jensen, G., and Parsons, T., "Structure and Dynamics of Classroom Groups and Educational Systems," Review of Educational Research, 29:344-356, October, 1959.
4. Kerlinger, F. M., "Authoritarianism of Group Dynamics," Progressive Education, 31:169-173, April, 1954. Also see Knowles, M. S., "Authoritarianism of Group Dynamics; Reply to F. M. Kerlinger," Progressive Education, 32:122+, July, 1955.
5. Lifton, W. M., "Group Classroom Techniques," Progressive Education, 30:210-214, May, 1953.
6. Martin, W. E., et al., "Methodological Problems in the Study of Interrelationships of Group Members," Educational and Psychological Measurement, 12:No.4:533-553, 1952.
7. Resnick, J., "Group Dynamics in the Classroom," Journal of Educational Sociology, 25:112-116, October, 1951.
8. Trow, W. C., et al., "Psychology of Group Behavior: The Class as a Group," Journal of Educational Psychology, 41:322-338, October, 1950.

H. Sociometry, social structure, and social adjustment in the classroom.

Noteworthy books: (1) Gordon, C. W., The Social System of the High School (Glencoe: Free Press), 1957; (2) Gronlund, N. E., Sociometry in the Classroom (New York: Harper), 1959.

1. Adams, J. J., "Achievement and Social Adjustment of Pupils in Combination Classes Enrolling Pupils of More Than One Grade Level," Journal of Educational Research, 47:151-155, October, 1953.
2. Boyer, P. A., et al., "School Organization and Classroom Adjustment," Review of Educational Research, 9:161-184, April, 1939.

3. Bonney, M. E., "Social Behavior Differences Between Second Grade Children of High and Low Sociometric Status," Journal of Educational Research, 48:481-495, March, 1955.
 4. Bonney, M. E., "Study of the Sociometric Process Among Sixth-Grade Children," Journal of Educational Psychology, 37:359-372, September, 1946.
 5. Brown, W. H., and Bond, L. B., "Social Stratification in a Sixth Grade Class," Journal of Educational Research, 48:539-543, March, 1955.
 6. Damvin, D. E., "Family Size and Sibling Age, Sex, and Position as Related to Certain Aspects of Adjustment," Journal of Social Psychology, 29:93-102, February, 1949.
 7. De Vault, M. V., "Classroom Sociometric Mutual Pairs and Residential Proximity," Journal of Educational Research, 50:605-610, April, 1957.
 8. Dineen, M. A., and Garry, R., "Effect of Sociometric Seating on a Classroom Cleavage," Elementary School Journal, 56:358-362, April, 1956.
 9. Jersild, A. T., and Fite, M. D., "Children's Social Adjustments in a Nursery School," Journal of Experimental Education, 6:161-166, December, 1937.
 10. Kinney, E. E., "Study of Peer Group Social Acceptability at the Fifth Grade Level in a Public School," Journal of Educational Research, 47:57-64, September, 1953.
 11. Neugarten, B. L., "Social Class and Friendship Among School Children," American Journal of Sociology, 51:305-313, January, 1946.
 12. Sandman, E. S., "Study in Sociometry on the Kindergarten Level," Journal of Educational Sociology, 25:410-422, March, 1952.
 13. Taylor, E. A., "Some Factors Relating to Social Acceptance in Eighth Grade Classrooms," Journal of Educational Psychology, 43:257-272, May, 1952.
 14. Thom, D. A., and Johnson, F. S., "Environmental Factors and Their Relation to Social Adjustment; A Study of a Group of Well-Adjusted Children," Mental Hygiene, 23:379-413, July, 1939.
- I. Interaction analysis and social role: teacher role in the classroom.

Noteworthy reports: Anderson, H. H., and Brewer, H. M., "Studies of Teachers' Classroom Personalities I, II, and III," Applied Psychology Monographs 6, 8, and 11; and Journal of Educational Research, 45 (entire issue); and Journal of Experimental Education, 30:307-326, a symposium.

1. Amidon, E., "Interaction Analysis Applied to Teaching," National Association of Secondary School Principals Bulletin, 50:93-97, December, 1966.
2. Anderson, H. H., "The Measurement of Domination and of Socially Integrative Behavior in Teachers' Contact with Children," Child Development, 10:No.2:73-89, June, 1939.
3. Brookover, W., "Social Roles of Teachers and Pupil Achievement," American Sociological Review, 8:389-393, August, 1943. Reply: A. Katona, 9:108-109, February, 1944.
4. Callis, R., "Efficiency of the Minnesota Teacher Attitude Inventory for Predicting Interpersonal Relations in the Classroom," Journal of Applied Psychology, 37:83-85, April, 1953.
5. Cogan, M. L., "Theory and Design of a Study of Teacher-Pupil Interaction," Harvard Educational Review, 26:No.4:315-342, 1956.
6. Dick, H. R., "Student-Faculty Role Consensus and Conflict," Southwest Social Science Quarterly, 41:415-423, March, 1961.
7. Dodge, A. F., "What are the Personality Traits of the Successful Teacher?" Journal of Applied Psychology, 27:325-337, August, 1943.
8. Grossack, M. M., "Effects of Variations in Teacher Role Behavior on the Student-Teacher Relationship," Journal of Educational Psychology, 46:433-436, November, 1955.
9. Hughes, M. M., "Teaching is Interaction," Elementary School Journal, 58:457-464, May, 1956.
10. Masling, J., "Effects of Warm and Cold Interaction on the Administrative and Scoring of an Intelligence Test," Journal of Consulting Psychology, 23:336-341, August, 1959.
11. Nelson, L. N., "Teacher Leadership: An Empirical Approach to Analyzing Teacher Behavior in the Classroom," Journal of Teacher Education, 17:417-425, Winter, 1966.
12. Olson, W. C., and Wilkinson, M. M., "Teacher Personality as Revealed by the Amount and Kind of Verbal Direction Used in Behavior Control," Educational Administration and Supervision, 24:81-93, February, 1938.
13. Rubenstein, B. O., "Comparison Between Cultural Expectations Regarding the Role of the Teacher and His Actual Role in the Learning Process," Educational Administration and Supervision, 45:95-101, March, 1959.

J. Techniques of analysis used in classroom studies.

1. Anderson, H. H., "The Measurement of Domination and of Socially Integrative Behavior in Teachers' Contact With Children," Child Development, 10:No.2:73-89, June, 1939.
2. Bass, B. M., et al., "Self, Interaction, and Task Orientation Inventory Scores Associated With Overt Behavior and Personal Factors," Educational and Psychological Measurement, 23:101-116, Spring, 1963.
3. Boyd, R. D., and De Vault, M. V., "Observation and Recording of Behavior," Review of Educational Research, 36:529-551, December, 1966.
4. Callis, R., "Efficiency of the Minnesota Teacher Attitude Inventory for Predicting Interpersonal Relations in the Classroom," Journal of Applied Psychology, 37:82-85, April, 1953.
5. Cogan, M. L., "Theory and Design of a Study of Teacher-Pupil Interaction," Harvard Educational Review, 26:No.4:315-342, 1956.
6. Dahlke, H. O., and Monahan, T. O., "Problems in the Applications of Sociometry to Schools," School Review, 57:223-234, April, 1949.
7. Fine, H. J., and Zinet, C. M., "Quantitative Method of Scaling Communciations and Interaction Process," Journal of Clinical Psychology, 12:268-271, July, 1956.
8. Flotow, F. A., "Charting Social Relationships of School Children," Elementary School Journal, 46:498-504, May, 1946; or Education Digest, 12:18-21, November, 1946.
9. Harmon, L. R., "Note on Pepinsky's Analysis of Validity and Reliability of Sociometric Data," Educational and Psychological Measurement, 9:No.4:747, 1949.
10. Janney, J. E., "Technique for the Measurement of Social Adjustment," Journal of Experimental Education, 7:203-205, March, 1939.
11. Justman, J., and Wrightstone, J. W., "Comparison of Three Methods of Measuring Pupil Status in the Classroom," Educational and Psychological Measurement, 11:No.3:362-367, 1951.
12. Martin, W. E., et al., "Methodological Problems in the Study of Interrelationships of Group Members," Educational and Psychological Measurement, 12:No.4:533-553, 1952.
13. Medley, D. M., and Mitzel, H. E., "Technique for Measuring Classroom Behavior," Journal of Educational Psychology, 49:86-92, April, 1958.

14. Nelson, L. N., "Teacher Leadership: An Empirical Approach to Analyzing Teacher Behavior in the Classroom," Journal of Teachers Education, 17:417-425, Winter, 1966.
15. Pepinsky, P. N., "Meaning of 'Validity' and 'Reliability' as Applied to Sociometric Tests," Educational and Psychological Measurement, 9:No.1:39-44, 1949.
16. Powell, M. G., "Comparisons of Self-rating, Peer-ratings, and Experts'-rating of Personality Adjustment," Educational and Psychological Measurement, 8:No.2:225-234, 1948.
17. Reckless, W. C., "Clinical Approach and Delinquency Research in Educational Sociology," Review of Educational Research, 7:36-43, February, 1937.
18. Sells, S. D., and Ellis, R. W., "Observational Procedures Used in Research; Sociometric Methods," Review of Educational Research, 21:432-449, December, 1951.
19. Withall, J. G., "Development of a Technique for the Measurement of Social-Emotional Climate in Classrooms," Journal of Experimental Education, 17:347-361, March, 1949.
20. Wodthke, K. H., et al., "Patterns of Needs as Predictors of Classroom Behavior of Teachers," Educational and Psychological Measurement, 23:569-577, Autumn, 1963.
21. Zeleny, L. D., "Measurement of Sociation," American Sociological Review, 6:173-188, April, 1941.

K. Creativity in the classroom.

1. Gordon, W. J. J., Synerctics, Harper and Row, 1961.
2. Osborn, A. F., Applied Imagination, Scribners, 1963.
3. Parnes, S. J., and Harding, H. F. (eds.), A Source Book for Creative Thinking, Scribners, 1962.
4. Parnes, S. J., Creative Behavior Guidebook, Scribners, 1967.
5. Parnes, S. J., Creative Behavior Workbook, Scribners, 1967.
6. Smith, J. A., Setting Conditions for Creative Teaching, Allyn and Bacon, 1966.
7. Smith, J. A., Creative Teaching of the Language Arts in the Elementary School, Allyn and Bacon, 1967.
8. Smith, J. A., Creative Teaching of Reading and Literature in the Elementary School, Allyn and Bacon, 1967.

9. Smith, J. A., Creative Teaching of the Creative Arts in the Elementary School, Allyn and Bacon, 1967.
10. Smith, J. A., Creative Teaching of the Social Studies in the Elementary School, Allyn and Bacon, 1967.
11. Wescott, A. M., and Smith, J. A., Creative Teaching of Mathematics in the Elementary School, Allyn and Bacon, 1967.
12. Piltz, A., and Sund, R., Creative Teaching of Science in the Elementary School, Allyn and Bacon, 1968.
13. Taylor, C. W. (ed.), Creativity: Progress and Potential, McGraw-Hill, 1964.
14. Torrance, E. P., Guiding Creative Talent, Prentice-Hall, 1962.
15. Torrance, E. P., Education and the Creative Potential, Minnesota, 1963.
16. Torrance, E. P., Rewarding Creative Behavior, Prentice-Hall, 1965.

11. 'Seminar Goal #2 (Interesting Behavioral Scientists in Sociological Study of the Classroom)

The following steps were (and are being) taken to interest behavioral scientists in studying social interaction in the classroom:

- (1) A seminar on the sociology of the classroom was offered to graduate students in sociology and education in autumn, 1967. Several of those who took the seminar have become interested in this important field of research.
- (2) Professor Robert Bierstedt of New York University and Professor Blaine Mercer of the University of Colorado held special seminars on the sociology of the classroom at the University of Montana in winter and spring of 1968. The faculty and students who attended found the seminars most stimulating. Some behavioral scientists from elsewhere in Montana participated with Bierstedt and Mercer on panel discussions and others were active members of the seminars. Seeds of research on the sociology of the classroom were sown at these meetings.
- (3) The seminar director presented talks and engaged in discussions with behavioral scientists and teacher educators at the University of Lethbridge (Alberta) in autumn, 1968. These talks and discussions stirred up considerable enthusiasm for continued study of classroom interaction.

- (4) Personal correspondence between members of the seminar and behavior science colleagues elsewhere in the nation has doubtless attracted some qualified researchers to the classroom.
- (5) Plans are under way to present findings of the present project to colleagues at sociology meetings in the near future.
- (6) It is expected that the present project will lead directly to further research on significant dimensions of classroom interaction.
- (7) Related dissemination has occurred in meetings with teachers and school administrators in a number of Montana communities. The teachers and administrators were highly interested and receptive. Favorable impressions made at these meetings will almost certainly contribute to breaking research ground in many classrooms throughout Montana.

III. Seminar Goal #3 (Sharpening Seminar Members' Observations and Analyses of Classrooms and Their Settings)

Observations of classrooms were made at all levels of elementary school, high school, and university. Members of the seminar generally found these observations to be most helpful for becoming sensitive to significant dimensions of classroom interaction. The following are representative of what seminar members learned when seeking to understand forms and processes of behavior in the classroom.

The fact that the classroom is a unit in one of society's fundamental complex organizations requires the student of society to take several matters into account. These include the facts that:

- (1) What goes on in a classroom is affected by activities in other classrooms, by the school as a whole, and by the educational system of which the school is a part.
- (2) No two units of a school, or of any complex organization, change at the same rate. At any given moment, therefore, some classrooms of a school are in the vanguard while others are in the rear guard of educational change. A further complication is that proliferations of new school functions make for difficulty in performing old functions let alone new ones. Coordination of functions is therefore a continuing problem.
- (3) Nontraditional classroom interaction and traditional classroom structures probably never occur together except in ephemeral, ad hoc circumstances. The structure of the classroom apparently has to be changed if nontraditional interaction is to be achieved.

- (4) Administrative controls of schools are failing to coordinate the schools' several parts. This is particularly the case in large, more complex schools. A result is that the direction classroom activity takes may not be consonant with other activities in a school.
- (5) It seems educationally desirable to encourage and administratively support teachers whose skills and inclinations can support efforts to foster creative interaction in the classroom. For example, experimental elementary school classes which have been designed to foster the free flow of ideas and innovative activities have been successful in Butte, Montana largely because the administration of the school district has carefully chosen and trained teachers for such classes and given them authority to run their classes without regard to the usual bureaucratic rules and professional norms. Another example comes from Whitefish, Montana, where team teaching in an elementary school has worked well because the administration has refrained from offering advice or otherwise interfering. Instead, the administration has served as a buffer between the teachers and the community, explaining to parents and others what the innovative teachers have been attempting to do and why. Despite the interest of most parents, students, and fellow teachers in maintaining the status quo in their classrooms, the team teachers have accordingly been able to create classroom climates which have sharply reduced tendencies to expect lecturing, rote memorizing, and emphasis upon convergent thinking to prevail. In both examples reduced bureaucratic structuring of classroom interaction has allowed teachers to fulfill their latent professional desire to get students actively participating in raising questions and solving problems, instead of just regurgitating facts obtained from teachers and textbooks.
- (6) Attitudes and actions of school boards, superintendents, principals, fellow teachers, pupils, and parents influence classroom interaction, not only in the sense that they may interfere with professional management of this interaction in ways such as those just mentioned, but in the sense that they constitute social psychological forces which may function either to help or hinder classroom members as they seek to cope with the simultaneous demands of role and self. Differences in expectations, conceptions, ideals, and the like, whatever the sources of these differences, have personal and indeed emotional consequences which tend to run counter to the leveling effects of school and classroom norms. For example, a teacher's normative concern with neatness, orderliness, and quietness in the classroom tends to communicate to students the message, "Don't be yourself; don't be a person; just 'behave'!" Differences or conflicts in expectations are always potentially, if not actually, face-related matters.

This example of being "turned off" is merely one of countless possible ways of coping with such conflict so as to preserve face, if not to enhance it. The latter seems to be much more a consequence of being "turned on" and being accepted in that personally exhilarated state.

- (7) The very complexity of school organization contributes to both structural and social psychological forces which make for frustrating disenchantment and estrangement from fundamental educational processes. Bureaucratic emphasis upon categoric interaction (i.e., interacting as nonpersonalized or depersonalized teachers and students) tends to be frustrating and to alienate classroom members from their roles and attendant interactions. Achievement of true interpersonal interaction, interaction as persons and not just solely as social categories or role players, seems to come easiest in the primary grades, where bureaucratic constraints and frustrations have not yet forced interaction into orthodox molds. Interaction becomes increasingly categoric and decreasingly interpersonal in succeeding years.
- (8) As pupils advance through elementary and high school and into college they grow increasingly concerned about course grades and other dimensions of "front." Indeed, it appears that the great emphasis on examinations and grades constitutes a ready-made bureaucratic substitute for commitment to learning and scholarship. Commitment to the present system of evaluating students seems to result from a search for substitute self-expression and self-acceptance, a search which pupils engage in when they move out of the primary grades. Alienation from learning occurs as the intense interpersonal interactions of the primary grades give way to categoric interaction and frustrated inclinations to be creative in settings which demand none but convergent thinking. Commitments to scholarship are apparently difficult to make except where the situation offers a framework of intense interpersonal interaction, a framework that encourages and rewards divergent as well as convergent thought processes which are necessary for direct self-expression and hence self-acceptance.
- (9) The above strongly suggest a need to restructure classroom roles so that students will find it rewarding to participate more actively in the learning process. The classroom needs to become a place where students and teacher can find it increasingly feasible to express themselves at minimal self-risk. This means, too, that the classroom needs to become more relevant to the hopes and interests of both teacher and students. As suggested in the foregoing, a way of doing this is to encourage classroom members to interact more and to take each other into account as helpful partners in a common search for knowledge, understanding, and relevance.

Members of the seminar could not escape noticing that the classroom is also a work place and that an adequate understanding of classroom interaction requires studying the teacher's work relationships and their meanings to all concerned. More will be said about "sociology of work" aspects of the classroom when suggesting research designs. For the present it is well to note that, from the teacher's standpoint, relationships in the school are work relationships and that to understand their impact on classroom interaction one must view these relationships in terms of such matters as the teacher's career preparations and aspirations, struggles to reconcile professional concerns with bureaucratic procedures, and claims to an occupational mandate to do much of the formal socializing of the children of our society.

Because the seminar's visits to classrooms were intended primarily to observe and only fortuitously to interview the teachers and pupils, members of the seminar had an unusually good opportunity to compare observational with interview findings. On the basis of observations alone, it was learned, there were enormous difficulties in trying to understand such important parts of classroom interaction as the working conceptions of reality which were employed, the definitions and meanings which were implied, and the personifications which emerged during the course of taking and playing roles. Additionally, the problem of recording and reporting descriptions of classroom interaction in any but structural terms was a source of continual frustration to the members of the seminar. Their words were like still pictures when on many occasions they were seeking to record and recount the flow of classroom action much as modern motion pictures might do this. They became acutely aware of the need to develop a processual language to describe interactional process while it is occurring and to recount it in appropriately graphic terms. They grew especially sensitive to the need to describe interactional process in qualitative terms which can be used for either straight qualitative analysis or for counting and then engaging in sophisticated quantification of noteworthy aspects of the interaction.

IV. Seminar Goal #4 (Suggested Research Designs)

Members of the seminar discussed many research ideas during the course of the project. While not all were principally concerned with developing a sociology of the classroom, the great majority pertained to one or more features of classroom interaction. Suggested research ideas frequently included deliberate manipulation of classroom variables with a view to studying effects of such manipulation on academic and human development of classroom participants. At least one group of seminar members is already developing research ideas into full-blown proposals which should lead to actual projects in the near future.

While keenly aware of the difficulties in trying to report research ideas to those who have not been directly involved in developing them, the present writer is nevertheless obliged to at least acquaint such

readers of this report with the range of these ideas. It is hoped that some of the ideas will excite other investigators as they have excited seminar members and soon lead to research which will yield needed sociological knowledge and theory concerning the classroom.

The seminar identified several core ideas which can readily be expanded into a variety of research designs. The ideas seem to be empirically relevant to many of the classroom's basic problems and processes. Included among the ideas are these:

- (1) Relationships between form of classroom (and school) organization and patterns of interaction in the classroom are not clearly understood. It would be well to design a series of experiments to learn what is likely to happen to patterns of interaction when formal organizational changes of given kinds are instituted for both the classroom and the school. Of particular interest would be investigation of what happens to learning achievement of classroom members and to the teacher's ability to function professionally.
- (2) In light of the apparent inverse relationship between grade level and amount of interpersonal interaction in the elementary school, and in light of the evident direct relationship between amount of interpersonal interaction and willingness to engage in divergent (as well as convergent) thinking, it would be instructive to study upper-grade classrooms in which steps are taken to foster interpersonal interaction. Before-after studies might focus on such consequences of increased interpersonal interaction as willingness to express self, to be creative, and to take active parts in the learning process. These studies might lead to development of a model for analyzing interpersonal and other aspects of interaction, in and out of the classroom.
- (3) Since one of the teacher's basic objectives in the classroom is to function as a change agent, as a socially approved intervener in the lives of the students, it would be appropriate to do a comparative study of development and utilization of interventionistic skills of teachers and of such other socially approved interveners as social workers and clergymen. These kinds of comparisons could lead to vast improvements in formal training of those who wish to become teachers--or members of other professional groups who are licensed by society to intervene significantly in the lives of clients.
- (4) Matching teachers with teaching situations appears to be done haphazardly, starting with the way teachers are recruited and continuing through the ways they are selected and placed. The relative importance of bureaucratic and professional considerations in these steps in the job assignment process might be investigated, as a way of trying to understand how the process actually works and how it might be made to work more fruitfully for all concerned.

- (5) Some kind of "sensitivity" training might be offered selected teachers to evaluate the effects of such training on patterns of classroom interaction, on learning achievement, on feelings of relevance, and on degree of commitment to classroom roles, to mention only a few important consequences which can reasonably be expected.
- (6) Selected teachers might be put in complete command of their classrooms to learn how far they can escape from hamstringing bureaucratic influences on classroom interaction.
- (7) Relationships between the "sociology of education" (an institution-centered or structural approach) and the "sociology of work" (a work-role-centered approach) views of the classroom might be explored. A series of investigations designed to synthesize these two views of educational organizations might have a salutary effect on the ability of behavioral scientists to interrelate the relatively abstract findings of sociology of education investigators with the relatively empirical findings of sociology of work researchers. Thus, for example, the classroom could more readily be depicted and understood as both an organizational unit and a work place which has given developing meanings for teachers and their clients. A "sociology of the classroom" might well emerge from such a synthesis of these two approaches to the study of social interaction in the school.

SIGNIFICANCE AND IMPLICATIONS

The project on the sociology of the classroom yielded some valuable insights into forms and processes of interaction in the classroom and suggested ways in which further research might build upon these insights.

A number of research and training implications were implied in the foregoing discussions of findings. A few deserve special and explicit mention here.

The seminar's experiences strongly suggest that the classroom as an area of behavioral science research is wide open and potentially very fruitful. If the classroom is actually where the action of the school really takes place, and if the interaction between teacher and pupils is really the most critical variable in the educational process, it behooves students of human behavior to take a much closer and more careful look at the classroom than they have done heretofore. The classroom, it should also be stressed, appears to be as good a natural laboratory for the study of society as any.

Preparation of people to become teachers, and continuing education of those who are already teaching, cannot help but be strengthened by

further development of sociological theory and knowledge concerning the classroom. For example, additional study of the roles of teachers and others who seek to intervene importantly in the lives of clients would almost certainly affect the training of teachers and would-be teachers, not to mention comparable training of those in other interventive professions.

Finally, it should be mentioned that application of findings of sociological studies of the classroom can be expected to contribute to resolution of bureaucratization of the school and other obstacles to professionalization of teaching. As the teacher learns to identify and cope with interactional difficulties and other impediments to playing an educationally interventive role, it can be expected that the teacher will become able to control relationships with students so as to serve their best interests, much as physicians and other established professionals have sought to do in their relationships with clients.