

DOCUMENT RESUME

ED 075 944

EA 005 172

AUTHOR Roberts, Julian  
TITLE Research Dilemmas in Testing Models for Organizational Change.  
PUB DATE Feb 73  
NOTE 16p.; Paper presented at American Educational Research Association Annual Meeting (58th, New Orleans, Louisiana, February 25-March 1, 1973)  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS Change Agents; Control Groups; \*Educational Research; Evaluation Criteria; Literature Reviews; \*Models; \*Organizational Change; Organizational Development; Research Criteria; Research Design; \*Research Methodology; Research Needs; \*Research Problems; Speeches  
IDENTIFIERS Theory Practice Relationship

ABSTRACT

Most studies either concentrate on situational variants or relate specifically to differences in interpersonal relationships involved. Therefore, difficulties arise in setting up control groups, the timing of post-measurements, and the use of varied intervention techniques. Dilemmas are caused by focusing on projected, rather than on desired, outcomes. Additionally, attempts to derive conclusions are limited because many studies (1) fail to specify the conditions under which a relationship between variables is tested; (2) are based on information from one school or one school district, thus limiting generalizability; (3) utilize variables unique to the particular study and/or are nontheoretical, providing little framework for integrating findings from different studies; and (4) fail to allow for differentiating among behavior patterns, providing only limited alternatives and involving just one specified behavior -- the only other one being the absence of the one observed. These studies rely on the participation of involved persons rather than on objective others, and often obtain information regarding two or more variables from the same respondents. (Author)

FORM 8510

PRINTED IN U.S.A.

ED 075944

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIG-  
INATING IT. POINTS OF VIEW OR OPIN-  
IONS STATED DO NOT NECESSARILY  
REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY

RESEARCH DILEMMAS IN TESTING MODELS FOR ORGANIZATIONAL CHANGE

Julian Roberts

Ferkauf Graduate School  
Yeshiva University

Prepared for  
1973 Annual Meeting  
American Educational Research Association  
February 25 - March 1, 1973  
New Orleans, Louisiana

EA 005 172

FILMED FROM BEST AVAILABLE COPY

## Research Dilemmas in Testing Models for Organization Change

### Introduction:

Much of the reporting and model development for organizational change is related to business organizations. That our schools, as an organization, need improvement is no longer a debatable question even if one were to concede that schools may be doing a better job than most critics claim. Schools and school systems, urged by their communities, by Boards and State departments of education, by their faculties and by their students, have begun to look for and call upon the services of those persons experienced in organizational development.

Miles and Schmuck define organizational development as "a planned and sustained effort to apply behavioral science for system improvement, using reflexive, self-analytic methods." OD accordingly emphasizes the system as the target of change rather than the individual. Reflexive self-analytic methods involve system members (individuals in "the assessment, diagnosis and transformation of their organization." (Miles and Schmuck) OD may involve innovative projects, but they are only a part of OD which requires a specially designated group responsible for planning, managing and evaluating the continuous process of organizational self-renewal.

The literature reveals several typologies of change strategies. Technological Changes; peoples Approaches; structural approaches;

system approaches. These have already been discussed, and are referred to primarily to indicate what change strategies are involved in each and why they present dilemmas to the traditional educational researcher.

Owens, in a paper prepared for this symposium, selected four representative orientations to change strategy. Briefly, Havelock's models for dealing with the adoption of innovations calling for problem-solving, or social interaction, or research, development, and diffusion. Each of these orientations call for the use of some or combinations of some such tactics or interventions as t-group experience, reflection in a helping relationship, non-evaluative feedback to individuals, role-playing, group process analysis and problem solving, survey data feedback to organizations, multi-media communication, endorsements of prestigious people, development of high performance products, building information systems, legislated change and systems analysis. Katz and Kahn's social systemic orientation call for the additional tactics of input of cognitive knowledge, individual counselling and therapy influence of peer group, sensitivity training, group therapy within organizations, survey data feedback, and systemic change. Chin has been shown to have three major orientations: empirical rational strategies, normative-re-educative strategies, and power-coercive strategies. From an analysis of these orientations, Owens has named four basic dimensions in change, namely structure, task, people and technology. It is with the interrelationships

of these dimensions, and the overlap of the kinds of tactics needed for the different orientations to change that we can begin to cull out some of the research dilemmas.

Dilemmas in the Use of Tactics Related to People:

Buchanan, in a paper on Laboratory Training and Organizational Development, enumerates some of the following variables that may create persistent problems in the research he examined: group composition, organizational membership, length of the learning laboratory, trainer behavior and the use of feedback. Harrison deals with the specific problems these variables generate.

1. Provision of Controls:

- a. Is there a problem inherent in terms of who selects which member of the organization for the control group and/or the training group?
- b. Is there a bias developed in the way in which a control group member sees himself or is perceived by others?
- c. Is there an expectation that a training group member must be expected to change his behavior?
- d. Is there a problem of assigning relevant members to a control group?

2. Temporal Changes:

Relative to temporal changes in training outcomes, Harrison reported that in 6 weeks, there were insignificant changes as opposed to greater changes after 6 months, whereas Schein, Bennis and Lewin theorize that time factors of undergoing change at one moment to the further point in time when change becomes stabilized must be allowed for

in assessing the effect of laboratory training experiences. Bare raises the further issue of the length of the actual laboratory experience itself, a variable that Buchanan had previously noted. There appears not to be any clear cut theory on this issue at all.

3. Dimensions of Change:

Harrison, Bare and others call attention to the dimensions of change, the direction of change and such theorizing as Bennis' concept that no normative or prescriptive change should be desired of the participants, but rather a need for "learning how to learn.

4. Variability in Training Experience:

Harrison here notes that the orientation of these responsible for designing the learning laboratory may affect the amounts and kinds of changes participants make. Here, Harrison calls attention to the need for theoretical formulation and exploratory investigation of the relationship among experience, conceptualizing activities, and learning' outcomes, the effect of variation in trainer style, and the effect of the group composition. The latter is a persistent problem wherever a special group from the organization is selected since no theory regarding homogeneity or heterogeneity of group membership for

maximizing learning has been accepted.

Harrison mentions two other problems that are also problems effecting several other tactics for change. One relates to the timing of the collection of data; the other to statistical problems. As to the first, any tactic involving the collection of data may be affected by whether or not the group from whom the data is to be obtained are aware of why they are being asked for certain information, who the collector is, what will be done with the data collected, and the conditions under which the collection is made. For example, in relation to data collected from training groups, the matter of experimenter-participant relationship in a lab setting may well effect the reliability of the data collected. Buchanan, in his Characteristics of Research on Leadership in Education, comments that "most use perceptions of involved persons rather than observations by a third party as sources of information regarding variables, thus making findings subject to attitudes and in many cases to the memory of participants."

As to the statistical problems besetting the researcher, Harrison mentions a) difficulties in such procedures as measuring the relationship initial standing on a test or variable and change on that variable; b) or assessing the relationship between change on a variable and an independent predictor of change.

Bare highlights these problems and includes concern for the environment under which a lab is conducted, the relationship between cognitive and affective learnings and particularly the relationship between the



training group and the "back home" situation. In a study conducted by Roberts in a suburban high school, the problem of, the lab group having to move back and forth from their training experience to an organizational setting that had as yet not been affected by any of the expected outcomes as openness, honesty, trust, etc., were almost insurmountable, especially when it came to assessing the degree towards which any initially noted changes might last.

Beer and Huse, in their article "A Systems Approach to Organizational Development," reach several conclusions that may create problems for investigators. First, they claim that O.D. efforts do not necessarily always have to start from the top echelons of the organization. This raises the question of whether or not top echelon personnel effect the outcome of change efforts to the degree that previous investigators have postulated. Second, they claim the organization itself is the best laboratory for learning, thus challenging the notion that organizations must send selected personnel to off-site lab groups. It also poses possible problems for the researcher in terms of demand to control certain variables within the ongoing activities of the organization that might seriously effect the outcomes of the change effects. This may be particularly true when only a part of the organization is being readied to adopt some innovation that others in the organization do not feel will effect them. Third and Fourth, they point out that structural and inter-personal changes must complement and reinforce each other, and that adult learning starts with behavioral change rather than cognitive change.



Herein, the researcher is faced with the difficulty of designing an investigation that takes into account the ripple effect<sup>the effect</sup>/changes in one of dimensions, (task, people, structure or technology) may have on the other dimensions, and how in turn, those effects may relate back to and effect the initial change noted by the investigator.

Beer and Huse decry the static rather than dynamic quality of research in the field of OD. They call for a need to "do a better job of developing a theory and technology of changing and to develop a flexible set of concepts which will change as we experiment with and socially engineer organizations. We are suggesting a stronger action orientation for our field and less of a natural science orientation." They are supported by Brown who opts for a model of research he designates as "research action." Using a problem solving orientation, Brown shows how the diagnosis of the school organization emerged as having some important action implications "associated both with the quality of understanding of the organization and with the relationships developed." He therefore calls for a greater collaboration between the change agent and the researchers so that the researcher may take into account, and possibly change the nature and/or direction of his investigation, as action steps are taken during the process of the self renewal of the school organization. Beer and Huse are further supportive for change in research behavior in their suggestion that the objectives of change agents should be "to develop an evolving system that maintains reasonable consistency while staying relevant to and

anticipating changes and adaptation to the outside environment." Research for them should focus on how effectively the change agents help organizations move from what Matthew Arnold once called "a having and a resting" to a "growing and a becoming."

In a recent study, Grabarz tried to identify change strategies in successful cases of innovation through the analysis of case studies. His examination of the literature related to ways of analyzing change strategies led to the following: recognizing the need for clearer theory regarding organizational development in the schools, he chose a case study-in-ductive methodology so as to generate critical elements of change strategies from case studies. The examination of this aspect of the literature also indicated that three similarities appeared in successful cases: a) top manager was actively involved in the project; b) a consultant was used--new to the organization; c) a model was introduced having a problem-solving perspective; the sequence of elements plays an important role in determining the successfulness of an innovation project.

From his examination of the research and literature related to typologies of change strategies, Grabarz further concluded that it was possible to find a fit in the dimensions of several of the typologies previously identified. Since a previous weakness in research on OD pointed out by Buchanan concerned that fact that most studies related to the people's approach, and therefore produced limited results insofar

as transferability to other approaches was concerned, Grabarz could now justify an attempt to avoid this limitation. The last group of studies he examined related to change tactics or elements involved in the use of a specific strategy. Change strategy was defined as "the means (usually involving a sequence of specified activities - 'tactics'-) for the successful implementation of an advocated innovation. This study is referred to because it revealed some further problems for the researcher. The use of case studies is faulty because of the wide variation in the styles of reporting. Although critical elements were discerned, the absence of (and presence of in some cases) of certain information prevented the researcher from finding any causal relationship. This suggested a need to develop a model for case reporting that could be developed from using the issues in OD identified by Buchanan, thus enabling an increase in inter-study reliability.

Many problems of the researcher identified at this point seem to parallel Owens list of OD Problems. There is a need for greater collaboration of practitioners and scientists to generate more flexible research designs; the need to stress organizational change and development as opposed to individual change, in order to meet the needs of schools relates to the researcher's need to see individual change as only one facet that feeds into the analysis of and investigation of the nature and characteristics of organizational change; the need for the researcher to be wary of evaluating an innovation or innovative process as indicative of revealing the full nature of organizational change. Schmuck and Miles

call attention to several areas that are of great concern to the kinds and quality of research needed in the field of organizational development. They call attention to a fact supported by Buchanan's investigation of research in the field of leadership in school organizations, that the evaluative reports are largely descriptive or speculative. Some of the wide range of needs and prospects for research projects suggested are:

1. More Complete and Formal Research on OD Interventions; here they call for the use of a "clinical-experimental" model like that of Benedict requiring a separation between the consulting and research functions. Using theory based predictions, describing interventions with care, using extended experimental-control designs, the authors try to compensate for the problems generated by such a classical design through increased emphasis on documenting the flow of intervention events, attending to collection of what they call organic data, rich detailed sequential information about occurrences during and between training events. More importantly, they argue for development of more unobtrusive measures of change, and include among possible considerations for use content analysis of agenda items or minutes of departmental meetings, school board meetings, speeches of the superintendent and the like. They call, too, for "multiple measures of self-renewing processes."

2. Need For Clearer Theory About OD in Schools: Here, the authors suggest that it would be helpful to the researcher if the change agent were more explicit about his postulates, assumptions and hypotheses.

For example, they refer to a situation not unlike Roberts study wherein there was a lack of understanding as to how/<sup>a</sup>particular training event is meant to influence the organizational normative structure while at the same time changing interpersonal relationships in the sub-group. They further suggest that one way to sharpen up theory of organizational development in schools is through use of a "research observer," allowing consultants "to deliberate creatively as the observer raises questions for the consultants to consider." This is similar to the ongoing feedback of information used by Brown.

3. Need to Demystify OD Technology: OD practioners should be able to describe their intervention techniques. Researchers will then not find the problem of replication as frustrating as it has been thus far, perhaps reducing such negative effects as time, design of learning labs, and even the explicit delineation of what the expected learnings or outcomes of some tactic are. This may enable the handling of the problem of equating learning outcomes as though they were all of equivalent value. For example, many studies reporting on changes equate such items as "he listens better" equally with "he runs a more effective staff meeting."

Schmuck and Miles call attention to the need for creating more models, making OD more useful for more types of schools and populations, and for preparing OD practitioners to work within school districts. For the researcher, these suggestions might lead to investigations that will produce more generalizable results, providing framework for integrating findings from different studies.

In summary, this paper has pointed to the following dilemmas of the researcher in the field of organizational development and change;

Studies either concentrate on situational variants or specifically relate to differences in interpersonal relationships involved. Difficulties are noted in setting up control groups, the timing of post-measurements, dilemmas caused by focusing on projected rather than desired outcomes, and use of varied intervention techniques. Attempts to derive conclusions are limited because many studies: do not specify conditions under which a relationship between variables is tested; are based on information from one school or one school district limited generalizability; utilize variables unique to the particular study and/or are non-theoretical, providing little framework for integrating findings from different studies; do not allow for differentiating among behavior patterns by providing limited alternatives and involve one specified behavior, the only other being the absence of the one observed; relying on the participation of involved persons rather than objective other; and often obtain information regarding two or more variables from the same respondents.

In examining the literature that called attention to specific nature of these problems, some suggestions for overcoming them were indicated. In some cases, such suggestions could not be generated until specific steps in theory building and in the creation of untied

research designs were taken. Perhaps the very nature of organizational development as defined by Miles, Schmuck and Owens calls for a greater acknowledgment on the part of researchers for the interacting variables of structure, people, technology and task. Most reporters are optimistic for the future of research in organizational development. Certainly, no one can deny the exciting challenges this field of investigation offers



BIBLIOGRAPHY

- Alschuler, Alexander, "Toward a Self-Renewal School," *Journal of Applied Behavioral Science*, Vol 8, No. 6, 1972.
- Bare, Carole and Rie R. Mitchell, "Experimental Evaluation of Sensitivity Training," *Journal of Applied Behavioral Science*, Vol 8, No.3, 1972.
- Beer, Michael and Edgar F. Huse, "A Systems Approach to Organizational Development," *Journal of Applied Behavioral Science*, Vol. 8, No. 1, 1972.
- Bennis, W. G. "A Typology of Change Processes." The Planning of Change. Edited by W. G. Bennis; K.D. Benne; and R. Chin. New York: Holt, Rinehart and Winston, 1961.
- Brown, L. Dave, "Research Action: Organizational Feedback, Understanding and Change," *Journal of Applied Behavioral Science*, Vol 8, No.6, 1972, pp 697-711.
- Buchanan, Paul "Laboratory Training and Organization Development" Mineo, Expansion of paper read at N.Y. State Psychological Association, 1968.
- Buchanan, Paul, "Characteristics of Research on Leadership in Education," An occasional paper, Social Training Curriculum Laboratory, FGS, Yeshiva University, New York, 1971.
- Buchanan, Paul, "The Concept of Organization Development, or Self-Renewal as a Form of Planned Change." Concepts for Social Change. Edited by Goodwin Watson. Washington, D.C.: NTL, NEA, 1967a.
- Buchanan, Paul, "Crucial Issues in Organization Development." Change in School Systems. Edited by Goodwin Watson. Washington D.C.: NTL, NEA, 1967b.
- Chin, R. and Benne, K.D. "General Strategies for Effecting Change in Human Systems." The Planning of Change. 2nd ed. Edited by W.G. Bennis; K.D. Benne; and R. Chin. New York: Holt, Rinehart and Winston, 1969.
- Clark, Alfred W., "Sanction - A Critical Element in Action Research," *Journal of Applied Behavioral Science*, Vol 8, No. 6, 1972 pp 713-731.

- Culbert, Samuel A., "Using Research to Guide An Organization Development Project," *Journal of Applied Behavioral Science*, Vol 3, No. 2, 1972.
- Grabarz, Harry L., "Crucial Elements of Change Strategies in Educational Innovation Projects," Doctoral Dissertation, Yeshiva University, 1972, unpublished.
- Greiner, L. E., "Antecedents of Planned Organization Change," *Journal of Applied Behavioral Sciences*, III (1967a), 51-85.
- Greiner, L. E., "Patterns of Organization Change," *Harvard Business Review*, VI (May-June, 1967b), 119-131.
- Harrison, Roger, "Research on Human Relations Training and Design and Interpretation," *Journal of Applied Behavioral Science*, Vol 7, No. 1, 1971.
- Havelock, R. G. Planning for Innovation Through Dissemination and Utilization of Knowledge. Michigan: CRUSK, ISR, 1971.
- Leavitt, H.J. "Applied Organizational Change in Industry: Structural, Technological and Humanistic Approaches," Handbook of Organizations. Edited by James G. March, Chicago: Rand, McNally and Co., 1965.
- Owens, Robert, "Conceptual Models for Research and Practice in the Administration of Change," Mimeo, paper prepared for AERA, 1973.
- Sampson, Edward, "Leadership Orientation and T-Group Effectiveness," *Journal of Applied Behavioral Science*, Vol 3, No. 5, 1972.
- Schmuck, Richard A. and Mathew B. Miles, eds., Organization Development in Schools, National Press Books, Palo Alto, California, 1971.
- Roberts, Julian, "Human Relations Training and Its Effect On The Teaching-Learning Process In The Social Studies, New York Education Department Division of Experimental Research, Albany, New York, July, 1969.