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A PARTICIPANT'S REPORT
ON THE
CRUSK FIRST SUMMER INSTITUTE

Prepared by
C. C. CONGDON

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BIOLOGY DIVISION

A PARTICIPANT'S REPORT
ON THE
CRUSK FIRST SUMMER INSTITUTE*

Prepared by

C. C CONGDON

Biology Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee
and
Department of Zoology, University of Tennessee, Knoxville, Tennessee

MARCH 1972

*Held June 13-18, 1971, Ann Arbor, Michigan, Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan.

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A PARTICIPANT'S REPORT
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SUMMARY FOR BIOMEDICAL RESEARCH LEADERS

Organizational psychologists and other professionals in applied behavioral science have now created from their studies a remarkable body of data about organizational life, its dysfunction, and its potential for growth into a more effective kind of existence. This knowledge is not being utilized to achieve goals in biomedical research because leaders in this science are not aware of its existence. A question we should ask ourselves is: Can application of research results from organizational psychology increase achievements in biomedical research? The assumed answer in this Summary is "yes," but it is recommended to defenders of the status quo in leadership styles in biomedical research that the new ideas about organizational life be checked out for their relevance to Molecular Biology, National Cancer Goals, Radiation Biology, Environmental Mutagenesis, and the multitudes of subfields that make up biomedical research.

Biomedical researchers tend to be disdainful and condescending about the positions and status of management, administrators, or other leaders. This Summary is directed to four kinds of equally important individuals in leadership positions in biomedical science. One group is comprised of the directors of laboratories and others in policy making roles. The second group is often called middle management — the division, or branch or section, chiefs and their collections of team leaders of the direct bench workers. The third group of leaders, although the most disdainful of managers and administrators — sometimes even unable to contemplate these individuals in any but a negative way, consists of the individual bench workers or biomedical scientists with their research assistants and graduate students. The problems coming from the inadequate leadership abilities of the individual biomedical scientist directing his immediate helpers could be one of the greatest dysfunctional points in biomedical research. The fourth group of leaders in biomedical laboratories is composed of personnel in the research-services areas supplying operations and facilities that keep the bench worker going. This key group in biomedical research is also encouraged to check out the findings of the organizational psychologist.

At the 1971 CRUSK Summer Institute the central goals were to show process skills and knowledge used for changing dysfunctional organizational life, to give the models for knowledge utilization on planned change, to examine the roles of change agents, and to show the kinds of resources that organizational psychologists have at their disposal.

I

Planned change begins with a felt need. Someone has to feel that something is wrong in an organization before rational problem solving can begin. Even at this first stage in the process of change new leadership skills are necessary and these techniques, called process skills, must be learned and practiced by leaders at every level. Bill Morris and Floyd Mann, as well as Ron Lippitt and others at the Summer Institute, repeatedly demonstrated and taught these essential skills. Handling ones own feelings, listening, handling misunderstandings and conflict, small-group problem solving, and surfacing and solving problems between groups are the basic leadership skills needed by every level in biomedical research. Elegant write-ups of the process skills have been prepared by CRUSK staff members.

II

After realizing and accepting the felt need for dealing with problems in our research organizations, the next step is diagnosing the situation in a more formal way, usually with outside help by the expert in organizational psychology. Dave Bowers of CRUSK uses the diagnostic survey and interviewing. These procedures define the status of an organization at a particular point in time and, along with other measures of achievement, can be used to evaluate the results at intervals during the attempt to solve organizational pathology. Evaluation of results is essential and fundamental to organizational change efforts.

III

Following diagnosis, the goals of the change process must be set forth. Ron Lippitt uses the expression "images of potentiality." What are we actually capable of doing with our organizational life? Realistic goals must be identified.

IV

The fourth step is choosing means and recognizing alternatives. We need to know the models or strategies and tactics for bringing about planned change. At CRUSK these models have been elaborately conceptualized by Ron Havelock and his coworkers. These investigators even tell us the principles for building individualized and mixed strategies. We can create a change process to fit the unique structures we think exist in biomedical science.

V

At this point we plan what is to be actually undertaken. Having chosen the change strategy, a commitment is made to apply sustained interest and effort in a trial of the strategy.

VI

In practice, to undertake organizational development requires that one be sure he has the skills necessary to carry out and to evaluate the action. So preparing for action with skill development of the types mentioned earlier and with skills for evaluating results is essential.

VII

The single action try is the first of many actual examples of knowledge utilization that the scientist-leader might undertake. Change agents often advise that we not select the toughest problem facing us in our organizational life for the

first action try but choose something intermediate between the toughest and the easiest. The immediate goal at this stage is to learn the processes in planned change rather than solve all problems at once. The reward cycle in organizational development is lengthy and failures can occur for many reasons. Organizations may find that irrational problem solving is their only possible mode of existence as we so frequently see on the international scene.

VIII

Evaluation of the trial, and probably evaluation of each step in the change process as well, is a central CRUSK idea about the problem-solving approach to cope with a felt need (organizational dysfunction). It should be emphasized that CRUSK teaches the client-system (the organization) the problem-solving process. Successful teaching of this process should rank high in evaluating the results of planned change. Does the organization now know how to carry out rational problem solving?

IX

The outline used in this Summary comes from a chart by Lippitt and Mann on "Process of Change As Problem-Solving Process."

Many other points might be cited in this Summary for leaders in natural science. We ought to know Don Michael's conclusion that genuine long-range planning requires organizational development. Genuine planning brings out so much resistance that only an organization capable of rational problem-solving can cope with thinking from the future back to the present. Do any of us believe Dave Bowers' observation that living in a clearly sick organization for prolonged periods tends to make the individual himself disturbed? Are we willing to undertake human asset accounting in our organizational life?

The delivery of community medical care, which is evidently the application of biomedical science, has been a major CRUSK change-process project of which we should be aware. The project has particularly involved Mann, Morris, and others

of the CRUSK staff .

Do we know the person-blame versus system-blame concepts studied by Nate Caplan? Do we know about the trade-offs we use to avoid system-blame in biomedical research?

Biomedical research conferences and congresses are now so stereotyped that they are regularly criticized and ridiculed by their participants . Have we ever used the research utilization conference described by Lippitt and his colleagues? Do we really know anything about the team-building process that is alleged to be a goal in most biomedical research grants and contracts?

Advocacy, or building a power base for the deprived groups in biomedical research, includes the consumer of our efforts — the public and the supporting groups who earn their livings keeping laboratories in operation . Are we willing to surface and solve this problem? Can we listen to our own environment and use the feedback?

If those of us in biomedical research feel that our personal life-styles and those of our institutes are so special and unique that they defy the problem-solving process then there is still one last resort . Ron Havelock of CRUSK tells us how to create our own model for planned change .

It may be that organizational development and the new profession of change agent will be tried only in building new organizations or groups . At least we ought to consider organizational development for all new undertakings .

of the CRUX staff.

Do we know the person, place or system whose concept studied in
this paper? Do we know about the methods we use to avoid system
in biomedical research?

Biomedical research conferences and congresses are now so steeped in
they are regularly criticized and ridiculed by their participants. Have we ever
used the research utilization conference described by Light and his colleagues?
Do we really know anything about the team-building process that is alleged to be
a goal for most biomedical research groups and centers?

Advocacy or building a power base for the deprived group in important
research, includes the concern of our clients—the public and the support groups
who don't think things happen in a vacuum. Are we willing to change
our role in the system? Can we listen to our own environment and see the research?

If there are in biomedical research, do our personal theories and
those of our clients, are so special and unique that they defy the prevailing
process then there is still one last resort. For Hoyerack of CRUX, this is how to
create our own model for altered change.

It may be that organizational development and the new profession of change
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INTRODUCTION

ISR, in Ann Arbor, Michigan, is the University of Michigan's Institute for Social Research. Its Director, Angus Campbell, reports it to be the world's largest organization of social scientists, having evolved over a period of 25 years from an original small group of investigators in the U. S. Department of Agriculture. The founding group with the Agriculture Department had the task of keeping Secretary Henry Wallace personally informed of the views of farmers about governmental agriculture programs. Professionals in the science of planned change still look upon the county agent in farming as one of the most successful of all change agents.

CRUSK, an abbreviation meaning Center for Research on Utilization of Scientific Knowledge, is directed by Floyd Mann and is one of four centers that make up ISR. Its major function is study of ways to utilize scientific knowledge.

This goal, utilization of scientific knowledge, translates into the science of planned change in organizational life or research on organizational development (OD) for many of the staff at CRUSK. Most of CRUSK is oriented to action research. The staff studies organizational life, its dysfunction or pain, and its treatment. Beginning like field biologists, CRUSK surveys and interviews in an organization to get a feel for what its life is all about, elicits the inevitable organizational pain — at which point the social scientist is acting like a diagnostician, then proceeds to a change-agent or therapist role to prevent, cure, or show the leadership how to live with organizational disease.

The philosophy of the change agent, or OD man, at CRUSK differs vitally from the doctor-patient model in human medicine because CRUSK believes the change agent should teach the client how to eventually diagnose and treat his own organizational disease. Everyone in the organization becomes a change agent during an OD program.

CRUSK's first Summer Institute, June 13-18, 1971, at Ann Arbor, Michigan, has major importance for natural scientists, particularly biomedical scientists, because our own organizational life in research laboratories frequently shows extensive

organizational dysfunction, often carefully covered to keep up a false front of well-being.

Twenty-six participants and 12 staff members made up the five-day workshop held primarily in a hotel at the edge of the University campus and near the ISR building. Participants came from the fields of education, medicine, government, social science, biology, and industry to spend intense days and evenings, as well as late afternoons, at Floyd Mann's home, completely involved in discussion of models of knowledge utilization in the process of change.

Six members of the senior staff of CRUSK presented their models to serve as focal points in the discussion. The seating arrangements, format of the program, methods of evaluating the sessions, and the entire tone of participant involvement in the workshop were so different from the usual biomedical science research programs and so full of vitality that they deserve imitation. Evidently the social scientists at CRUSK are quite willing to experiment with meeting arrangements to gain maximum interaction of participants and staff. In fact, the five-day program itself was built on an interaction model which was followed with reasonable success throughout the sessions. Participants experimented with reading material for later group discussions but since most of us have learned to read in a certain amount of isolation this facet of the model diminished as time went on. Floyd Mann used the tape recorder, a major research tool in applied behavioral science research, to record all sessions.

Participants sat in a large circle of chairs and began the first session by interviewing each other as pairs of strangers; partners would later use this information to introduce each other to the group. Since the CRUSK Summer Institute staff participated at random in this first exercise, it was immediately clear that a different kind of meeting was under way. My partner turned out to be a research planner for a Model Cities Program in a metropolitan ghetto. He was at the "cutting edge" of planned change for ghetto life but was also keenly aware of the organizational pain in his group trying to create planned change. During the course of the Summer Institute, it appeared time and again that planned change in urban and rural poverty

situations is the crucial area of modern organizational life that the change agent has a mandatory charter to explore.

This very first exercise in the Institute, a process skill for getting acquainted with a stranger at a meeting, started another facet of organizational life for the 5-day period — making it a learning community. At the same session, Mann reviewed the larger objectives of the Summer Institute: to show process skills and knowledge used for change, to give the models for knowledge utilization, and to examine the roles of change agents. A further goal was to show participants the kinds of resources that are available for bringing about change.

After brief previews of the six senior CRUSK staff presentations to be given during the 5 days, William Morris of CRUSK, coordinator for the Summer Institute, explained the interaction model for participants and staff. Participants would read a working paper written by a staff member, prepare questions in small groups of about six participants each, report these to the whole Institute, discuss them with the senior staff member, develop further questions with the senior staff man, and continue the interaction by drawing implications about the work as well as its back-home relevance to the individual participant. Morris was change agent to the change agents at the Institute, keeping the inevitable day-to-day problems solved as they were diagnosed. The considerable paper work and many other housekeeping details of the 5-day period were handled by Revella Woodson of CRUSK.

If the formal program interaction model didn't meet the needs of a participant, he could continue the discussion, usually about back-home issues, with a senior staff man and others from CRUSK at a daily late afternoon session at Floyd Mann's home. Another fascinating technique for facilitating communication between participants and staff was the evening set aside for an "Interaction Fair" with the CRUSK Summer Institute staff. Each of the senior staff took over a room on the top floor of the ISR building, and Institute participants could wander from "booth to booth" and talk or listen to the dialogues as they desired.

During the first day, Floyd Mann introduced some process skills for attending meetings. He called these skills in small group interaction, particularly in listening more effectively. We watched role playing and, as triads, practiced handling misunderstandings and conflict, the skills for dealing with breakdowns in communication. The major technique here is to follow a rule first stated formally by Carl Rogers: "Each person can speak up for himself only after he has first restated the ideas and feelings of the previous speaker accurately — and to that speaker's satisfaction." The exercise is called the third-party method because the third person intervenes between the two having an argument when they stop listening to each other and invokes Carl Rogers' rule for each to follow. If this method shows genuine differences to be present, then the third party explores with the two participants value differences and other steps that are used in creative resolution of conflict. As Floyd Mann points out, listening can be dangerous. We might have to change our position.

Another skill for dealing with one's own problems in the man-to-man problem-solving process is to be able to stop the action, learn how to ask for help, and learn how to give and receive help. Feedback from the third party may be an important feature in handling misunderstandings and conflict. In problem-solving, it is often said that the problem statement usually needs more attention. As N.R.F. Maier was cited as saying, we are solution minded too quickly.

INTERACTION WITH DON MICHAEL

Donald N. Michael of CRUSK is concerned with the social psychology of planning. He means long-range planning (LRP) and has a special interest in the organizational resistances to long-range social planning.* Long-range to Michael is a 10- to 20-year perspective. To emphasize the need for LRP, he recommends reading the special report to Successo on "How to Survive on the Planet Earth" by Aurelio Peccei (Successo, February 1971). Peccei's statement of the problem

* Michael's working paper was "On the Social Psychology of Organizational Resistances to Long-Range Social Planning."

emphasizes Michael's role as a problem poser first, not a solution presenter. Although Michael talks of LRP for social problems, his views are easily translated into long-range planning for all kinds of organizational life, including that of biomedical research where the need for continued LRP along the lines that Michael proposes is fairly obvious.

Michael concludes from a two-year study of organizational resistance to social LRP that the resistance is beyond the scope of present organizational theory and change-agent practices. He thinks the findings represent a major professional challenge. In Michael's study, six criteria in LRP technology proposed by Melvin Webber are used to show the presence or absence of a long-range feature to the planning.* Little if any social planning that would meet the Webber criteria was found in the two-year study.

Philosophically, Michael believes LRP is both necessary and dangerous to a democracy. It needs to be brought into use with both sophistication and humanity. In his review of LRP in industry, he concludes that very little goes on in terms of Webber's criteria even though great lip-service is paid to LRP by industrial concerns and that almost no thinking from the future back to the present occurs. Michael found even less planning in governmental institutions than in private industry.

Michael has studied the planned-change literature for its implications on LRP. He finds that we don't know how to design organizations that operate effectively in the context of uncertainty associated with the long-range future. The resistances to long-range social planning come from the requirement to live openly with uncertainty, from the "turbulent environment" outside the control of an organization affected by the same environment, from the threat of changing organizational

* Melvin Webber's criteria for genuine long-range planning are 1) analysis leading to goals-setting in conjunction with 2) forecast of future setting (differentiating exogenous and endogenous factors) for which the working out of the plan over time is relevant and desirable; 3) evaluation of alternative plans; 4) tracing out the consequences for plan of pertinent circumstances outside the plan's direct operating environment; 5) laying out sequenced chains of actions that define the plan, and 6) evaluation of how the plan is working out on the basis of environmental feedback that permits recycling of the above steps.

boundaries by LRP, from the need to acquire new skills demanded by LRP, from the posture of acknowledging error that LRP requires when the feedback shows that the planning isn't going well and, finally, from the technological inadequacy of present LRP application.

Switching then to a potential solution-minded approach, Michael indicates that organizational development is a necessary precondition to long-range planning. The overwhelming resistances in organizations to genuine LRP as defined by Webber couldn't be handled in any other way than by a sustained OD program. Here too, Michael is pessimistic because the review of OD literature shows that the techniques currently available are inadequate for the severe task required in LRP.

Michael ends his working paper with suggestions about his own continuing search for surrogates to LRP and its attendant OD processes. From crises and disaster, he suggests we might learn a more error-acknowledging philosophy that supports long-range planning. Another approach might be to parcel out the planning process to corporations, think-tanks, special advocates, and citizen groups. Still another is to discover a new theory of organization design that automatically includes long-range planning.

The small groups prepared 19 questions to discuss with Michael after reading his working paper. Eighteen further implications and questions were developed during the ensuing hours of discussion and interaction with Michael.

Some highlights of the interaction with Michael brought out the absence of alternatives to Webber's criteria for LRP. This is a synopsis of the discussion: To motivate people for LRP, they need to be rewarded for goal setting; hence there is a need to begin with an OD program. Present corporate planners last about 2-1/2 years in their jobs. The Institute for Future Studies (Paul Behrens) is one of the strongest in the field of LRP. If future studies pose problems the organization wants to avoid, then the LRP study goes on the shelf. But if the LRP study shows the organization is already moving in the right direction, then it may begin to use the study. There is much scapegoating in avoiding LRP — corporations blame stockholders; the executive branch of government blames Congress. A "strong-man

approach" to leadership for LRP doesn't solve the problem either. Rewards are needed for problem-posing as well as problem-solving. Von Braun of NASA, for example, gave parties for the team that found its own errors. Environmental turbulence presents an opportunity to grow, but knowledge about the environment of an organization and knowledge about the future tend to protect the organization from the turbulence. Is the problem of LRP new? There has always been the need to socialize the next generation but now we have a Third World that is furious with the First World. We can't make the pie bigger because our space ship, the earth, is finite. Deprived people want "in," while the "have's" say there is no more. For planning, one needs to get to the people in key positions in the power structure. Road building has been one of the more elaborate planning efforts. Organizational development works from within and is accused of pouring oil on troubled waters. Former colleagues of the staff at CRUSK developed a conflictual OD approach — the use of student advocacy by Mark A. Chesler and John A. Lohman of the Educational-Change Team of The University of Michigan. The YMCA has done considerable LRP. Change agents in organizational development need to think more about LRP. LRP may be a way to get OD started. LRP is work. How can we take on LRP in an organization where the staff is already loaded?

This question led Floyd Mann and Bill Morris of CRUSK, with the help of two Summer Institute participants, to demonstrate the fishbowl exercise, another process skill. The four sat in the middle of the room and discussed a specific medical center with wide regional medical care tasks, while the rest of the Institute sat on the periphery and listened. The center has an OD program under way. After listening to the fishbowl, the observers commented, questioned, and further discussed what was said during the listening phase. As the discussion progressed, it was learned that the medical center found the organizational development program so much work that long-range planning is an overload at this time. When the center staff tried to look 10 years ahead, it worked out to a 2- to 3-year planning level, which Michael's study showed to be the usual perspective for organizations doing so-called long-range planning.

Floyd Mann suggests that an older, more secure, person in an organization might be needed for LRP. Michael closed the interaction with the question of how do we do both jobs of OD and LRP. What kind of a reward system is needed to keep people involved in both jobs?

In a private conversation with one of the CRUSK staff, I later heard the opinion that Michael is the only major long-range planner who is pessimistic about the future. The pessimistic position is easy to arrive at from both the resistance to LRP and the equally major resistance to OD that is quickly discovered by anyone who tries to promote organizational development. Counteracting this pessimism is Michael's recurring thought that maybe there is still something entirely new to be discovered about the operation of society and its organizations.

INTERACTION WITH DAVE BOWERS

David G. Bowers is with the Business and Industry Group at CRUSK. His working paper was "Perspectives in Organizational Development." To Bowers, OD is a subcategory of the broader topic of planned change. The latter topic varies from individual enrichment projects to broad societal change programs. He believes OD is coming to mean a relatively specific subpart of the whole array of things that make up planned change. "Organization" in OD implies organizational boundaries and "development" means to increase the potency in some way. Therefore, OD is increasing the ability of an organization to do its work.

If the purpose of OD is to increase work, then the measure of OD achievement is volume of work done in relation to some expected level, standard, or capacity.* Cost and quality are other basic dimensions in OD measurement. Although the "people-measures" in organizational life, such as apathy, hostility, alienation, and unhappiness, are secondary criteria they are acknowledged to be the aspects of organizational life that must first be changed by OD if development in the primary

* In his working paper, Bowers eliminates swaying of public opinion, community action programs, personal therapies, and marathon stranger groups as forms of OD.

criteria of organizational effectiveness is to be achieved. Some practitioners of the interpersonal approach to OD object to the notion of a rational and manageable organization, but this aversion needs to be overcome.

Diagnosis is emphasized as the first step in OD, but many change agents consider the diagnosis a "personal" rather than an "instrumented" venture. The second step in OD is therapy, and this too can be personal or instrumented. This leads to the problem of whether the change agent is an artist or a scientist. The complexities and shortcomings of the change agents role become very great when the various possibilities of personal versus instrumented diagnostic and therapeutic processes are conceptualized.

Some change agents enter a system as process observers while others have a complete plan in mind; one is the artist and the other more of a scientist. One will create teachable moments, while the other waits for them naturally to appear. The preplanner expects the task of change to take a longer period of time than the process observer and the preplanner does more to teach theory (cognitive input). The process observer or the artist uses more emotional or affective inputs in his interventions. It is believed that, on the whole, preplanners get more measurable change toward goals.

Bowers also sees the extensive complexities in the change agent's relationship to the organizational client. In one point of view, the organization or client system explains to the change agent what the lesion is and buys his help in treating it. In the other, the change agent makes his own diagnosis and plans the therapy of the client system. Bowers believes the evidence strongly favors the second approach.

Cognitive inputs are conceptualization or the theory of what is going on in the organization in relation to the change process. How does the change agent introduce these items into the client system? How does he deal with affect or feelings and with behavior in the client system? What order does he follow? Many began with affect, then behavior, followed by cognitive input. Changing feelings is one of the most complex and difficult tasks for the change agent in OD.

Sensitivity training, or T-grouping, is an affect-based method of change agency and OD. It begins with affect and proceeds to behavior and cognition. Many questions and problems are associated with this approach as with all others. The team-development laboratory is one of the more successful uses of the method. In looking at feelings in organizational life as a problem in clinical psychology, Bowers makes the distressing observation that living in a clearly sick organization for a prolonged period tends to make the individual himself disturbed.

In getting at behavior as the target for change, Bowers points out the neglect of learning theory in organizational development. The use of imitation or modeling to change behavior is also of interest to the OD specialist. Bowers completes his far-reaching perspectives in OD by considering 13 research proposals in the field.

After reading the perspectives, small groups of Summer Institute participants generated 28 questions for Bowers to consider. In the subsequent interaction, discussion, and elaboration of these, many additional ideas were brought out.

Learning theory does need more elaborate study for change-agent techniques. Survey-feedback is widely used by CRUSK. Questionnaires give diagnostic information about an organization that can be discussed with its management. It is not too expensive and can be applied to large organizations. It is a low-threat vehicle for starting OD.

Internal change agents have more detailed information about an organization but external change agents have more access to top management, more independence, and more immunity to threats and other forms of resistance to OD.

Sensitivity training is not central to OD, but it is not irrelevant either. A change agent should be eclectic. Problems and treatments make up a matrix where special treatments apply to special problems. The climate an organization creates is composed of a host of subclimates built around work groups.

The survey questionnaire, a diagnostic instrument of CRUSK, examines the leadership area, organizational climate, satisfaction of individuals, and processes within groups. So much data from CRUSK surveys is now available that national

norms and profiles of norms can be made. Measures of quality in patient care, research, education, and service can be achieved by using their correlates.

CRUSK believes an important concept is the social-psychology research model of an organization. In it, the basic building block is the group. Behavior in top management group settings has dimensions that involve task and people orientation. To get better output, the organization needs to create a climate in which lower-level groups can work. Thus, effective output can be gotten from the bottom echelons of the group. A change agent's role is to design getting things in the right place at the right level at the right time.

In Bowers' programs, the social-psychology of an organization is learned by a survey and a study of the prior established norms. After the survey Bowers interviews extensively in the organization. Another instrument, the survey of management beliefs, is used to see how authoritarian the leadership is. Repeated surveys are taken. Performance in the organization must be measured from its records. After the OD process starts, there is a long time lag for change to develop.

Human asset accounting is the attempt to measure the value of people in an organization. All organizations have a big investment in human assets that is ignored in ordinary accounting procedures.

Organizational development for major business concerns may in the long run be an important part of societal change, but to some participants at the 1971 CRUSK Summer Institute, like my earlier partner who works in the metropolitan ghetto, the process is much too slow. People dealing with change in the ghettos need action now and this undercurrent ran throughout the interactions for participants from community action programs. OD is too slow for many individuals, but its research findings and conceptualizations as outlined by Bowers are eventually indispensable for those who don't want to live with the status quo.

Back-home implications and relevance derive from the idea that diagnosis, or problem identification, precedes therapy or intervention for change in organizational life. A major point is the need to plan the method for measuring results of the change process before the process is initiated.

A CRUSK PROGRAM

Floyd Mann pointed out that existing knowledge banks from the many studies at ISR and CRUSK over a 20-year period are available for use. The data bank contains the studies on what distinguishes effective from ineffective organizations. Measures of performance are worked out first in deciding what effective and ineffective means in terms of the type of organization under study. One essential point from these studies is that a high correlation exists between organizational effectiveness and the sense of well-being of members of the organization. An important causal variable in organizational effectiveness is its leadership and, as Mann says, the change agent doesn't need to study the leader very long. He is best examined through the eyes of his subordinates who really study him.

After discussing background studies on effective and ineffective organizations, Mann's review turned to utilization of the knowledge for organizational development. He described one elaborate program in community hospitals which focused on how to make them more effective organizations.

Twelve community hospitals were selected for interviewing. The interviewers worked like cultural anthropologists. Questionnaires were then designed for 13 different groups in each hospital. Effectiveness of a community hospital was measured from many criteria of hospital activities. Four hospitals were selected for change experiments, but the investigators learned after 1-1/2 years that they had begun at the wrong place and decided the physicians were key links in the whole system of a community hospital. From community hospitals in one state, the program has been extended nationally to 40 hospitals of all kinds. Locating the key informal leaders among the medical staff was an important finding, and teaching them additional leadership skills became an important goal.

In a big system study such as this, a strategy of multiple entry was used so that many groups eventually were touched by the change process. Inside and outside teams, each a heterogeneous group, were built to develop the change program. In the course of this CRUSK effort, all models for planned change were used.

INTERACTION WITH NATE CAPLAN

Nathan Caplan deals with the Social Policy and Urban Community study area at CRUSK. He asks how problems like poverty, race, drugs, and ecology get defined at the national policy level. The way a problem is defined determines what is done about it. What determines the processes for a large-scale problem definitions?

In his working paper "The Impact of Social Research on Policy Decisions," Caplan notes that, in the United States, concern for the welfare of society has been greater in recent years than formerly. Caplan's position is close to that of Don Michael, who finds that social problems demand long-range planning. Caplan, however, feels that the punitive consequences of our ways of life require immediate radical intervention. We turn to the Federal government because it has the power and resources to act — even to the extent of a war-time footing if need be. Our Great Society programs have been largely failures. The deprived people are no longer quietly waiting for change.

Caplan sees his task as examining the role of the social scientist and social-science knowledge producer in creating and/or changing social policy, whether by deliberate effort to effect change or only through the indirect effect on policy resulting from society's response to his presence and activities in a narrower and more specific area.

Problem identification is already achieved before the social scientist gets involved. He waits in the wings until the problem is made known; yet, as shown by the social indicator movement, the future holds little chance of change unless he is involved.

Social scientists are usually called in as a last resort when the problems defy solution and after the politicians and technologists have failed. The identified social problems are often those that short-term political trade offs and technological fixes have worked over unsuccessfully. Public housing is an example of this. After the housing is built and fails to meet the needs, social scientists are called in to help find out why people don't want to live in the housing.

Once the problem is identified, the next step in policy decision is its definition. This key step determines the actions taken. If delinquency is defined as person-centered, then treatment aims at controlling the delinquent individual; if system-blame or external factors define it, then one tries to change the environment. Those involved in problem definition have a critical role because once a problem is officially defined as person- or system-blamable, from then on all officials follow the same line. Problems resist redefinition, and interventions can't be adequately evaluated if the original definition is in error.

Caplan sees problem definition as a key area for the involvement of the social scientist in the field of social pathology. The social scientist is involved in producing relevant knowledge for the policy-formulation process. Research of higher quality is needed rather than more studies on delinquency. Funds to support research for relevant knowledge are often quite meager. Sounder social policy will require multimillion-dollar investments in social science research.

Built-in biases to problem definition are a crucial problem for the social scientist. He tends to see behavior as person-centered rather than system-centered. In the same fashion, policy makers see problem behavior in terms of person-blame rather than system-blame explanations.

The person-blame tendency seems to result from our thinking, in our role of observer, that we would behave differently (better) in the same situation as the individual with the problem. Planners need to share and be immersed in the problem situations to make unbiased policy decisions.

After identification and definition, policy determination is considered by Caplan. He finds policy making requires causal research and explanations rather than descriptive research which counts the number of drug users or highway deaths instead of searching for the causes. Present policy makers have to find politically acceptable causes for the problem at hand; their main consideration is to avoid any system-blame for the social pathology.

The government may cooperate with a system-antagonistic group, providing the group accepts a person-blame rather than a system-blame action program. The black takeover of Ellis Island in New York Harbor is an example of this maneuvering.

Federal agencies devote much of their energy, and nearly all of their labeling, to avoid system-blame and to attach blame for all problems to the person. In fact, Caplan asks the question: Does a person-blame orientation hold society together?

After policy formulation, the social scientist needs to be involved in social intervention, concerns of the target population, and evaluation of the policy decisions as the further steps in the social policy formulation process.

As a final point, Caplan finds that social scientists, even when they are highly qualified researchers, have little role in decision-making. A CRUSK study on highway safety found a bias that excluded social scientists from decision-making.

Caplan concludes that social policy and social science knowledge create an enormous problem for matching knowledge and action, and that social pathology makes this matching urgent. He doesn't insist, however, that scientific information forms the premises for all policy conclusions. Models for knowledge utilization are too narrow to be applied at a national level for the total social science community and the policy makers. He thinks in terms of knowledge environments with producers and consumers interfaced to achieve understanding in policy making.

The small groups reading Caplan's working paper arrived at 11 questions for discussion and interaction. His person-blame versus system-blame discussion stirred the participants in a disconcerting way, perhaps because of the person-blame way of life that most of us, not only the social scientists, lead.

Did Caplan intend the working paper to have a person-blame tone? During the last 30 years, affect and emotion of man was held to be 80 percent negative. Psychologists have a "bad beast" image of man. The science of mankind now begins to see man as man — not the image of man as a cripple.

Should we reinforce positive behavior, not search out negative behavior? Caplan's bias has been large-scale social intervention programs that failed. He thinks we were incorrect in our assumptions about what the problems were.

Why don't social scientists get involved? The norm is not to get involved, otherwise it is not science. Scientists study bad behavior but don't get involved in it. They write up the results and leave action out. Action involves other people, not us. The other people are the government, not social scientists.

At this point, the discussion and interaction turned on the need for scientists to play two roles: the researcher and the activist or practitioner. These represent two distinct knowledge areas or two knowledge communities. At this point, Ron Lippitt of CRUSK remarked on three common assumptions of the researcher: That there is magic acceptance of expertness, that expertness automatically gets knowledge utilized, and that the scientific method is an appropriate model for a new role.

Caplan continued his comments on the question of the researcher getting involved. One can't be an activist if he acts like a scientist. Action orientation like that at CRUSK is far more dangerous for the scientist. The scientist thinks that action without research is absolutely forbidden. How can a social scientist become a legitimate activist and take relevant action on social policy? About five universities are trying to do this. The social scientist is caught up in an emerging radical humanism. Who is using what knowledge for what ends? Knowledge producers and knowledge users need to experience each other's thing.

Ron Lippitt interjected that the scientist-turned-change-agent must keep two hats and be aware of two roles, one with an inquiry posture and the other with an action posture.

Turning to the person-blame versus system-blame problem in society, Caplan described some results of experiments in the psychology laboratory on this issue. In these experiments, subjects play a game that is programmed in the form of a winner and a loser, with other subjects watching the game as observers. How do players and observers locate blame for losing? A losing player inside the system

blames the system which is, in fact, the lesson in this experiment. An observer outside the system blames the losing player for losing. After the game, an exceptional winner becomes a great person-blamer. Losers learn the most; winners learn very little. Both insiders and outsiders are needed to see a system.

The interaction with Caplan kept returning to the problem of involvement and action by the social scientist. Caplan thinks there is a need for both advocacy research and study of the researcher as advocate. The problem is to get funded for large experiments. Poverty is the major cause of death in New York City but lack of interest and funds prevent research on this. Support on the scale of the negative income-tax studies in New Jersey and Vermont is needed.

In the discussion, Ron Lippitt pointed to the analysis- or diagnosis-and-action linkage as a problem for change agents. Some of the 75 graduate students in training as change agents say they can't work with organizations whose goals they don't accept. Lippitt sees the head commitment versus the heart commitment of the social scientist as selling an answer rather than selling the problem-solving process. What are the payoffs each way? In selling an answer, the change agent-social scientist puts himself in a dependency relationship to the client—he is always needed. In selling the problem-solving process, the change agent teaches the organization how to solve its own problems and is not tied in a dependency relation to the organization for the rest of his life.

This point of view expressed by Lippitt, concerning the change agent's role in teaching problem-solving processes to the client, came up again and again as a CRUSK staff position on the role of the change agent. Both Floyd Mann and Dave Bowers expressed it repeatedly in various interactions with participants at the Summer Institute.

Caplan and Lippitt discussed how target groups, such as those involved in social pathology issues, defend themselves against the essentially hostile outside environment that wants them to go away and not be a problem. Some information is coming from intentional communities. Communal groups have consulted with CRUSK staff about their own problems. Can "target populations" themselves do

the research? Some groups are tired of being studied and insist on reviewing research proposals before they are undertaken. If we treat the problem neighborhood as a zoo, we lose valuable knowledge. Research is done on neighborhoods and the populace investigated never sees the results. Kurt Lewin was cited as saying that action research is basic research and the contract is a two-way deal.

In this interaction with Caplan and Lippitt, the back-home relevance was probably greatest for participants actually involved in community action programs where social pathology is the issue. For others, the problem of involvement and action versus research-study-meeting attendance was most poignant.

AN INTERACTION WITH RON LIPPITT

Ronald O. Lippitt is primarily concerned with the Socialization and Education Study area on CRUSK's staff. He told the participants that in looking at a community, it is usually found that the peer system is not too coherent so that one must create a system to provide a client with whom the change agent can work. Instead of using the terms goal or objective for what one is after, Lippitt suggests use of the more concrete expression "statement of desired outcome."

In a chart giving a resource utilization model for planned change efforts, Lippitt lists the following steps: (1) Identify a concern or a need for improvement. (2) Identify images of potentiality or select concrete goals or desired outcomes for change. On this point, Lippitt stresses the need for taking positive posture on what is good about an organization rather than a posture of pain. He says that stressing the pain focus becomes difficult to deal with later. It leads to self-flagellation, system-blame, and progressive depression. Perhaps this is Lippitt's way of saying that error-embracing can be carried too far, to a point where it becomes self-defeating. Other steps in the process are: (3) Diagnose the potential change situation, and the resistance to or readiness for change, etc. (4) Formulate action alternatives. Lippitt says this prevents too early closure of options or stopping with the first suggested solution for the identified concern. (5) Pretest selected alternatives. (6) Select the preferred action commitment. (7) Design, implement,

and evaluate action. (8) Disseminate and adapt tested alternatives and revised goals.

At each of the eight steps listed in the model, which incidentally are basically a sequential process, the client system and the change agent can draw on resources external to the client system, or on internal resources within the system. In drawing on external and internal resources, the knowledge must be retrieved before implications are derived from it. New scientific knowledge may result from the total process, as well as new knowledge about the client-system setting. The model obviously has many uses outside of Lippitt's immediate area of study. With this theoretical background for participants, Lippitt then turned to "The Socialization Community," one of his working papers for the Summer Institute.

In a community, a medley of voices about educating youth gives rise to the curse "a plague on all your houses." The medley of voices gives freedom for each voice to do as it pleases, generates the computer response of trying to please everybody, and induces anxiety. There's nothing wrong with the values of our square culture, only that no one lives them.

The socialization community is a view of our community life that is directed toward rearing the young and giving them its values and commitments; in other words, socializing them. The linkages between groups that carry on the socializing process in both the local and national communities are not coherent. Lippitt examines the structure and process of the linkages and at the same time, in very fascinating ways that utilize his previously described model, he shows how to create a coherent client system that a change agent can work with. He shows how to bring about team-building in a community. The techniques are presumably widely applicable to many kinds of organizational life.

Ten key clusters, or groups of people, make up the socialization community. Among the ten are the schools, the parents, and the churches. These clusters have a delegated interest in and responsibility for influencing the values, knowledge, and behavior of the young.

The structure or dimensions of the community can be viewed in several different ways in addition to the clusters alone. For example, (1) each cluster has a vertical system similar to that of the schools — from laymen on the school board to those who work directly with the young; (2) there is a horizontal communication and collaboration between clusters; (3) each cluster is made up of professionals, paraprofessionals, and volunteers; and (4) the clusters operate formally and informally in their socialization efforts.

The recipient of all this effort is the child, who has a life space receiving the inputs of socialization, and who must cope with the inputs. There is truly a medley of voices at work.

The problems and issues in the operation of the socialization community, exploration about consensus on desired outcomes in the socialization process, the choice of appropriate means of socialization, and the problems and issues for the recipient or "socializee" are all major topics to be taken up in the study of the socialization community.

What are the needed developments in the community and the directions for research on the process? Singled out for special attention and experiment are communication among the ten clusters of socializers and team-building within and among the clusters.

In one experiment, without sanction or invitation of the community, Lippitt's approach was to begin interviewing individuals in the various clusters to locate in each the individual who knew most about what was going on in that group. These individuals then became the group of key informants. They functioned as an informal ad hoc steering group and their main initial role was to name the influential policy makers in each cluster.

This new group of about 40 people influential in the socialization process was convened for a fact-sharing session on the process in their community. There was also extensive interviewing of these influentials to obtain a statement of the values and behavior patterns they desired to inculcate in the young, especially with regard to patterns of communication, cooperation, and competition. The policy makers nominated the key administrators in each of their clusters.

The key administrators were brought in to nominate the key direct youth workers in each cluster, and the youth workers named the key youths. With these key individuals and the key informants, the process of team-building began. Vertical meetings of youth, youth workers, administrators, policy makers, and key informants were held to collect data on the socialization process.

Many charts of data were obtained to feed back to the various groups, but it was found that role playing of dramatized episodes showed the data much more effectively. After this stage, task forces were set up on a horizontal basis so that the policy makers could work on values in the educational program; administrators worked on leadership processes for community leaders; direct youth workers had a task force on exchange of practices for direct workers and came up with a notebook on techniques for dealing with problems.

At the youth level, half of those chosen for the task force were pro-establishment and half anti-establishment. One-third was female and two-thirds were male. All were in the 13- to 18-year age range. Blacks and the poor were also represented. The young people decided to show the racism of both adults and children by a role-playing program of parent-teacher education. When children issued invitations to evening education sessions for adults, the adults always came. There were also task forces for children on probation and for in-betweeners in the vertical teams.

Lippitt then pointed to the difficult task of getting the enormous amount of knowledge produced by this study utilized and disseminated. No money was available for this. Some of the task force data was published privately but most of it was turned down for publication.

The report of the study by Lippitt leaves the impression of a breathtaking adventure into an extremely complex maze of organizational life using the principles and style of a CRUSK intervention. Formal evaluation of this kind of an approach is also a feature of the resource utilization model for planned change efforts.

To the participants at the CRUSK Summer Institute the implications and back-home relevance of the work reported by Lippitt may be as varied as the backgrounds of the 28 participants and CRUSK staff. But one thing became very clear during the five-day Institute. As shown by the project just described, by the one on community hospitals and medical care, by the business and industry interventions, and by one yet to be mentioned on ghettos in urban areas, it is clear that CRUSK has moved through its own development into progressively more complex undertakings in studying the processes of planned change in our organizational life.

To one whose back-home relevance is biomedical research and the world of research in natural sciences, the evidence I can personally collect is that this whole development of the social scientists in planned change and organizational development is passing us by. We think our expertness in natural science is so great that it automatically extends to our organizational life. The only shortcoming I see to our national cancer goal is that we may fail to include organizational development in building the institutions to pursue the statement of the desired outcome.

AN INTERACTION WITH FLOYD MANN

By this time in the progress of the Summer Institute, a great deal of information about knowledge utilization had been displayed and discussed. Floyd C. Mann, Director of CRUSK and specialist in Health and Medical Sciences Knowledge Utilization, now turned to the issue of "Applied Social Science/Change Skills." In his working draft, he made a detailed truly encyclopedic outline consisting of 23 pages listing every process skill of the change agent he could identify. Process skills are vital items among the technical capabilities of the change agent. However, some change agents reassure us that it isn't essential to know every conceivable skill. A few, well-handled, may be enough.

Change agents are highly competent knowledge-utilization people. Their process skills differ from such skills as those used in clinical work. A change agent needs to diagnose, intervene, evaluate, and manage change activities. Individuals

good at research are not necessarily good change agents and a good change agent may not want to conceptualize what he does. When a change agent brings in knowledge, knowledge is power and knowledge is upsetting.

Except for team training in football and at the surgical table, in general the skills for working as a team are not taught and get no rewards. However, in our present world we need to build teams as never before and, in Mann's view, using teams of change agents is very important as a team can learn many skills and their total resources can often solve problems beyond the capacity of any single individual. Field training is absolutely essential for a change agent in learning his skills.

Mann listed the skills required for a variety of levels in the functioning of a system. He began with the behavior and well-being of the change agent himself, then proceeded to the skills at person-to-person, small group, intergroup, social organization, interorganization, institutional, and total-society levels. He listed process-type intervention skills first, and then those concerned with monitoring, measuring, or evaluating at each level. Learning how to teach these skills will be a major task in the Seventies.

For the change agent, the skills for understanding himself are essential in order to use himself as an instrument of change. He must be able to work under very trying circumstances. From a very long list, Mann cited the skills for the change agent's own problem-solving and coping problems. In personality and behavior, the skills of patience and acceptance of others are important, as are giving trust and being trustworthy. The change agent needs the ability to work with a long reward cycle.

The interpersonal and man-to-man skills include speaking, organizing ideas, and clarifying and expressing ideas and feelings; also the more complex interpersonal communication processes of influencing and persuading are needed. Drama-school skills (especially of nonverbal nature) may be important in presenting ideas, and learning theorists may have a lot to offer.

T-group leadership ability and sensitivity training are important at the small group level, and group decision-making exercises are essential tools. Floyd Mann and Bill Morris have prepared a questionnaire, "Looking at a Problem-Solving Discussion," that collects much of the research on problem-solving in a single instrument. Life-planning exercises were also mentioned — for example, "here you are now, what do you want in your obituary?"

Also necessary are intergroup functioning skills such as those used in problem surfacing. These include the merger and fishbowl exercises and how to handle negative feedback. Process-advocate skills are an entirely different approach to organizational development. In introducing a change agent into a system, Floyd Mann begins man-to-man, then proceeds to the small group before involving larger components of the system. Bill Morris, also of CRUSK, prefers to start with small groups and work in both directions.

The interaction with Mann, who during the Summer Institute brought up repeatedly the need to learn process skills, made it clear that anyone who wishes to bring about planned change needs to learn the skills that go with the new profession of change agency. This was the major point of back-home relevance for everyone.

AN AFTERNOON WITH RON LIPPITT

This session was a Research Utilization Conference which followed the model on knowledge utilization given in an earlier interaction with Lippitt and which was to be applied to the learning week at CRUSK. Lippitt's working paper, "The Research Utilization Conference: An Illustrative Model," reported a microdemonstration of the procedures of a research utilization problem-solving process that he held with the U.S. Office of Education.

For the exercise, the Institute participants broke up initially into pairs and trios to answer the general question: what pieces of the knowledge-utilization process had been learned by participants during the week. Each group addressed itself to the question: What have we learned about knowledge utilization that we think is important. Our group came up with eight items, two of which we added to the

contributions of the other Institute participants .

The next step in the exercise was to list the implications, for direction of effort in our own operating roles back home, of items of importance selected from the total list provided by all the pairs and trios . I listed six of the items learned: (1) Process skills are essential for knowledge utilization . (2) Both inside and outside change agents are essential . (3) Long-range planning is essential . (4) Long-range planning requires a future view and organizational development . (5) The basis for change is the image of potentiality . (6) The utility of future studies gives new options and moral obligations, and abolishes stereotype barriers .

We then took up potentialities for the future and projected two years ahead for goal images . What were the implications from the learning process of the past week? I wrote: (1) In long-range planning, we need organizational development, and (2) I ought to learn process skills . At this point Lippitt's comments were: Stick to the plan to give it a change — the plan forces you to set goals and measure error; the change agent needs to prepare the client for the time required for results, and the change agent should build in a frustration factor as well as spend time identifying expectations .

The fourth step in the learning exercise was for each of us to select one learning with very high personal back-home relevance, and brainstorm it for any actions we could think of to go in the chosen direction . Mine was to learn process skills . I proceeded to brainstorm it . Lippitt admonished us to keep going even after we thought we were through .

Step five in the research utilization conference was to ask: What are the criteria for start-up? Then a force-field analysis, following Kurt Lewin's analysis of quasistationary equilibrium, can be done on the selected goal . In this technique, factors that support the goal are listed opposite those factors that resist achieving the goal . The list is subdivided into factors within me, factors relating to me and others, and situational factors that support and oppose the goal . Lewin's ways of effecting change indicated that one gets to the goal best by first removing resistance factors wherever possible . One can also strengthen driving forces, add new

forces, or sometimes change the direction of a negative force to a positive one. Many groups understand restraining forces better than positive ones.

An added step was to select a target for change from the force-field study and mobilize resources for action. What skills do I need to begin? Sometimes, Lippitt added, there is an intense dialogue about alternative value assumptions. Value questions have to be faced. Is a change agent manipulative? One can choose sides and have a value confrontation. At this stage utilization conference participants also begin making appointments back home.

I listed six of the stated learnings-of-the-week from the pairs and trios at the research utilization conference. The others are worth seeing since they represent a very brief summary by participants and staff of important segments of the week.

1. In conferences on utilization of scientific knowledge, there tends to be a resistance to the process by which information about knowledge utilization is conveyed.
2. Organizational development requires establishment of a norm to encourage continuous identification and understanding of error. This is painful but results in learning and, therefore, adaptation.
3. Knowledge utilization has to be systematic. One must understand the process but be willing to start from where the client is. There is need for a new profession of practitioners of knowledge utilization — generalists as opposed to specialists.
4. Knowledge utilization is a continuing process. There is no finite end.
5. The definition of the problem determines the solution alternatives.
6. There is need for a system or organization to link the knowledge to the user.
7. The change agent team needs a multiplicity of skills and approaches.
8. "Good" long-range planning surfaces uncertainty. Long-range planning that does not surface uncertainty isn't "good."

9. In evaluating the impact of his intervention, the change agent needs to allow for a time lag and to have specified the change criteria .
10. Better problem-solving occurs when time is spent defining the problem adequately and considering alternatives .

ANGUS CAMPBELL, DIRECTOR OF ISR

Another kind of interaction for participants at the CRUSK Summer Institute was an evening with Angus Campbell who reviewed the history of ISR and then talked at some length about "Using Social Measures to Monitor a Nation's Quality of Life ."

He mentioned the increasing controversy over the quality of life that has appeared in the last five years . We have always talked in terms of progress which meant something bigger and better and was measured by money — money equals progress . The GNP turns out not to be a totally satisfactory measure of national well-being . There is a paradox of increasing affluence with increasing crime, drug use, and other forms of social pathology . The contradictions are oppressive . That wealth equals health is no longer accepted .

Some attempts have been made to get at the problem of life's quality . Senator Mondale's work, a Council of Social Advisors, and Nixon's National Goals Commission (which published and went out of business) are examples of prior attempts that show concern for the quality of life . Now the National Science Foundation is considering a grant to ISR to become a social observatory .

Social indicators, like economic indicators but more loosely, are any measure having some normative aspect in relation to some national goal . Crime is a social indicator and low crime is a national goal . A distinction is made between objective and subjective facts . Objective facts are systematic presentations on morbidity and number of hospital beds, and data on employment and population movements . There is not much argument about these objective facts .

Dr. Campbell finds the subjective facts more interesting. The quality of life is the experience of life in all its aspects including the experiences of living in a metropolitan area or of being a minority person in a ghetto. We can't be satisfied with knowing only the number of hospital beds or other objective facts.

But the problem of subjective facts is more difficult. What should we measure? — that which has the greatest relevance to social policy. How should we measure? How do we translate what is measured into policy and what kinds of measures are of greatest value for future policy? If we anticipate the requirements of 5 to 10 years from now and hope to provide useful responses, we need to know how society is changing.

Three kinds of social indicators — descriptive, predictive, and evaluative — are needed. These apply to organizations, communities, and the nation.

Examples of descriptive indicators are the work of ISR on public understanding of violence, and the question of time budgeting — how people use their time. Meaningful implications can ensue. In the Soviet Union, a time-use study on waiting for transportation showed that time was wasted and this information was fed back to the transportation system for action.

Evaluative indicators were used in E Bond sales by the Treasury Department. What kinds of sales slogans motivated people to buy bonds? An employment index is an evaluation of the approach to a full employment goal. A crime index is an evaluative one.

For predictive indicators, Campbell mentioned one currently in use. As measured by the Survey Research Center of ISR, buying intentions show that consumer attitudes change a few months before actual buying changes.

In discussing how to measure social indicators, Campbell said that the objective facts mentioned earlier came from the institutional system of government that keeps records on objective data. For the subjective aspects of life, Campbell contemplates an observational study. A person can place himself in a position to see how people act, like the reporter who placed himself at the margin of a black and white community and then talked with a bartender who described a number of

black-white interactions. Campbell suggested that a specially trained observer would measure interactions in more depth than that achieved by a reporter interviewing a bartender.

Problems of translating social data into social policy and the implications of social data for organizational change arise when the data are introduced into the federal scene. Campbell cited Richard Rose, who questioned when policy indicators are used and when rejected in The Market for Social Indicators. According to Rose, they are used when utility is greater than cost. Cost of obtaining indicators; cost of taking action; and cost to the values of the policy maker, with which they may be at variance, all must be considered. Seven conceptual principles were given. (1) The more immediate and pressing the problem, the more receptive policy makers are to new information. They are prisoners of "first things first." (2) The more distant in time the use of new data, the less value it has to policy makers. (3) The greater the confrontation with the status quo, the less the value to the policy maker. (4) The more reliable the information, the easier it is for the policy maker to accept it. (5) The less conflict about the data, the easier the data are to use. Social science data are rarely the only facts entering into a decision. (6) The greater the change implied, the less the acceptance of the data. (7) The greater the conflict in values with those of the policy maker, the less acceptable the new data will be.

Finally, Angus Campbell took up the status of social science in relation to the Federal Government. President Johnson put pressure on the National Institutes of Health and the National Science Foundation to show results from the investment in science. Pressure is put on social science too because the pressure of social problems is now on the President and the Congress. How do we demonstrate that our social science research is valuable? By responding that all research and all innovation is a gamble, with the only immediate and sure reward a useful bank of statistical data, but with a certainty that some proportion of it will eventually pay off more directly.

During 30 years of empirical social science, there has come greater public understanding and a willingness to face issues on the basis of revealed fact rather than on prejudices. Social scientists have contributed to a change in racial values through publication and teaching of their findings. Following the change from a concept of inferiority to that of an environmental effect, changes in attitude toward black people among high school and college graduates now varies positively with the younger age group versus the negative attitudes of older groups. Both attitudes and behavior are now different and Angus Campbell believes expressed attitudes and behavior do correlate.

The problem of the value of social-science data takes one into evaluative research, such as studies of the Head Start Program. What are the consequences of participation or nonparticipation in Head Start? Can we evaluate broader measures of well-being such as job satisfaction? Can a continuing program of such measurements be developed? The implications for society of these questions and remarks were discussed by Campbell, the participants, and the CRUSK staff. How do you decide what to measure that will be useful in recognizing the problems that need change? The Federal Government decides what the problems are. Campbell said that ISR does do studies to justify its own existence, but also measures quality of life as defined by researchers at ISR. There is urgent need for social scientists to provide data that can be translated into action. This is the whole mission of ISR — something can be done within the system; few people have gone into a counter-culture.

Experience of life is also an experience of beauty. How would one measure experience of beauty? Will the experience of life be only urban? What about renewable natural resources? Will rural areas be included? The primary focus of the questionnaire now going to press is urban. Urban people want 70 million acres of wilderness but will never use it. Where does one intervene in the Federal Government to get change when the federal level is not a good place to intervene? How do we know when we have data that will be of help? The negative income-tax experiment data from New Jersey is being fed into a congressional committee. Who is the translator or communicator of data? Some say it should be a social scientist.

Researchers who became translators quit research. Suppose it is shown that a greater than incremental change is needed. Are there studies under way about this? Subjective facts mean values. Does ISR have a set of values? There is no written credo. Variation in personal values of the ISR staff is pretty wide. The human side is here in contrast to in an industry. We shouldn't get overblown ideas about the value of research.

What kind of organizational development and long-range planning goes on at the University of Michigan? The University doesn't face up to these problems. What does ISR do about organizational development and long-range planning? ISR doesn't have a good record here for it meets the strains as they appear. CRUSK and other centers at ISR developed in this way, but they are now reviewing their goals and their relation to the University. What is the relation of ISR, which has a focal point in science, to the rest of social science? ISR is the largest social science research institute in the world, and has stayed healthy over a period of time, yet it is not setting an example of long-range planning for the same reasons that others are not. We suboptimize because we can't optimize. What about research for people who don't have the money to pay for social science research? This requires social science statesmanship.

INTERACTION WITH RON HAVELOCK

Ronald G. Havelock of CRUSK dealt with "Alternative Models of Change and Knowledge Utilization" and "Roles in the Knowledge Utilization Process." His background for the first study was an extended review of the planned-change literature from which he derived an overview of models used for change. The second topic reviewed the roles that the change agent himself can follow: solution giver, catalyst, process helper-consultant, knowledge linker. These roles, incidentally, show the varied postures that many senior people in natural science take when they are administrators, consultants, and advisors.

Havelock is also concerned at CRUSK with Knowledge-Utilization Conception and Measurement. His working papers were "Innovations in Education Strategies and Tactics" and "Resource User Linkage and Social System Problem Solving." To a participant, Havelock's goal seemed to be to conceptualize, in the form of models, everything going on at CRUSK and elsewhere on planned change and change agency. The library research work in this area at CRUSK appeared under the title Planning for Innovation by Havelock and collaborators.

Havelock does not see innovation as inherently valuable. If the commitment is to innovation as an end in itself, then the situation is better described as faddism. His conception of planned innovation is based on realistic needs, systematic planning, development, and evaluation.

From a study of the planned change literature, Havelock found three strategies or models, each associated with a set of tactics or action steps. Havelock also found that there are criteria or principles the change agent can use to select or invent his own strategy and tactics. The third point in his working paper indicated that in a sphere such as educational innovation, as well as in others, certain considerations are always important and always need to be accounted for. His fourth point called for a national focus on planned innovation.

The three major strategies for change are Problem Solving (P-S); Social Interaction (S-I); and Research, Development, and Diffusion (RD&D). Some other types, called conflict strategies, are also now being discussed. These include conflict and crises models, training for negotiation, and crisis intervention.

In the P-S strategy, planned innovation or change is a part of the problem-solving process that goes on within the user or client. The approach is characterized by user need, which becomes the problem statement, and by diagnosis followed by a search for and retrieval of ideas and information to formulate or select the innovation. Finally, the user or client has to deal with adapting, trying out, and evaluating the innovation for its effectiveness in satisfying the original need. An outside change agent can help with any or all of these tasks in a nondirective way.

Some strategies derived from the P-S orientation are: system self-renewal, action research, collaborative-action inquiry, the human relations laboratory, consultation, and sharing of practice innovations. Particular tactics are not necessarily associated with a particular strategy or model of change, but P-S change agents often use T-groups and sensitivity training, reflection (Rogerian), authentic feedback, role playing, group observation and process analysis, the derivation conference, survey feedback, brainstorming, and synectics.

"Social interaction" aptly describes the process Havelock sees in the strategy. Innovations diffuse through a social system in the S-I orientation. A fixed innovation, such as a new curriculum package, a new seed, a new drug, or a fertilizer, diffuses through the systems that utilize these kinds of innovations. In S-I strategy, the user or adopter belongs to a network of social relations that influence his behavior. His position in the network predicts his rate of acceptance of new ideas. Informal personal contact is a vital part of S-I. Group membership and reference group identifications are also major predictors of behavior. Diffusion of the innovation follows a predictable S-curve pattern. The bulk of evidence on S-I strategy comes from rural sociology.

Derived S-I strategies include natural diffusion, natural communication, network utilization, network building, and multiple media approaches. Tactics of S-I orientation are mass-media dissemination, the county agent, the salesman, prestige suggestion, and opinion-leadership utilization.

The Research, Development, and Diffusion model of planned change or innovation begins with basic research, is followed by applied research, the development and testing of prototypes, mass production and packaging, and planned mass-dissemination activities; and finally reaches the user. The derived strategies are development of high-performance products, information-system building, engineering-diffusion projects and programs, experimental social innovation, administered legislated change, fait accompli, and systems-analysis approaches to innovation.

Tactics in RD&D are those of research itself. For development and diffusion of the RD&D model, experimental demonstration; research evaluation of adoption success and failure; user-need surveys; and successive approximation; translation;

and packaging for diffusion are a few of the tactics .

In looking at these three major strategies, Havelock found them to be different but equally important aspects of the total process of planned innovation . He showed that the linkages among them are a unifying concept .

After reading Havelock's material, participants generated 10 questions in the small group discussions of the work .

A person with influence is an example of the Social Interaction strategy . Doctors with sociometric status act along the lines of this model . We see S-I in the concepts of formal and informal organizations . The models conceptualize what we see empirically . We then use the models for planned change . It is also true that social processes may conflict with planned change experts . In comparison with the other two, the S-I model is a more natural process and by studying it we learn where to act . The P-S and RD&D models are prescriptive actions .

At this point, Floyd Mann injected that CRUSK is locked into rational models because it has a body of knowledge to use in a rational way . His position is to work within the establishment . He uses S-I to find the key group, then acts on its members with the P-S strategy . Some of the models are locked into organization units with bureaucratic characteristics . CRUSK has now gone beyond OD models into planned change in politics and labor organizations .

What Warrington Parker (also of CRUSK) and Mann are doing in cities is a mix of several strategies . The present meeting is not a seminar about effecting social change by use of whatever tactics are available; it is a seminar about utilization of knowledge . In the city context, one does everything possible with rational P-S models . At the same time, there is a need to develop a political ability in deprived groups for bringing problems to the surface . Mann and Parker still work within the power structure, and Parker pointed out that there have been changes in deprived groups from 1966 to the present, and that "advocacy" is a white (and advantaged) term, not one used by the deprived . Crisis mediators and interveners build up the power base of the weaker group so it can negotiate .

Ron Lippitt then commented that we need to know what kind of knowledge is required for knowledge utilization in groups with a weak power base. Futurists are needed, but are missing in dealing with deprived groups. Many alternative models of intervention exist, and these too need to be examined for fresh applicability to the problem.

We need resource pools before resource utilization. Society assumes a certain kind of self-image. In Michael's models, LRP goals are set. Havelock's models don't set goals but, as he pointed out, his models show how to set goals. Frustration doesn't automatically lead to the truth or a correct solution, so we still need the strategies of planned innovation.

Where does the advocacy-model of Chesler fit in? Havelock thinks this is a problem-solving model that takes a particular subgroup in the society as a target. Lippitt added that when there is disequilibrium between parts of the power base, one part of the system needs advocacy to get support and consultation so it can achieve a significant power base. This avoids the irrational problem-solving process and changes the deprived group's posture. It is a methodical advocacy position, not a neutral posture, yet it does not choose sides.

In this interaction, the participants and staff kept trying to get more and more involved in the crisis and conflict models of change.

Havelock put the ideas very nicely. Much more problem-solving goes on in advocacy than is admitted. The change agent identifies with the under-represented groups and equalizes balance in the system so P-S can go on. The rhetoric sounds more disturbing than it really is. Advocacy is extremely healthy for the sake of society. It is extremely important to get the feelings of oppressed persons into the system so their feelings can be considered. Reality is redefined and elements that have been defined out of society are reintroduced.

Should knowledge "plants" like CRUSK be outside of universities? The university is protective, but there are nonuniversity models. Havelock pointed to the Nader "plant" as one that plays an extremely positive role in translating user needs and that can put a lot of extremely accurate pressure on the Federal Government and the power elite.

However, though the problems of long-range goals and objectivity are present, there is a place for both the university and for Nader. Havelock has a high regard for Nader and what he has done. The little funds that come from the power elite are well spent. Consumers Union is an applied research center which deals in images of change that could not otherwise be emphasized. Focusing is on the negative rather than the positive.

Lippitt introduced the idea of a temporary system — RD&D by matrix — in which the kind of a team needed for a particular problem is assembled. The team can bring together different resources — university people, regional labs, etc. One can create a temporary system to cope with a contemporary problem. In one 500-man plant, a matrix chart of skills vis-à-vis personnel is maintained so that teams can be selected according to skills.

What are CRUSK's values? A value-pure system assumes indifference. CRUSK is action-oriented and maybe research tension is needed to maintain creativity. A state university is sensitive to some problems. Other questions asked of Ron Havelock were: Does the "real" linkage model (for joining strategies of planned change) require that the researcher and the utilizer participate in each other's systems? Has a preference function in strategy selection been looked for? What kinds of research or knowledge utilization are most important now? Is reality as rational as models imply? What are the criteria that measure successful utilization of knowledge? What assumptions does each model make about human nature?

MORE ABOUT PROBLEM SOLVING

As already mentioned, several ways of viewing the problem-solving process were covered during the course of the CRUSK Summer Institute. Another way, reviewed by Floyd Mann, was taken from a chart by Lippitt and Mann titled "Process of Change as Problem-Solving Process." The chart reads like a time line from left to right:

Feeling, sensing, awakening to problem (no pain situation,
okay as is; sense of pain, need for change) →

Diagnosing (diagnosis of pain or status quo) →

Searching for goals (choose goal and formulate goal) →

Choosing means (identifying alternative means) →

Planning (commitment to effort, interest; commitment to action try) →

Trying (preparation for action-skill development) →

Doing (the single action try) →

Evaluation (program of action and feedback seeking).

There are three foci of the problem-solving change flow: (1) Client-system focus (C/S), (2) change-agent-self as focus (C/A), and (3) relationship of C/A and C/S as focus (C/A and C/S).

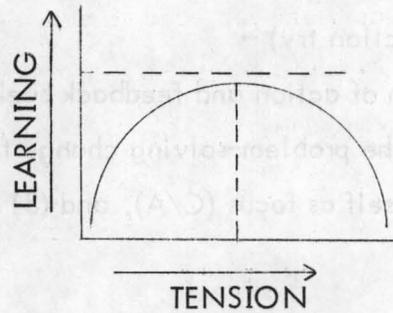
ONE MORE PROCESS SKILL

Ron Lippitt led the participants in the 1971 CRUSK Summer Institute through another exercise designed to deal with internal linkage issues in the change agent. It is called the Internal Society Dialogue Procedure and is a conception of John Rickman of Tavistock Institute in London. It is based on the idea that the superego is not a unitary structure but an interacting dialogue within its parts. The goal is to listen to one's internal dialogue. Instructions for the exercise were to write a script between voices or parts of the self that support risk-taking now (having learned the implications for back-home relevance) versus voices that recommend a slow, conservative posture.

We wrote our dialogues, then put them face down on the floor in the middle of the room. Each participant then picked up a script and read it to the group who commented on the issues in the internal dialogue. It is possible to go further with the exercise and do a force-field analysis on the opposing voices.

I might add that this exercise immediately generated tension and anxiety for the participants. For many process skills, some psychological stress is likely to be generated. It seems essential for change, but it certainly is a major feature of organizational dysfunction. We heard many times at CRUSK about the dither that

promotes creativity and a right level of tension that facilitates learning. Learning theorists draw a curve illustrating the relation between the degree of learning and the level of tension. Low tension correlates with low learning as does high tension. Intermediate levels of tension show the greatest degree of learning.



THE INTERACTION FAIR

I mentioned this CRUSK process earlier and bring it up again to show how it worked for me and to pass on additional information coming from it. Since this was timed for the evening of the last full day before the closing half-day, nearly all the program had been covered and participants could work on special questions they had for the CRUSK staff.

For example, there was an opportunity to discuss with Ron Lippitt the organization-development programs of the Institute for Applied Behavioral Science at Bethel, Maine. Don Michael talked about the fuzzy goals in research labs and how one might positively confront, while still supporting, individuals in leadership positions. Dave Bowers responded to a question on how to choose an outside change agent by suggesting that an eclectic choice of the change agent was desirable. He advises diagnosing the situation first, then choosing the outside intervener. If one begins with the change agent, the organizational development might not be of the eclectic type recommended by CRUSK. Apparently, some change agents have learned a single skill and apply it to every situation whether it is needed or not.

THE LAST SESSION

The first half of the final session opened with the choice of three possible agenda items built around the theme of evaluating knowledge utilization and social change. The possibilities were: (1) What critical issues or problems do you wish to address to the staff? (2) What plan(s) do you have to continue the learning in knowledge utilization and change you have been exposed to this week? (3) Are there some small groupings you would like to form this last 1-1/2 hours to discuss some topic, problem, or next back-home steps?

Participants chose item (3) and broke up into five small groups, mostly along the lines of their professional affiliations, to discuss private industry, medical care, education, knowledge utilization in the Federal Government in Washington, community action, or urban problem-solving.

Seven participants and staff joined Floyd Mann to hear more detail on two of the CRUSK projects in community action and urban problem-solving. Mann and Parker began the projects 3 years ago by discussing the use of a conflict versus a problem-solving model for a tense, explosive, urban black-white confrontation. It was decided to use the P-S model. Black, white, and brown power sources in the community met with Parker and Mann in an initial 1-1/2 hour meeting that was more than cathartic. A time limit was set for each individual to talk. Negative trust was accepted as the starting norm. The session was taped and duplicate tapes sent to participants for use back home. At the meeting, the next steps were developed and a multiple-entry strategy adopted. It was decided to spotlight a problem in the community each month. It was also decided to begin with small groups and teach P-S skills to these, then proceed to cross-group P-S skills.

A similar project has been undertaken in another urban conflict environment where CRUSK had been invited to help with the community issues.

The final hour of the 1971 CRUSK Summer Institute was used to give a critique and evaluate the Institute. Participants filled out a questionnaire giving their detailed evaluation of the week's events. Then they and the staff evaluated the week in Ann Arbor by the process skill known as the fishbowl exercise. First the



staff formed an inner circle and gave their impressions of the Institute while the participants listened. Then the participants changed places with the staff and gave their impressions while the staff listened. The two groups then jointly discussed the matter and the 1971 CRUSK Summer Institute came to a close.

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