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EXPLORATIONS ON THE TEACHING AND LEARNING OF

THE MANAGING OF LARGE SYSTEM CHANGE

Output of a producing workshop
MIT Endicott House, Dedham, Massachusetts
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Richard Beckhard

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This book is the output of a conference of twenty-two applied behavioral scientists and managers of change who worked hard to combine their thinking and experience. Practitioners in the field of large systems change tend to be entrepreneurs, who are often loners. No natural organizations exist to facilitate their interaction. The conference was stimulated by our feeling that there was a need to pool and synthesize our practices and teaching. The world's increasing turbulence and the multiplying complexity of managing human effort in organizations and institutions gave these feelings an added intensity. It seemed well worth testing whether a significant group of practitioners would be willing to gather and engage one another in attempting to produce a product that combined their knowledge and experience.

Richard Beckhard initiated the activity by inviting all of us to participate. The response to his invitation was unanimously enthusiastic. Through contributions of time and money, we the participants funded the event, and in an exciting four days, produced this document.
From our own backgrounds and experience, we were agreed at the outset that there is a body of knowledge, technology, and practice around managing and facilitating large systems change that is worth documenting in a systematic way. We felt that this knowledge was related to, but different than the knowledge and technology required for managing and facilitating small group and individual change. We felt that there was a need to develop the meaning of Large System Change, to speak about a definition of large systems, and to identify the scope of society's need for the application of this knowledge, technology, and practice to actual large system improvement.

We addressed may other questions as well:

1. What relevance does this knowledge, technology, and practice have to the real and growing problems of large system change which are so dominant in such complex institutions as Third World countries and multi-national corporations.

2. How do large systems distinguish from smaller ones, such as companies or school systems?

3. Is large system change just another label for Organization Development (OD)?

4. Is there really a unique technology in this area?

5. Is this really another device for the self-aggrandizement of a group of applied behavioral science practitioners who need to have a "different product?"

6. Is there really a need for this as a separate area? In what arenas?

7. What values are appropriate, implied, and/or necessary in this field?
SCOPE OF THE BOOK

Three major issues absorbed our attention at the conference. Hence, they are the major organizing themes of this book.

First, there is our concern for defining large systems and large systems change. Second, focusing on those people who are either managing or facilitating large system change, we ask, "What do they need to know from this body of knowledge and technology in order to optimize their efforts?" Our response, as it is captured in this book, was a list of subject areas which we have categorized into: (a) those areas which practitioners need to know for any types of change effort, including those which occur in large systems; (b) those areas which may be applicable in other settings, but are significant and critical in large system change; (c) areas not ordinarily included in change efforts, but are especially critical in large system change.

The third major organizing theme is concerned with consumers: who in our society needs to have this information and knowledge, in order to manage large system change? A number of groups were identified; most are very familiar: line and staff managers of institutions and organizations; practitioners and consultants who work with managers; graduate students, who are learning to be managers and facilitators; volunteers who run community organizations; and political leaders, are a few examples. Keeping these people in mind, we asked ourselves in what kinds of learning settings are they most likely to gather for the transfer of this knowledge and technology. Four principle settings were identified: the university, in-house development programs, public programs for a heterogeneous population, and
public programs for a homogeneous population, such as professional development courses.

Accordingly, we have offered some sample designs of educational efforts and activities in each of these settings, for each of these populations of consumers. The work includes several examples of short in-house program possibilities; a five-day public program for heterogeneous populations; several examples of professional development activities; and two examples of possible graduate courses.

This book's final section was stimulated by the conference experience itself. We tried to look at opportunities and implications for people who are involved in training and development of others in this area or for people who are practicing managers of change. One factor that we agreed upon at the conference is that this field does not lend itself to a cookbook of "how-to" techniques; we are concerned that where techniques are listed, the reader might assume that we were operating under different assumptions. The field depends on increased diagnostic competence; awareness of the interaction of small, medium, and large systems; a lot of intuition and are; a willingness and ability to live with ambiguity and a desire to seek some reasonable degree of order; and humility.

Toward the end of our four days together, we had a session with all of the participants on the meaning of the conference. One participant remarked--and most seemed to agree--"we all owe each other a real debt of gratitude."
In addition to that debt, we owe another to the Sloan School of Management at the Massachusetts Institute of Technology, which we would like to begin paying by thanking them for hosting this conference. Also, our thanks to Ms. Mimi Pearson and her staff at Endicott House, for providing a wonderfully supportive and appropriate environment for our work. Finally, out thanks to Ms. Gloria Malkin, who did an extraordinary job in assembling all of this into a cohesive written document.

All of us who participated hope that our explorations and this product will help all readers to feel more optimistic and confident as they manage complex change in a demanding and less-predictable environment.

We also hope that this documentation of our explorations will lead to new excursions by the growing number of managers, facilitators, and leaders who are regularly confronted with the problems of large system change.
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INTRODUCTION

The Nature of the Organizational World

The nature of the organizational world is changing almost on a daily basis. Newspaper headlines herald the events: oil price increases, exchange rate changes, trade imbalances, industrial strikes, affirmative action legislation, inflation, nationalization of industries, and changes in national leadership. Individually and in combination, events like these are making management of complex organizations an increasingly stressful and socially critical activity. Consider the following list of issues:

- the changing role of women and minorities in organizations;
- codetermination;
- increasing demands for community control of public services
- government regulation of pricing and wages;
- rising cost of health care;
- government and public concern over ecological matters;
- concern over the emergence and growth of multinational firms;
- shifting values around role of wealth production in the society.

Most contemporary organizations and their leaders are currently coping with at least one of these issues, and some, especially those operating in world-wide markets, may be confronting all of these issues simultaneously.

Sometimes organizations respond well and cope easily, but too often issues like these create familiar problems:
-Disagreement among people in different parts of the organization mounts, and as a consequence, decision taking grinds to a disturbing halt; scapegoating becomes a substitute for action.

-Solutions to specific and pressing problems are taken without regard to other organization concerns, thereby exacerbating rather than relieving organization difficulties. "Everyone is working on the busted pipe and nobody is minding the store."

-The complexity and uncertainty surrounding the problem results in a heightened emphasis on "legalism" - rules, standard operating procedures, bureaucratic controls are developed and strictly enforced. Focus shifts to the controllable, e.g., expense accounts, leaves, attendance are scrutinized closely. Subunits of the organization focus on local goals and tend to become parochial in their methods of operations.

-Organizational leaders feel constrained in both ends and means, and throughout the system understanding of accountability diminishes. Hopeless, as well as helpless feelings develop; passivity and compliance emerge as if they were the only options.

-Complex problems are oversimplified and as a result there is an increased tendency to fall back on old technologies and solutions to deal with novel situations.

The point is that in the face of complex environmental and organizational pressures, organizations do respond - albeit sometimes dysfunctionally. The all too familiar, costly responses to the pressures of today's world which we have cited reflect underlying but not irrevocable problems which are outgrowths of the large, complex organizations in which many of us live.
Large, Complex Systems

Large, complex organizations can be characterized as having:

- A significant number of subsystems which do differentiated tasks;
- Subsystems which have different time perspectives, e.g., basic research has a long-time perspective, while manufacturing's is ordinarily more short-term;
- Multiple "products and/or services" for consumption by outsiders and/or insiders;
- High independence among subsystems accompanied by high needs for integration;
- Multiple interfaces and permeable boundaries between system and environment and subsystems and environment;
- A life beyond that of any of its subsystems or individual members.

The characteristics of such large, complex systems can be defined more formally and succinctly as a number of suborganizations doing different tasks, having differentiated time perspectives and multiple interfaces with outside systems, and whose effort must be integrated.

This is distinguished from less complex systems which are comprised of individuals and groups with different needs, perhaps different time perspectives, interfaces demanding of high central loyalty, and for whom integration is desirable but not necessary.
In this book we take a specific stance about the meaning of "large systems" and "large system change." We believe that the nature of change in such systems requires a different perspective than the one which guides action in simpler systems. Our intent in this book is to describe this perspective as a way of thinking about large system change, not to explicate ways of doing large system change.

The Nature of Change

When people concern themselves with remedying an organization's response to the kinds of problems we have been discussing, they frequently find themselves confronted with dilemmas such as:

- Is change evolutionary, revolutionary, or capable of being planned in a systematic way?
- Are there choices available or is individual free-will and organization self-determination a myth?

Organization members and leaders respond to these dilemmas in at least one of four familiar ways. Some behave as if there were a perfect organizational form or structure. The critical problem is to find it. Once the new structure is in place, the belief is that all ills will be cured. For example, many organizations have assumed that a matrix form is the solution - the perfect form. The reasoning is that a complex structure is needed to cope with complex problems.
A second group acts as if the organization's destiny is being controlled by immutable and uninfluenceable external forces. No response, or no change in their pattern of response, is their response. Such groups running the same "old" programs, in response to new environmental demands. For example, designing and organizing the international division of an organization in the same way as the home office even though the international division will have to interface with and respond to different cultures and different patterns of government influence.

Another group assumes that all meaningful change occurs only as a consequence of conflict. The belief is that issues must be polarized and opposition must occur in order to create organizational progress. Fighting is the strategy of this group. Examples are evident in the strategies of many social action groups, parts of the women's and Black movements, consumer groups, organizational lobbyists, unions, and quasi-military terrorist groups. Characteristic of such strategies is the underlying view that the parties' interests are totally in opposition and therefore, solutions must be of an either-or form; win-win alternatives simply do not exist.

The fourth group recognizes and accepts the inevitability of the increased uncertainty of the future. They seek to understand and adapt by assuming different frames of reference in relation to various organizational problems. With the goals of improving organizational outcomes, the strategy of this group involves an interactive diagnostic and action-taking process based on tough personal choices about goals, constraints, and opportunities.
Our Stance

The first three approaches listed above shared a common characteristic—each represents a "right answer solution set" based on a simplistic yet holistic diagnosis of a complex situation. The first assumes the answer is structural; the second, procedural, and the third power. Only the fourth approach explicitly assumes the goal of the change as improving the organization's capacity to work on problems as well as its work outcomes. As noted, this view recognizes and accepts change, uncertainty, and complexity as inevitable parts of organizational life. Thus, diagnosis, the need to understand the parts of the situation, is the first step. A determined examination of personal, subjectively-defined criteria (goals and mission definitions) and identification of real constraints are also characteristic of this approach.

The assumptions and action implications inherent in the fourth group's position is seen by this group of twenty-two as most realistic in today's world. No one can deny that organizations are influenced by powerful evolutionary forces born of historical, political, economic and cultural realities. There are equally impactful forces stemming from predictable and unpredictable changes in the environment. Together, these two sets of forces create genuine constraints, but they do not totally determine what is possible in terms of organization form, process and outcome. Choices exist. It is our stance that organization success requires that change be managed based on at least two critical assumptions:

- Evolutionary trends may not be controllable, but their potentially adverse personal and organizational consequences can often be lessened by planfully managing the change process.
Where choice exists, a planful interactive approach is preferable to a reactive, passive or even proactive one.

An interactive approach requires practitioners to abandon the myth of total rationality and control which, in the extreme, underlies the proactive stance. It also requires abandoning the cynical myth of no rationality and no control which underlies both the reactive and passive stances. A planful interactive approach makes allowances for powerful, perhaps irrational, evolutionary forces and for unpredictable and uncontrollable crises by placing an emphasis on the need for continuous planning and replanning in the context of goals as well as givens. It seeks to create simultaneously the stable thrust that is characteristic of a proactive posture and the flexible core that is characteristic of a reactive one.

Scope of the book.

Before describing the material that follows we want to offer a caveat. Organizations are living, dynamic systems which are not totally describable by words. It is therefore essential that readers supplement any learning generated from the program designs given in this book by active, experiential learning in bringing about organization change.

The materials which immediately follow in this book represent the conference participants' consensus of the topics one would need in order to have a working knowledge of how to effectively manage change in a large complex organization. Also included are the designs for several educational programs aimed at a variety of participant groups in different settings. Finally a description of the process used to produce this book and a partial bibliography are included in the Appendices.
Designs

On the following pages we have developed a number of sample designs. These are illustrative only. Our objectives are

1. To illustrate, through examples, the possible choices of subject matter and teaching methods for different "student groups" in different settings.
2. To explicitly develop designs for the different populations we serve.

These designs are not prototypes. They are a sampling of ideas from which an experienced practitioner can make his/her own applications.

The designs include
- Three 2 day "in house" programs for line and/or staff people
- A five day public workshop for administrators or senior executives
- Three graduate programs — two for masters students — one for mid-career professionals
- 4 designs for practitioners
  - a one year program in 4 modules for experienced human resources O.O. managers
  - a one week entry level program
  - a modular network program for advanced practitioners
  - an issue based workshop
DESIGNS WITHIN ORGANIZATIONS

(THREE DESIGNS)
DESIGNS FOR EXPLORING LARGE SYSTEM CHANGE
WITHIN ORGANIZATIONS

In what follows, three designs are presented which can be used for introducing various levels of management to the knowledge and technology of large systems change. Those of us who were involved in the creation of these designs took as our task to design three different ways of introducing large system change knowledge in three real organizations. This had the advantage of forcing us to be concrete and complete. We also wanted to point out the general parameters of these designs for the readers' consideration. Thus, this introduction is intended to convey such parameters.

As indicated by the title above, the settings envisioned for this training activity are internal organizational workshops. There was a general consensus that the introduction to large systems change knowledge probably had to fit within a two-day format. However, emphasis is to be placed on the word introduction, since much longer periods are required for exposure to the full range of knowledge within this area of inquiry.

There was also consensus that this material could profitably be taught to line and staff managers of many different levels. There is, however, an interaction between specific content areas and who should be selected to participate. Thus, one principle we used in designing was to select from the general knowledge base on large system change four or five core content areas and then decide who should attend. As it turned out, one of the designs selected corporate staff of a large conglomerate, another selected upper management and the third, middle management. While the bias is towards the top of the organization, a very persuasive argument can be made that with careful selection of the core content, designs in these general formats could work easily for first line supervisors.
A basic dilemma in this design activity is that there are two important starting points: namely, the real world with all of its problems for the managers versus the core content of large system change technology. All three designs to follow worked out variations on a basic compromise of the dilemma. The compromise involves starting with material that is "illustrative" of managerial problems, but presented in large systems change perspectives. The illustrative material takes the form of (a) a set of projections about the future which must be resolved by the total system; (b) a case example of the introduction of new technology; and (c) a series of vignettes drawn from data collected for the workshop.

In each design, the illustrative material is followed by a testing period to find out if participants are "buying into" the idea that although the material in the workshop will be connected directly to management problems, it is not designed to immediately resolve such problems as much as provide new perspectives for examining those problems and to elicit subsequent work directed toward their resolution. Once this general contract is negotiated, the three designs diverge on how to introduce large system change perspectives. All three, however, close with the development of a commitment plan to continue the explorations.

The general objectives shared by all three design teams are:

1. To become aware of a body of knowledge that will help participants to understand major organizational problems in such a way as to resolve them in the larger context.

2. The participant is to leave the training setting feeling concerned about the gap between what is currently being done to resolve large system change problems and what is possible but, encouraged by the
potential of the new knowledge to reduce the gap.

3. The participant is to actually use the new technology during the workshop and thereby get a feeling for its potential.

4. The design is to be implemented in such a way as to produce confidence in the internal staff to guide further explorations in large system change.

The Designs follow.
IN-HOUSE DESIGN #1

Setting: Food retailing business (25,000 employees)

Participants: Division managers and Executive Vice Presidents

Objectives: (See Overview of this section)

Time: Two Days

FLOW OF EVENTS:

A. Start-Up (approx. 1 1/2 hrs.)

1. Introduction/Welcome

2. Statement of objectives

3. Presentation of one or more "case illustrations" of complex systems change for which this workshop is relevant (see attached case & guideline)

4. Participants "buy-in" to one or more cases:
   - were you ever in such a situation?
   - are you now in such a situation?
   - are you feeling the repercussions of such a change?

5. Lecture re: "If any of these illustrations are where you're at, then . . .
   - brief explanation/description of complex systems notions that are relevant to the illustrations in #3 above
   - e.g., single vs. multiple frames of reference
     - multiple and conflicting demand systems
     - transition states and the need to manage them
   - brief overview of workshop agenda
B. Content Module One: "Redefining Problems in Systems Terms" (approx. 2-2 1/2 hr)

1. With respect to case illustration (attached), sub-groups discuss, "where are we today in terms of this change?" Generate 3 lists:

- successes
- unexpected problems
- unrealized expectations

2. Total group discusses "Why" we are where we are: What they see as underlying causes for problems, etc.

3. Lecture/discussion:

- systems theory
- models of systems
- multiple frames of reference
- open vs. closed systems

4. Group use new input to re-define current problems and unrealized expectations from #1 (e.g., no change in inventory processing is also concerned with store manager role, consumer response, supplier collaboration, etc)

5. Critique: What new ideas appear useful to explaining/defining problems you face?

C. Content Module Two: "Setting Goals and Change Objectives" (approx 2-2 1/2 hr)

1. Subgroups: Given current cproblems as defined above, answer question: "Where would we like to be with this issue (the case) as it now stands?"

- sub-groups take different problems from above and define an "ideal" state

2. Lecture/discussion on Open Systems Planning and Mapping demand systems to illustrate new ways to define desired states, taking into consideration a changing environment.

3. Group re-defines change goals or "ideal states" they quickly defined in #1.

4. Discussion/Critique:

In addition to what new concepts were useful in the exercise, also discuss if and how they could use any concepts so far back at work.
D. Module Three: "Managing Transitions" (approx. 2 hrs.)

1. Lecture Input: "Given newly-defined problem [current] and where we would like to go [future], now we have to manage the transition state:

   - transition state
   - transition management vs. implementation strategy
   - impact of changing on or by other systems . .
   etc.

2. Group works on identifying issues to be managed if they were to begin to change towards the goals from Module Two (i.e., if the case were now a reality): What issues would/could arise--

   - structurally
   - in changing roles
   - boundary interfaces
   - priority management
   - gaining commitment,

(etc.) -Create a list of transition issues they envision.

3. Discuss/critique new concepts

E. Module Four: "Managing Roles in Complex Systems" (approx 1 1/2 - 2 hrs.)

1. Lecture: Role Theory
   Role Conflict
   Boundary Roles, etc.

2. Group Discussion: In context of case, if they were managing the transition state, what would be impact on their roles?

   - individual lists of personal role problems/pinches to be dealt with

3. Options: depending on nature of lists

   - Decision Charting Technology
   - Role Mapping Technology
   - General discussion re: how to solve role conflicts.

4. Discussion/Critique--usefulness of concepts in grasping/grappling with personal dilemmas
F. Summary Session: Commitment Plans (approx. 1 1/2 hrs)

1. Lecture/discussion: Commitment Management Intervenor Dilemmas in Complex Systems

2. Groups or individuals apply concepts from #1 to do action planning for themselves
   - things they would like to change (behavior)
   - things they would like to learn more about
   - things they would like others to learn about

3. Future Programs
   - future modules for this group
   - future sessions like this one--for whom

4. Critique/Closure
CASE ILLUSTRATION: DESIGN #1

The design example that follows was built on the assumptions that:
(1) the intervention was addressed to corporate and divisional executives;
(2) the intervention would start with an evening session and last until late the next afternoon (1½ days); and (3) the case used reflected a real organizational experience originating in the past and currently affecting the organization.

The highlights of the specific case used as a "backdrop" for the construction of this design will be related below. It should be explained, however, that the case is used here as simply an example and that it should not in any way be viewed as a constraint to the "intervenor" in other organizations. What is relevant about this case to the practitioner wanting to use the following design in a different setting are the following characteristics:

1. The central tasks had to do with the introduction and implementation of new technology;

2. Some of the participants had been involved in the decision to introduce the technology and had to manage its implementation. Other participants had to wrestle with the consequences of the implementation;

3. The basic merit of the decision to introduce the new technology was not in question, but there was an awareness among the participants that the implementation of the new technology had brought about unexpected problems and that some of the expected benefits had not been realized.
The organizational setting of the specific case used is a large retail food company operating a chain of stores using multiple cashing units. The senior management of the company became aware of a new electronic cashing process. A number of executives of the company investigated and realized that the new process would reduce the waiting time of customers at the cashing station, improve accuracy of cashing, and provide very precise information that would facilitate (a) management of inventories; (b) processes of ordering, (c) timing of load delivery, and (d) staff scheduling.

The decision to adopt the new technology was made and the technology had been installed for approximately two years. The management of the company feels that the decision was correct, but that its implementation has resulted in a number of problems.
Setting: Large Consumer Products Company

Participants: Middle Managers

Objectives: (See Overview of this Section)

Time: Two Days

**Introduction/Welcome**

Present Several Participant Relevant Pre-prepared Scenarios--Connection of Problems to IS Thinking

Presentation of Several Content "Notions" with Explicit Link to Scenarios

Presentation Overview of Transition Management
Examples from scenario/pieces of life in organization
(Overview of Modules & Case link)

Present Case (Background Information)

**Module 1:**

* a. Present concept taking systematic, comprehensive picture of present state

* b. Vignette as illustration (prepared) of this concept in application (link to case)

* c. Participants work on their scenarios individually and as small groups

* d. Total Group Discussion/Questions

**Module 2:** Concept: Define New State

**Module 3:** Transition State

**Module 4:** Governance of Transition

**Module 5:** Activity Plan

**Module 6:** Commitment Plan

**Module 7:** Final Session

Brief Summary/Review,

* Overview of What is Available Next
* Content in Depth
* For Whom
* Who is interested in what

(Each of the content modules to be scheduled for 1 1/2 hrs)
GUIDELINES FOR SCENARIOS FOR DESIGN #2

1. Current important problem which participant managers will relate to quickly.

2. Should be of sufficient quantity that participants can relate to at least one on a personal level.

3. Content should be less than a page, because several are needed.

4. Description should include enough detail on total internal and external environment to account for clear illustration of complex major system issues.

GUIDELINES FOR WRITING CASE PROBLEM FOR DESIGN #2

1. Be written in familiar language and detail that the participants deal with in day-to-day life.

2. Should contain the following information:
   a. Historical information about this situation/problem, including what's worked, not worked in dealing with problems like this one;
   b. What is current situation (Organization Dynamics) and how did it come about. Include business performance data where relevant;
   c. If relevant or apparent or specified, what are the organizational goals with respect to this situation;
   d. What is expected by top management, the employers, union and other key domains. Also what is considered possible by the local management;
   e. When is the result of the change to be realized, and if there are any intermediate stages/check points, what are they and when;
   f. Who are key power and influence roles in the system and what are their attitudes towards the change;
   g. What if any future environmental conditions (new laws, etc.) are anticipated within the time frame of the change effort.

3. The case should be written so that it can clearly and readily illustrate the aspects of major systems change.
IN-HOUSE DESIGN #3

Setting: Large Multi-Industry Company

Participants: Corporate Management

Objectives: (See Below)

Time: Two Days

Objectives:

1. To develop awareness in new way of planning for major corporate problems related to future growth options and complexities.

2. To communicate and create awareness of new knowledge (re: Large Systems Change) that can contribute to the resolution of such problems.

Design Elements:

Content to be taught:

1. Large System Change (People-Organizations-Processes)
2. Role Theory Relevant to Large Systems
3. Role Theory (as relates to Individual in System)
4. Defining "System" boundaries
5. Organization Design
6. Open Systems Thinking and Appreciation
7. Strategy Formulation
8. Dilemmas
9. Transitions and Change

Assumptions:

1. Breadth more important than depth.
2. Integrate elements of content into large system change knowledge.
Design:

First Morning:

Introduction: (20 min.)

1. Clearing Expectations
2. Administrative Details
3. Agenda for First Day.

Presentation of Problem* (30 min.)

1. Why these problems
2. Why these problems are large systems problems
3. Presentation of the problem itself.

Lecture on "New Lenses to Viewing the Problems at Large Systems" (30 min.)

1. Content:
   a. Large System Change (People-Organizations-Processes)
   b. Defining System Boundaries
   c. Open Systems Thinking and Appreciation
   d. Dilemmas
   e. Transitions and Change
   f. Strategy Formulation
   g. Organization Design

* Note: The problem used to construct this design included the following aspects:

1. Recollection of different issues that were not working well in the company, such as: unclear objectives, undefined mission, unclear roles and responsibilities, inconsistencies between objectives and actions, specific conflicting situations and problems presently at the company.

2. Recollection of several issues that illustrated the complexity of things in the following 5 and 10 years such as:
   a. growth in terms of: sales, markets, products, joint ventures, diversification, number of division managers, functional managers, total employees, geographical areas, human resources to be trained and developed.

   b. environment interaction issues such as: government relations, private enterprise preservation, unions relations, estate and local government issues, contributions to balance of payments, jobs generation, housing, education, etc.
2. Group Task

- First Individually (30 min.)
- Then, Sub-Groups (60 min.)

"Describe what strategies have we used or developed for solving these problems.

Response is structured around a guide or framework that has to be design base on the problem.

Examples:
2. How consistently have planning efforts reckoned with environmental variables.
3. Consistency between mission, goals, and governmental actions.
4. Corporate vs. Divisional roles and relations.

Note: There are some scales that have been developed that could be adapted, e.g., Material Produce by Blake & Mouton, for Diagnosing Corporate Excellence.

General Session: Groups Report (60 min.)

Lunch

Afternoon of First Day

Lecture (3:30)

The staff has to prepare several lectures that will start from one of the issues provided as framework guide, --

Example: "Consistency Among Mission, Goals and Governmental Actions," -- and from that statement, [staff] has to elaborate all the knowledge that is relevant to this problem--e.g., using parts of or several of the listed content topics on large systems change.

Lecture (60 min.)

"Consistency among Mission, Governmental Actions, and the New Knowledge and Approaches."

Work in Sub-Groups (60 min.)

Task = To produce recommendations for improving the problem using large systems change perspective

General Session: Sub-Groups Report (60 min.)

Lecture: (60 min.)
Second Day

Morning

Work in Sub-Groups (60 min.)

Groups work on improvement of the address issue.

General Session (60 min.)

Sub-groups report

Lecture (90 min.)

Lecture on the additional issues prepared.

Lunch

Afternoon

Sub-Groups Meet (2 hrs.)

Development of an overall improvement plan.

General Session (5:00)

What could be done in the company to:

1. problem-solve in perspective of the large system change process;

2. spread the knowledge.

End of Program
DESIGN FOR
PUBLIC PROGRAM
ON MANAGING COMPLEX CHANGE

(5-day program)
PUBLIC SEMINAR ON MANAGING COMPLEX CHANGE

(FIVE DAYS)

This seminar is designed for persons in organizations and in the community, who have significant power and influence in large systems. These persons are involved in complex systems change and in planning the future.

Included in this seminar could be a stranger group composed of:


2. **Elected Officials** including: Commissioners, Councilmen, Mayors, etc.

3. **Planners**: City Planners, Council of Social Agency Planners, etc.

4. **High Level Union Persons**

5. **Managers** (work and line upper middle level) from Business, Industry, Government, Human Resources, etc.

6. **Administrators of Large Professional Organizations**: NEA, NASW, ANA, etc.

7. **Presidents/Officers/Executive Directors** of large organizations: Chamber of Commerce, YMCA, Boy Scouts, Girl Scouts, Rotary, Council of Churches, etc.

Persons could participate as individuals or as teams of two or more from the same home-base.

**DESIGN ASSUMPTIONS**

1. The case study used in this design is one identified by the participant and serves as a learning vehicle rather than as a problem that will be "solved" at this workshop.

2. The final output, which is called an "action plan," is intended as a means for the manager to begin to bring about desired changes.
PUBLIC SEMINAR ON MANAGING COMPLEX CHANGE
(FIVE DAYS)

Prework: Ask for problem identification. Think about: the possibility of freezing them into a particular problem formulation versus the potential for arriving well-prepared. Another consideration is the lack of opportunity to clarify and test the criteria of problem selection.

DESIGN

I. INTRODUCTION AND ORIENTATION

A. Contract-Setting

The focus of work:

![Diagram](figure1)

The focus of the work for the week will be participants' own complex change problem as conceived in personal terms; that is, from the individual's perspective. The open systems work will be in terms of forces impinging on the individual's complex change problem. Note for Staff: This approach is in contrast to the typical open systems planning exercise, which asks people to focus on the system's core mission, rather than their own problems. In the case of the proposed design, the participants' system core mission will be one of the external demands impacting on their own change problem (see Figure 1).
B. Background & Assumptions of the Design

C. Participant Expectations & Resources

  e.g., paired interviews/data feedback/structured community interviews/small groups

D. Working Definitions; Large System & Managing Complex Change

  e.g., lecture/group discussion/papers/short reading period

II. THE PRESENT

A. Identify a problem which falls within the definitions of large system
   and managing complex change. (Give criteria to ensure good learning
   vehicles, e.g., unfinished, participant is central to the problem,
   vital that something be done).

  1. individual work to identify problem.
  2. testing products in terms of the concepts, e.g., pairs,
     ad hoc groups, staff interviews, learning groups*, consultations
     in the round.
     *(At this point, you may want to form basic learning groups;
     the trade-off is that, although you will provide partici-
     pants with support through the learning groups, you will
     close off the freedom to use all resources and risk focusing
     on group dynamics rather than the problem identification task.)

  3. May want to share products in total community.

B. Lecture—Open System Concepts and Their Use at Different Levels

C. Environmental Mapping of Problem

  1. input on present, desired and transition
  2. environmental mapping explanation, with examples.
     (Think about: A critical issue here is to work with one or
     more participants publicly to model how to search for critical
     and little-thought-about domains, their impact on the problem
     and the person, and their influence on one another).

D. Response Mapping

  1. input on responses
  2. response mapping explanation, with examples
     [Think about: A critical issue here is to work with one or
     more participants publicly to model how to search for the full
     range of important responses and the underlying implicit
     assumptions around themes which guide them].

  3. doing response mapping individually.
III. THE FUTURE

A. Goal-Setting
   1. input on goals and goal-setting
   2. goal-setting explanation with examples [Think about: the need to test change goals for congruence with broader system goal].
   3. doing goal-setting individually

B. Strategic Thinking for Change
   e.g., force-field, readiness model, imagining planned change model
   1. input on each sequentially
   2. mini-activity on each

IV. INTEGRATION PERIOD

Pairs, trios, or small groups to internalize and clarify where person is now re: the problem.

V. TRANSITION STATE

A. Bridge Input

B. Lecture--Transition States
   1. management structures & processes
   2. activity plan
   3. commitment plan

C. Management Structures and Processes
   1. input
   2. individual work on problem
   3. testing & sharing in groups

D. Activity Plans
   1. input
   2. individual work on problem
   3. testing & sharing in groups

E. Commitment Planning
   1. input
   2. individual work on problem
   3. testing & sharing in groups
VI. ACTION PLANNING

A. Developing an action plan
   1. input—components of a plan
   2. individual work to develop plan

B. Testing/Assessing
   1. input—criteria
e.g., individual fit, unintended consequences, practicality, monitoring, potential response analysis, costs of failure and success.
   [Think about: How to maintain a balance between optimism in the participant about action on managing complex change and the inevitable reality of continuing uncertainty and ambiguity].
   2. do it in small groups

C. Summary

VII. CONFERENCE INTEGRATION & CLOSING

Summarizing

Evaluation

Follow-Up?
DESIGNS FOR TWO
SEMESTER GRADUATE COURSES

(INTRODUCTORY AND INTERMEDIATE LEVELS)
GRADUATE COURSE DESIGN: ISSUES & ASSUMPTIONS

I. Background

A. Designed for general Masters level students not majoring in organization behavior or OD (MBA, MSW, M-Ed, MHA, etc.)

B. Assume students have taken basic OB course or equivalent

C. Do not assume any work experience

II. Placement in Curriculum

A. Elective course toward end of program

B. Could be linked to career development activities independent of curriculum

C. Link closely with field placements, internships, etc. where possible

III. Logistics

A. Assume 13-15, 3-hour, weekly sessions

B. Assume 3-4 hours of outside work per class session

C. Assume heterogeneity in terms of:
   - male-female
   - public-private sector
   - work experience
   - disciplinary interests

IV. Choice Points

A. Individual vs. group projects in the field or classroom—depends on level of interpersonal skills and feasibility of many field sites

B. Classroom vs. real organizational setting as experiential base or context (should probably do one or other, not both)

C. Focus on student's personal dilemma vs. perceived view of a manager's dilemmas (e.g., is it a course on managing complex systems change or on managing oneself in complex systems?)

D. Depth of topic investigated:
   1. I understand
   2. I value
   3. I can do it
   4. I will do it

V. Linkage to real world

A. Options: Alumni; Local executive preceptors; Instructor's case

B. Interactive component with some complex system: feedback from managers on student performance and vice-versa
Semester Course -- Managing Change in Complex Systems

1. Learning Objectives

This seminar is designed to give each participant some knowledge, understanding and limited practice in functioning as a member of a team, diagnosing organization behavior, planning strategies for change, intervening as a consultant. Emphasis will be placed on developing insights and strategies which have application to management of change in public sector organizations, with a specific orientation towards health systems.

2. Course Content

The content will deal with:

a) learning as a change process
b) self management of learning
c) team development
d) the process of change
e) models and strategies for planning change
f) organization dynamics
g) organization design
h) leadership styles and strategies
i) intervention theory and practice
j) OD system-wide planned change efforts

3. Methods and Structure

a) Meetings
   There will be meetings of the class on Friday mornings from 9-12.

b) Learning Teams
   The class will be divided into learning teams, each with an assigned resource person. Teams will meet weekly at a time decided by the members for approximately two hours.
c) Readings
There will be a few required readings and an extensive optional reading list.

d) Pensees
Each member will be expected to write two pensees, "thought papers." Pensees are thought papers of any length designed to stretch the thinking of the writer. Any subject is permissible. Unacceptable products are book reviews, reviews of lecture materials, etc. Original Thinking Is The Object.

4. Preliminary Schedule of "Themes"

Class Organization
Team Organization
Organizational Case Analysis
Organizational Diagnosis
Strategies for Planning Change
Planning Change
Organization Behavior
Organization Design—Intervention Theory and Practice
Team Development—Theory
Team Development
Large System Change
Summary Review—Evaluation
MANAGING CHANGE IN COMPLEX SYSTEMS

COURSE THEMES

SESSION

1  Organization Expectations
   Concept & Summary of course ideas and themes

2  Diagnostic Case--Case and Discussion

3  Diagnosing the Present State
   Open System Diagnosis--the Environment

4  Model for Planning Change Strategy

5  Testing the Strategy--Case

6  The Transition State--Governance & Management

7  (Transition--Process Plan/Commitment Plan)

8  Transition Cases

9  Guest Speaker

10  Interventions

11  Technology--Interface Management

12  Helping with Change--The Helping Relationship

13  Maintaining Organization Flexibility

14  Evaluating Change Efforts

15  Course Summary
Semester Course -- Managing Change in Complex Systems

Practicum in Organization Change

I. Learning Objectives

Participants will have some increased:

A. Knowledge of:

1. Large System Change Technology
2. Intervention Themes
3. Phases of Change
4. Intervention Strategies

B. Understanding of:

1. Issues in Intervening
2. Self as an Intervenor
3. Intervenor/System Relationships
4. Transition Management

C. Skills in Using some Techniques, e.g., environmental mapping, responsibility charting, readiness assessment, team building.

D. Awareness of:

1. Own Style as Intervenor
2. Own Practice in "Client" Relationships
3. Own Behavior in "Real" Situations
4. Areas for further Exploration

II. Learning Methods

A. Lectures
B. Demonstrations
C. Team Building
D. Client Encounters
E. Critiques
F. Readings
G. Discussions
### III. Course Outline

<table>
<thead>
<tr>
<th>Session</th>
<th>Theme</th>
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<tbody>
<tr>
<td>1</td>
<td>Class Organization</td>
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<td>2</td>
<td>Intervention Theory &amp; Diagnosis</td>
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<td>3</td>
<td>Practice Case</td>
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<td>4</td>
<td>Client (Subsystem Change)</td>
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<td>5</td>
<td>Client (Complex Organization Management)</td>
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<td>6</td>
<td>Client (Organization Redesign)</td>
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<td>7</td>
<td>Critique Session -- Transition Management</td>
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<td>8</td>
<td>Client (Program Change)</td>
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<td>9</td>
<td>Critique &amp; Review</td>
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<td>10</td>
<td>Client (Human Resources Management)</td>
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<tr>
<td>11</td>
<td>Client (Role of OD in Complex Organizations)</td>
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<tr>
<td>12</td>
<td>Review &amp; Evaluation</td>
</tr>
</tbody>
</table>

### IV. Readings:

**Required:**


Suggested:


V. Papers

The Meaning of the Course -- Due Session 7
DESIGNS FOR PRACTITIONERS

PROFESSIONAL DEVELOPMENT WORKSHOPS

in

MANAGING COMPLEX SYSTEMS CHANGE
Professional Development Program

For Entry Level Practitioners

Objectives: To walk away with the following:

- An understanding of what one knows (implies difference between integration of knowledge)

- An increased sense of complexity of organizations (e.g., when in a setting of restaurant, market, etc., to be aware of interdependence, etc.)

- An appreciation for the range and variety of modes for dealing with change. (e.g., see Introduction)

- An awareness of the different possible ways of doing strategic thinking

- An awareness of cross-cultural impacts on change management

- Knowledge/acceptance that training should require effective action in a cross-cultural - male/female - black/white setting

- An increased sense of personal potency to introduce large system change

- A realistic assessment of strengths and shortcomings as a consultant in large systems change. To know one's distinctive competence

- To have the tools and knowledge to evaluate large systems change
I. Selection/Appraisal

Prerequisites:
- Opportunity to use and consult with peers
- Setting committed to use
- To know and to experience: (a) Basic Organizational Behavior
  (b) To demonstrate applications
  (c) To have intense group experience

II. What to Bring:

A. Pre-work on practice theory
B. Case example in large systems change from one's own setting

III. Design

A. First Event Themes
   1. Self-Assessment—own distinctive competence
   2. Self as an Instrument of Change
   3. Diagnostic Technology
   4. Appreciation of the Complexity

B. Back-Home Work
   1. Selected Readings
   2. Personal Assignments from 1. & 2. above
   3. Personal Assignment from 3. & 4. above

C. Second Event Themes
   1. Analyses of settings for large systems change
   2. Modes for dealing with change
   3. Intervention Theory and Technology
   4. Strategic Thinking
   5. Practice Consulting Skills/Interactive Skills

D. Back-Home Work
   1. Selected Reading
   2. Personal Intervention Assignment
   3. Apprenticeship

E. Third Event Themes
   1. Evaluation of large systems change
   2. Career planning

F. General Themes Throughout
   1. Problem formulation
   2. Transfer of learning
   3. Personal mapping

Two current examples follow:
   1. Columbia University
   2. European Model
DESIGNS FOR ADVANCED PROGRAMS

for

ESTABLISHED PRACTITIONERS
Example of an Extension Course

I. The Advanced Program in Organization Development and Human Resource Management

Graduate School of Business
Columbia University

The advanced Program in Organization Development and Human Resource Management is designed to meet the needs of a growing number of senior level practitioners responsible for these activities in large organizations.

The experienced practitioner faces increasingly complex and multifaceted organization and management problems which cut across several disciplines. Drawing on the knowledge and expertise of interdisciplinary faculty leaders, the Program provides new knowledge and training on managing change processes in complex organizations as well as affords the opportunity to work with one's peers on individual job-related projects.

II. Audience

The Program is for experienced professionals in the organization development and human resource management field. Admission requirements include completion of the equivalent of the NTL Institute Program for Specialists in Organizational Development, or The University Associates Behavioral Science Intern Program, as well as a minimum of three years of experience in the field.

III. Focus and Objectives

The focus of the Program and its objectives are:

1. To provide new knowledge and training on the current state of the field as it relates to organization functioning (behavioral, technical and financial systems). There is an distinct interdisciplinary orientation.
2. To provide new knowledge and training on change processes in complex organizations, including a behavioral science orientation as well as exposure to other relevant disciplines.

3. To provide advanced practitioners with a self, peer, and professional assessment of their current effectiveness as practitioners.

4. To help each participant develop a private, comprehensive and integrated framework for managing organizational change and development.

5. To provide participants with advanced case consultations from peers and faculty along the lines of a medical case conference.

6. To provide participants with new consultant and intervention skills.

IV. Design and Method

Because the Program not only provides training but on-going consultation and skill development activities, it consists of three sessions conducted over a seven month period.

V. Program Overview

Focus There are four major on-going streams of learning in the program. These are: (1) the development of comprehensive integrated frameworks (models) for organization diagnosis and change, (2) learning about new social intervention technologies and approaches to organizational change, (3) self-development both conceptual and skill focused, (4) case consultation with peers and faculty on back home work situations. All four streams are dealt with during each of the three workshops, however, each workshop puts special emphasis in terms of time and faculty resources on one particular stream. Workshop I stresses model development, Workshop II stresses intervention technologies and Workshop III self-development.
Core Faculty. Members of the core faculty will be present during all three workshops.

**FACULTY**

**NOEL M. TICHY**  
Associate Professor and  
Director of the Program  
Graduate School of Business  
Columbia University

**DAVID A. NADLER**  
Assistant Professor and  
Associate Director of the Program  
Graduate School of Business  
Columbia University

**JAY GALBRAITH**  
Associate Professor  
The Wharton School  
University of Pennsylvania

**BILLIE ALBAN**  
Consultant in Organization Behavior  
Politt & Alban Consultants

**W. WARNER BURKE**  
Professor and Chairperson  
Department of Management  
Clark University

**MICHAEL TUSHMAN**  
Assistant Professor  
Graduate School of Business  
Columbia University

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**Themes**

- Models  
- Interventions  
- Self-Development  
- Case Consultation

**WORKSHOP I** - Major Theme is Models

**WORKSHOP II** - Major Theme is Interventions

**WORKSHOP III** - Major Theme is Self-Development

**Visiting Faculty**

Prof. Ian MacMillan  
Prof. Russell Ackoff  
Prof. Richard Beckhard  
Dr. Harry Levinson

Prof. Rosabeth Kanter  
Prof. Edward Lawler  
Prof. Richard Hackman  
Prof. David Lewin  
Prof. Ian MacMillan  
Prof. Harvey Hornstein  
Prof. David Lewin
International Programme for the Development of Social Scientist-Consultants

Jointly Organized By:

H. Bridger, The Tavistock Institute of Human Relations
R. Markillie, The University of Leeds
L. Vansina, International Institute for Organizational and Social Development

Programme Objectives

The programme is designed to help social scientists achieve the following requirements for their professional development and behaviour:

1. To master a relevant body of knowledge about the developmental and change processes in individuals, groups, organizations and communities.

2. An ability to understand cultural, functional and national differences and to be capable of operating in cross-cultural, multifunctional and international settings.

3. An ability to develop consultative relations with individuals of varying degrees of education and types of speciality; with small and larger social systems to assist their better understanding of their work, its socio-technical and economic implications; with the design of appropriate structures associated with necessary or desirable changes.

4. Through the capacity to identify them, to help individuals, groups or institutions learn from their defences against anxiety and to recognize their value systems, standards and social climate. In addition, to make connections between this learning and the individual, group or institutional behaviour, decisions and plans. This presupposes an ability to recognize relationships
between the behaviour exhibited by a social system and its past history, its current external events and its anticipated developments, as well as the capacity to make predictions about future events in a system.

5. A capacity as a consultant to understand the situation of a client, his roles and relationships — accurate empathy — as well as a sensitive appreciation and control of his own responses and tendencies both rational and irrational or hindering towards the client's situation, person, interests or ideology.

6. A capacity to understand and so to withstand pressures from individuals, groups and organizations, which lead to collusion with the client-system, and/or sponsor.

7. The ability to design relevant methods and strategies for developing pilot projects, interventions, and action-research projects and for disseminating the acquired understanding, the diagnostic and collaborative abilities into action-choices, and continuing learning within the client-system(s).

8. The consultant needs to demonstrate a capacity for "working through" issues and problems with those concerned, based on the learning derived from their collaborative work. This "working through" process is basic for ensuring the continuity of learning beyond any specific project phase and towards the active pursuit of purposes and directions agreed with all concerned.

9. The ability to recognize discrepant and disturbed behaviour as it presents in the professional context. To identify the chief symptoms of disturbance in an operational context, the sensitive and risk areas in which they are most likely to occur and the ability to take appropriate action on them.
Programme Design

Phase One

A ten-day residential workshop provides an opportunity for an international group of candidates and senior staff members to gain deeper insight into the role and the personal requirements of a social scientist-consultant.

This phase is, because of its objectives, primarily designed for experience-based learning. The key activities are:

a. The Learning group: "Being is being in concern" Heidegger once wrote. A small group of 7 to 9 candidates will regularly meet with one or two consultants to explore and discuss the various concerns of the membership. At the same time, the members are given the second task of studying the group processes triggered off by its tasks or those related to any work group.

b. The study of the conference as a temporary social system and learning institution as well as the development and interaction of its component parts. The organizational and intergroup processes proper to a larger social system will consequently be analyzed within an open system frame of reference.

c. An individual self appraisal and joint counseling session with some group members and the staff.

We realize that the self-appraisal and counseling sessions are, in many respects, a source of concern for everyone. Often it is negatively perceived or talked about as yet another selection procedure or examination. Rather, it is our intention to provide an opportunity for the candidates to consolidate their experience, their perceived competence and interests as a step towards a more informed planning of their own professional lives.
Phase Two

On admission to this phase of the programme, the candidates will receive five basic works for study and subsequent joint discussion, and a list of reading assignments from which they can develop their individual, additional programme.

This phase consists of two residential weeks, aiming at mastering a body of knowledge relevant to consulting work in groups and organizations.

The first week focuses on the theory and practice relevant to:
1. The organization and its environment.
2. Dynamics and processes in work, learning, and training groups.
3. Individual, group and organizational defenses.
4. Learning theories and various change strategies.
5. The role and process of consultation in small groups and larger social systems.
6. Interventions in small groups: process consultation and group training.

Besides theoretical presentations and discussions, the participants will, if consent has been given, study critical incidents on the tapercordings of their learning groups in phase one. The study of these tapes enables them to apply the theories, constructs, and concepts discussed during the week to a real group.

The second week focuses on the theory and practice relevant to:
1. Organizational diagnosis and development.
2. Client system identification and interventions in large social systems: learning/change strategies and diffusion strategies.
3. Action-research and counseling.

4. Socio-technical systems, job design and work structuring.

5. Cultural and international issues.

6. Psychopathology and disturbed behaviour in groups and individuals.

During the second week the participants will have the opportunity to discuss one of their current projects with some of their peers and a staff member. In this consulting group they will be able to apply what they have learned to a real project as well as practising consulting on each other's projects.

At the end of this phase, members and staff organize another joint appraisal and counseling session for each participant. The purpose being to assist each one in designing a further personal and professional development plan.

Phase Three

The aim is to provide each participant with at least one opportunity to work with a recognized senior social scientist-consultant, in order to learn, while being involved in a project, about his own abilities and enxieties as a professional. These projects can vary according to the needs and interests of the respective candidates, from co-training assignments, to being consultant in consulting groups, or to shared work in organizations or conferences.

General Remarks

It should be noted that after each phase, the candidate or participant may be advised to work through particular personal or professional issues before he continues with the next phase of the programme.

The international programme for the development of social scientist-consultants is considered to have been completed only after a review with a
recognized social scientist of the candidate's independent work in the field.

ADMISSION

1. Candidates should have a background in some academic discipline: sociology, psychology, engineering, etc. or an equivalent study experience, or be engaged in a role within an organization which demands the professional skills and knowledge described above. Individuals with special gifts, creative capacities who have under their own initiative began to operate in some cross cultural field but who lack the usual qualifications may be considered for admission.

2. Candidates should have already acquired some understanding of group behaviour either through participation in training conferences, or through their work as consultants or managers.

3. Candidates should be prepared to gain some insight and understanding of their own impulses and the effect of their behaviour on others, and have a capacity for control of those forces through the ability for reality testing.

4. Candidates should be able to express themselves in English.

5. Candidates should submit a letter of recommendation, reviewing both the candidate's potentials and limitations for becoming a qualified consultant or trainer.

6. After their application forms and letters of recommendation have been considered by the staff of the programme candidates will be informed if they have been accepted and details of the programme will be sent to those who have.
Continuing Education Events - a 3-Part Curriculum and/or 3-module design outline

Title: COPING WITH DILEMMAS AND PARADOXES OF ESTABLISHED PRACTITIONERS IN COMPLEX OPEN SYSTEMS

Participants: Managers, consultants, administrators, etc. who have (a) solid body of content knowledge and skills, and (b) experience in applying strategies and models in complex open systems, and (c) new questions about old assumptions.

I. CONTEXT:

Theories, strategies, models, and technologies are essential to practitioners of complex open systems change. They make possible the doing, managing, and testing which leads both to helpful transition processes and to new knowledge about what helps.

As we practice, however, each of us re-discovers a curious phenomenon: our methods and procedures have a peculiar power and also paradoxical and sometimes frustrating limitations. Certain of these limitations are bridged by new methods. Many of them--what we call the dilemmas and paradoxes of complex open systems--have no rational or systematic solutions. Yet, they remain at the core of the systems, of our professional practice networks, and within ourselves--real, inescapable, and, for most of us, not directly confronted within the training and professional events we conduct and attend.

These paradoxes and dilemmas can be approached through any of three doors, each of which eventually leads to the same room:

1. Through study of our own working experiences in complex open systems, consulting and strategy problems and case material;

2. Through exploration of ourselves as practitioners, what we do, how and why we do it;

3. Through the development and understanding of our professional networks--the core philosophies, ethics, values, etc. which bring us together in a collegial way.
This notion can be visualized as three interlocking circles, with a homeostatic core. The core constitutes a sort of scanning, balancing and optimizing within ourselves, exchanging with the environments, as we open one door or another and focus our attention on what we find.
II. DILEMMAS - ASSUMPTIONS - PARADOXES

A clear distinction should be made between these three concepts, each of which influences change and persistence in different ways.

ASSUMPTIONS

Assumptions are underlying premises which to an extent are roadblocks to basic change. They frequently are difficult to perceive, as the observers are part of the system. In a way, they are the system's "unconscious" part of the superego. Fundamental change from within can only become possible when these assumptions are made clear to a critical mass of constituents who, finding them "wrong," want to do something about them.

As typical examples of assumptions of Western industrialism, we could mention:

- that quality of life can be expressed in quantifiable terms, like growth, production of consumption

- that technology will bring about a better life for mankind

- that nature is there to be manipulated and controlled by man

- that human relations are a matter of transactions.

In organizations, McGregor's famous Theories X and Y have made us conscious of several fundamental assumptions, and have thus influenced a degree of change.
DILEMMAS

Practitioners find themselves repeatedly assaulted by conflicting needs, values and responsibilities, such as:

- How to exercise power, and at the same time, develop trust;
- How to discharge their responsibilities towards themselves, and at the same time, act responsibly towards the organization;
- How to act in appropriate roles and, at the same time, be a friendly, social person;
- How to maintain, simultaneously, trust as well as respect;
- How to provide stability and continuity to the organization and, at the same time, not pay too high a price on the personal level;
- How to be rational and also human;
- How to respect group norms as well as personal norms;
- How to exercise leadership as well as being a counselor, while maintaining an equitable balance between freedom and constraint;
- To maintain authority one must fill the emotional and material needs of one's followers, and at the same time, retain self-respect--carrying-out what is best for the organization;
- The balancing out of tradition and renewal represents a very dynamic dilemma.

The treatment of dilemmas requires constant self-scrutiny, where the capacity to cope with uncertainty and ambiguity is fundamental.
PARADOXES

Paradoxes are logical impossibilities which pester systems and which have intrigued mankind since "the beginning of thought." R.D. Laing, in his famous "Knots," cites a great number of paradoxes, such as:

'If you don't know you don't know, you think you know'
'If you don't know you know, you think you don't know'

or

'They are playing a game . . . if I let them see that I see the game, . . . they will get angry and punish me . . . so let me join the game of not seeing the game.'

(Not Direct Quotations)

A good example of a paradox at work is, for instance, not only must you work, you MUST also like and want to work, otherwise you will be punished. Or, the mother who insists that the child not only should study, but also should WANT to study. The order "to be spontaneous" is another classical example of paradox. We exhort that teaching should be very free, democratic, etc., but find ourselves trapped in coercive-persuasive schemes to let them "want to" learn.

Our typical approach to paradox is to write it off as illogical and therefore of no practical relevance. The point, however, is that paradoxes are important red flags of the system having locked itself into a trap. Watzlawyck, etc. have elaborated in interesting ways about paradoxes ("Change" by P. Watzlawyck, J. Weakland, and R. Fisch. W.W. Norton & Co., Inc.) and the fundamental importance of understanding their "function." The Theory of Logical Types (Whitehead and Russell) "whatever involves all of a collection must not be one of the collection" has been shown to be of help in understanding paradoxes.

Paradoxes give us the opportunity for breakthrough to "second order" change (meta-change, the change of change itself).
ASSUMPTIONS

Assumptions Re: Self as Practitioner in Complex Open Systems

- That a "planful interaction" with a continuously changing environment is preferable to a stoical persistence.

- That the "state of flux" environment is not going to stabilize (there is not going to be another Ice Age).

- That individuals/system's interaction with this environment is not totally reducible to a cognitive way.

- That goals or desired states are not stable destinations.

- That the system can (should) try to interact with this environment and influence its (system's) rate of change and gross direction of change towards (periodically revised) desired states.

- That my formulation of (a) desired state, (b) strategy, (c) intervention, and (d) interaction will be influenced by my philosophy, values, and priorities.

- That to function at all in complex open systems, one has to be continually learning and changing oneself.

These assumptions, dilemmas, and paradoxes may also be related usefully to:

1. the self as an established practitioner in organizations;

2. the self as an established practitioner in professions.

III.

The Designs which follow constitute three examples of the kinds of things that might be done by experienced practitioners who wish to examine their interlocking dilemmas and paradoxes of complex open systems by opening any one or more of these doors.
I. Membership and Purpose

This mode is for "established practitioners" who by reason of their experience and quality regard themselves as belonging to a "network." They would come together from time to time, in various forms, to continue not only with personal development, but push out the boundaries of their expertise and explore the frontiers of new developments in Open Systems.

Such a "network" must be equally concerned with advancing scientific knowledge and with Professional and Organizational aims.

The "established practitioners" can be regarded as coming from all spheres of society and organizations and their roles demand and offer opportunities for engaging with large systems and collaborating in their efforts towards self-review and change. The mode discussed is based on two designs:

a. An Action-Research approach already operating in Europe as a pattern for network/collegium development (Tavistock Center)

b. The Professional Development design and training programme evolved by Bridger/Markillie/Vansina.

II. Relevant Basic Elements in these Designs are as Follows:

a. The "network" of "established practitioners" need to regard their development as dealing with network/collegium issues, dilemmas, and paradoxes, as well as with advancing knowledge professionally and personally. The principle is that "established practitioners" must study and internalize their own systems and explore their working modes and problems as an essential basis for consultative and collaborative work with other open systems.
b. The design for the "established practitioner" mode must be regarded as a continuous process and not a set of courses, although from time to time, certain special workshops or courses may be designed to explore selected issues or dilemmas.

c. In general, meetings of the network or sections of the network will deal with

1) Exploring and collaborating on working situations in which colleagues are professionally and personally involved and which raise issues or dilemmas for them;

2) Problems and issues of public concern and scientific interest emerging from the above explorations;

3) Self-review not merely of the group and working processes in such activities, but of the implications for the network/collegium and systems-thinking in large systems change;

4) Developing other practitioners who are at other stages in their professional and organizational careers. This will include not only consideration of designs and programmes for such practitioner development, but also selection/appraisal issues and dilemmas.

III. A training design based on the above, but directed towards highly competent but, as yet, "unestablished" practitioners is attached as an appendix. (NTL Module)
DESIGN B

Participants: (Initial Offering): 8-10 experienced practitioners--by invitation of offering organization.

Duration: 5 days

Purposes:

1. Collegial event to help each person examine assumptions, paradoxes, and dilemmas in light of own experience (a back-home case)

2. Add to body of knowledge about practice theories of change in complex open systems.

What This Is Not:

1. A training event

2. A new technology conference

3. A case clinic re: methods or procedures.

Pre-Work:

1. List of your practice assumptions

2. A practice dilemma you wish to pursue

3. A case(s) illustrating assumptions and dilemma--work is progress

4. One personal objective for learning about each of above.

Design Strategy:

Provide ways for participants to share assumptions, dilemmas, and cases working towards:

1. Accomplishment of personal objectives

2. Explication of practice theories in use

3. Understanding of direction in which the profession is going.
POTENTIAL MOVEMENT:

Towards more focused core philosophy of practice in complex open systems.
ISSUES - AN EXISTENTIAL APPROACH

The goal of this learning opportunity is to have each of the participants experience themselves in relation to each of the major issues in the design. This is not training. It is expected that each of the participants are experienced practitioners and a further input of technology can be made without such a program. In short, we are no longer trainable. Rather, what we have here is an experiment in consciousness expansion. It is intended as a boundary experiment. The method for doing this is problem-sharing.

Method - A theme or issue is selected for each day. The entire day is spent on each theme. Each evening is spent in a consciousness raising group whose goal is to explore each of the issues in a free form discussion.

TOPIC

Basic Assumptions - The goal of this session is to explore some of the basic assumptions in the field.

1. Total Group brainstorming: list basic assumptions about:
   complex systems, the nature of humankind, the quality of our professional lives.

2. Split into subgroups: each group takes a class of issues and prepares the mass challenging argument against the assumptions.

3. Presentation to the total group.

4. Discussion: How I changed my mind.

Evening: Consciousness Raising.
TOPIC

Power - The goal of this segment of the program is to have each participant explore his/her inability to deal with power in its variety of manifestations.

Beginning:

1. What are the 3 situations which make me feel most at a loss as to what to do with power?
2. What are the commonalities in these situations?
3. What are the differences " " " ?
4. Pick the person in this group whom you believe is most different from you on this dimension; pair up.
5. Share the examples.
6. What are the commonalities/Differences?
7. Report to group: Partner's discussion.
8. Group Discussion.
9. Move around room to create socio-gram of attitudes toward power.
10. Sub-groups meet--what are similarities?
11. Prepare list: most uncomfortable questions to be asked of:
   a. own group
   b. others
12. Share questions.
13. Fishbowl--group by group

* Evening: Open Group Discussion

   How has my consciousness been expanded?

   How would I like my consciousness to be expanded?

* Open Group Discussions to take place every evening.
TOPIC

Dilemmas and Paradox:

Dilemmas

1. The most important dilemmas I face are: (identify 3)
2. Pick persons comfortable sharing these with.
3. Share--no advice; simply expand and explore examples.
4. My dilemma with this subgroup is: (identify)

Paradox

1. Theory session--paradox as opportunity for understanding
2. Selection of "negative" experiences by individuals
3. Each individual explores the "positive" aspect of the negative experience.
4. Meetings in three's to expand perceptions of the inherent paradoxes.
5. Sharing in the Group.

Evening: Consciousness Raising.

TOPIC

The Deadly Sins/The Nether Side of Humanism

AM
1. Generate List: Who Am I?
2. What are the (psycho-) logical poles?
3. What would I be like with the other side--who am I not?
4. Divide into two groups.

PM
5. Each group meets one hour, each person being the nether side.
6. Individual feedback from outside.
7. Group process.

Evening: Consciousness Raising.
1. The design is musical design.

2. The instructions to participants are to stay with the question, "What is the use?"

3. Once every 1/2 hour, a song is to played or a poem read.

4. One statement per person/per hour
   - Sinatra - "Is that all there is?"
   - Cummings - "What go him was nothing"
   - Thomas - "Do not go gentle into that good night"
   - Shakespeare - "Hamlet's Soliloquoy"
   - Jackson Browne "The Pretender"

Day's End: 30 minutes staring at wall

Evening: Consciousness Raising
THE WRITING CONFERENCE--
A MECHANISM FOR TECHNOLOGY TRANSFER

THE WRITING CONFERENCE:
A MECHANISM FOR TECHNOLOGY TRANSFER

by
Richard Beckhard

In August of 1977, twenty-two people--applied behavioral science practitioners and senior executives from private and public organizations from six countries--produced in three and one-half days a one hundred and fifty page book which included a theory of large systems change process; an analysis of the knowledge areas needed for managers and change agents; some thirty subject matter outlines; and twelve designs for education programs, including "in-house" programs, professional development programs, and graduate courses.

This article is about the process we undertook in producing these products and the possible applications of this methodology for hastening the dissemination of other research and knowledge.

A time lag always exists in any field between the discovery of new knowledge, its development, and its application into practice. Physical scientists have found ways of shortening this time gap, but behavioral scientists have not been so successful. This lag is due to many causes, e.g.:

1. Some researchers, perhaps reacting to the stereotype of working in the "soft sciences," are ambivalent about showing public concern for turning their results into practice.

2. Many practitioners in this field lack the desire and/or time to write; therefore, they don't.

3. For many practitioners, there is a proprietary interest in any new techniques or experience which they have developed that leads them to hold back from sharing.
4. Users, managers often do not see the relevance of the research and knowledge production in this field to the kinds of organizational problems they are facing. They think of organizational development as the same thing as team building, interpersonal competence improvement, etc., and tend to have difficulty seeing what this field of knowledge has to do with more effective management of an organization.

For these and other reasons, there tends to be limited interchange between researchers, practitioners, and consumers of knowledge—managers and executives. There is even more limited interchange on the subject of connecting the research and the application of the technology. When they do get together, there tends to be a sense of competition and territoriality. One finds a lot of protecting of positions, rather than significant desire to share.

It was my feeling that this condition is increasing in these times of increased environmental complexity, changing social values, and new roles for public and private enterprise, which place increasing demands on executives and organization leaders. The genesis of this particular project was a felt need by me, and by several colleagues, for knowledge dissemination in the area of managing large systems change. While journals, professional meetings and conferences are of use, none of these have done an adequate job of collecting and organizing the concepts and techniques of managing large systems change. There is no natural forum for bringing this material together. Practitioners in this field tend to be loners and entrepreneurs. At the same time, there is a significant
body of knowledge and practice which could, and we believe, should, be made available to a larger audience of practitioners and managers.

Based on some previous experience with book producing workshops, I felt we could achieve this technology sharing if we could bring together a mix of practitioners and executives/administrators who were concerned with managing large systems change. They should be from a variety of organizations, public and private, and from both the U.S. and other parts of the world, both developed and Third World.

I also believe that conditions necessary to achieve this result included:

1. A group of people who were mature and could handle conflict and stress.
2. People willing to contribute their thinking to a group product.
3. People with low needs for personal attribution or identification with a particular part of the product.
4. People who could work with a diverse group of ideas, approaches, and biases.
5. People who were not selling a package.
6. People who had design skills.

I contacted about twenty-five people from around the world; twenty-two accepted, and in practically all cases, were enthusiastic about the possibilities. There was, of course, considerable concern about whether it was possible in the limited time (three and one half days) to produce any meaningful product. However, based on blind faith and healthy curiosity, people were willing to try.
We brought together a group of participants from the U.S., Canada, England, Mexico and Venezuela. There were four female participants and fourteen males. The group included senior executives from four companies, a senior personnel officer from UNICEF, international president of a counsel of management associations, consultants in volunteerism, educational systems, government, national, local, agencies, and business and industry. Two people were working in country development for Third World countries.

Suffice to repeat at this point that the conference did produce a product—a one hundred fifty page book, including a list of subject areas to be considered in teaching large systems change and twelve designs for educational activities in teaching or transferring large systems change concepts and technology in a variety of settings.

Again, the purpose of this paper is to look at a technology transfer process with the particular conference as a case illustration. I want to explore some of the processes used in developing and managing a technology transfer project, given the conditions in a short period of time, a variety of resource inputs and interests and the need for a product.  

THE INITIAL CONTRACT

It is essential, I believe, to establish an appropriate "contract" between the participants and the conference members. Some of the elements of this contract are:

1. Some shared postures, including
   a. "second best elegance is good enough"
   b. pride of authorship is less important than collaborating in a group output.

---

Details on the product are reported in the book itself, which is entitled, "Explorations of the Teaching and Learning of Large Systems Change."
c. collaborative investment with other authors--practitioners--
is worthwhile.

2. Group conditions.
   a. there must be opportunities for all participants to influence
      the process
   b. there must be joint ownership of the product itself
   c. there must be a structure in management of the task that
      keeps the activity moving.

In contacting potential participants, I first discussed the reasons
and rationale for the conference and got their agreement on the purposes.
The specific product goals were presented to all potential participants and
agreed-to in advance. In this conference, there were three "product" goals:

1. A set of working definitions and posture statements about large
   systems and large systems change.

2. A list of content outlines for presenting core content that should
   be considered in teaching this field.

3. Sample designs for:
   a. in-house administrative and management development programs
   b. public programs for managers and administrators
   c. courses for graduate students
   d. professional development programs.

Participants were asked to think about the three tasks and to
bring appropriate materials.\(^2\) Participants were also sent a tentative

\(^2\) In addition, participants were sent a draft for a new book that Reuben
Harris and I had just produced called, "Organizational Transitions: Managing
Complex Change." The book was sent with the purpose of providing a forth
starter around the kinds of subjects that might be explored in the conference
itself.
conference schedule.

At the beginning of the conference, the contract was reviewed and re-established. The opening of the conference was a description of the purpose of the conference—that is, the need for such a conference in this social context; the hoped-for output of the conference—a book which would include a statement of issues, a series of content outlines, and a series of designs; the ownership of the product—the product would be produced by all participants without attribution, would be owned by all of us. Decisions whether to publish formally or to distribute xeroxed copies would be made by us at the end of the conference. The product being in the public domain was a "given."

One of the key learnings which might have applications for others involved in setting up a technology transfer conference is to be sure that the consensus achieved in setting up the activity is reaffirmed when the participants come together. As I will discuss shortly, the first session illustrated dramatically that, in addition to the stated purposes and products about which we had agreement, there was an even prior need to develop a values-oriented posture statement about why this whole field is relevant in the first place. The redesign of the activities in the conference to accommodate this priority need was one of the major early decisions of the group.

In summary, the contract needs to be explicit, continually reviewed, and not taken for granted before the conference itself.
GROUP CONDITIONS FOR EFFECTIVE WORK

There are a number of conditions that must exist in a conference of this kind if the many different resource people are to synergize their efforts quickly, and if the product is to be more than the sum of the parts. In this conference, there were two conditions that were planned and one that emerged.

1. I was sure in advance that even with the short time available to produce the products, it would be essential to take the time at the beginning of the conference to get commitment and agreement by all participants to the project mission and tasks and to the working methods. Passive participation would not be appropriate.

2. It will be necessary for each participant to understand the types of resources that the other participants brought, in order to have adequate information for selection of subgroups to perform the various types of tasks. I felt that it was particularly important to avoid "affiliation" as the only--or even the major--criterion for work team selection.

3. There will be a need to get acceptance to strong procedural leadership, if the conference is to be managed in a way that will assure product results.

The fourth, unanticipated condition, was the need to really re-review the basis of the conference, the various values and biases, and priorities of relevance that different people in such a conference would naturally bring.
Fortunately, in this conference, since we had planned to take the time to make sure that the earlier dynamics were operating, we had the time to deal with the new and priority issue. This paid off handsomely in the result.

In pre-planning the conference, I had thought that we could get a fairly quick agreement around the working definitions of large systems and large systems change, which could then be used as guidelines in selecting the content topics. As the group began to talk, it became very clear that there was a prior need to debate people's understandings, attitudes, and biases around the whole concept of large systems change as a discrete technology or body of knowledge. There were serious questions around whether there was such a thing as "large systems change" or whether this was just another label for organization development (OD). Was there really a technology in this area? Is this really just a device for self-aggrandisement of a group of practitioners who have a different "product"? Does this have application broadly or only in industry? What relevance does this have to the growing problems so dominant in Third World countries today? - What values are implied, appropriate, and/or necessary to this field?

This discussion took the better part of the first morning and the early part of the first afternoon--time that originally was budgeted to moving into definitional tasks and developing candidates for subject matter outlines. However, what happened was that from the discussion, the group got ownership of the entire conference. We chose to legitimize the questions that had been raised and to redesign the activities in the conference, so that among us, we could be both working on these fundamental issues and at assigned times, be working on technology production.
The group decided to divide our resources so that some people would be working on developing this posture statement, while others started on the tasks of identifying core content subjects. Thus, what we developed was two parallel subgroup tasks. Membership in the subgroups were based on very different criteria. The subgroups that were going to be working on subject areas I had previously allocated, with provisions for a review by the group. I had used criteria that had mixed practitioners and users and allowed the subgroups to have in them resources which would assure that any subgroup could take any four or five content areas, and be sure that they had both theory and knowledge, and application, built into the subject outline. The members of the conference who felt most strongly about the issue questions became the basis of a task force, working to produce an issue statement, and, in fact, the introduction to the book, and one of its most important chapters. We decided that, in order to manage the clear conflict in priorities and the differences in priorities, the sensible thing to do would be to run in parallel for a while, and come together to check progress fairly frequently. Therefore, what happened was that the group of people who were particularly concerned with the issues questions produced a first draft statement and posture, while the rest of the membership began initial work on the subject matter outlines. Prior to that, the entire group produced a list of candidates for subject matter outlines. When we broke up into the parallel groups, everyone owned the subject outlines, as well as the issue statement.
We then ended up with three subgroups working on early development of content outlines, and a fourth group producing the issues. When they reported back, we then were able as a total group to develop a definition of complex systems, and of large systems change, to which the entire conference could be committed.

**STRUCTURING THE CONFERENCE**

To begin, a few general precepts that guided this and other conferences in which I have participated.

1. There needs to be different configurations—general sessions, subgoups, etc. for different types of tasks. It is absolutely essential in this type of technology transfer conference that there be some subgrouping to produce first drafts and working papers; sessions for review; sessions for looking at how people about the activity; action planning and redesign sessions.

2. There also needs to be a mechanism for redesigning the structure as issues arise which involve producing new tasks or new configurations of participants.

The concept "form follows function" is very applicable to this type of conference. In order to give the reader some flavor of a particular example of the above, I will review briefly the design of the conference (which was established in advance). I will then try to show what changes were made and why.
## PRE-CONFERENCE DESIGN

<table>
<thead>
<tr>
<th>TIME</th>
<th>TYPE OF SESSION</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>MONDAY</td>
<td></td>
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<tr>
<td>Morning</td>
<td>General Session</td>
<td>1. Review Contract</td>
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<td>2. Review Conference Plan</td>
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<td>3. Housekeeping</td>
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<td></td>
<td></td>
<td>4. Review 3 tasks</td>
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<tr>
<td></td>
<td></td>
<td>a. definition-setting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. content production</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. designs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. work on definitions*</td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
<td>Informal</td>
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<tr>
<td>Afternoon</td>
<td>General Session</td>
<td>1. Produce definitions</td>
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<tr>
<td>(2 hrs.)</td>
<td></td>
<td>2. Brainstorm for content</td>
</tr>
<tr>
<td>Late</td>
<td>Content Subgroups</td>
<td>3. Organize subgroups</td>
</tr>
<tr>
<td>Afternoon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cocktails &amp;</td>
<td></td>
<td>No Agenda</td>
</tr>
<tr>
<td>Dinner</td>
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<tr>
<td>Evening</td>
<td>General Session</td>
<td>Review Progress</td>
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<td>(1 1/2 hr)</td>
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(PRE-CONFERENCE DESIGN, continued)

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<tr>
<th>TIME</th>
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<tbody>
<tr>
<td><strong>TUESDAY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Morning</td>
<td>Groups</td>
<td>Content production</td>
</tr>
<tr>
<td>11-12 AM</td>
<td>General Session</td>
<td>Review content outlines</td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
<td>No Agenda</td>
</tr>
<tr>
<td>Afternoon</td>
<td>General Session</td>
<td>1. Review designs needed</td>
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<td></td>
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<td>2. Develop guidelines</td>
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<td></td>
<td></td>
<td>3. Issues in designing</td>
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<tr>
<td></td>
<td></td>
<td>4. Develop design subgroups</td>
</tr>
<tr>
<td>Late Afternoon</td>
<td>Design Subgroups</td>
<td>1. Work on designs</td>
</tr>
<tr>
<td>Dinner</td>
<td></td>
<td>No Agenda</td>
</tr>
<tr>
<td>Evening</td>
<td>Design Subgroups</td>
<td>Continue to work on designs</td>
</tr>
</tbody>
</table>

| **WEDNESDAY**   |                     |                                                 |
| Early Morning   | Design Subgroups    | Continue to work on designs                    |
| 11-12:30 AM     | General Session     | 1. Review designs                              |
|                 |                     | 2. Define further work                         |
| Lunch           |                     | No Agenda                                       |
(PRE-CONFERENCE DESIGN, continued)

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<th>TIME</th>
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<tbody>
<tr>
<td>(WEDNESDAY cont.)</td>
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<tr>
<td>Early Afternoon</td>
<td>Subgroups</td>
<td>Conclude work</td>
</tr>
<tr>
<td>Dinner</td>
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<tr>
<td>Evening</td>
<td>General Session</td>
<td>1. Review designs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Begin to develop book outline</td>
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**THURSDAY**

<table>
<thead>
<tr>
<th>TIME</th>
<th>TYPE OF SESSION</th>
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<tbody>
<tr>
<td>Morning</td>
<td>General Session</td>
<td>Review outline</td>
</tr>
<tr>
<td></td>
<td>Subgroups</td>
<td>Clean-up</td>
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<tr>
<td></td>
<td>General Session</td>
<td>1. Decisions on follow-up:</td>
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<tr>
<td></td>
<td></td>
<td>a. publishing</td>
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<td>b. organization</td>
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<td>2. Evaluation</td>
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<td></td>
<td>3. Adjourn</td>
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</tbody>
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Let me review quickly, using the schedule above, the rationale of types of groups and groupings as it related to the types of tasks.

In the first general session, it was important to begin to build a group, to reaffirm or redefine objectives and priorities, and to get reapproval of the tasks. For this, the entire population needed to be together.

The original next task, providing definitions of large systems and large systems change, again was one that needed everyone's input, although it might be possible, and in fact, was after an extended discussion, for tasks forces to write drafts which were then brought back to the body as a whole for modification and approval.

On the task of producing content outlines, everyone's input was needed in the identification of the different types of content, so that we got as big a list as possible to start with. We also needed to develop some kind of consensus around prioritizing and organizing the brainstormed list. This also required either the total group or a task force drafting the changes and bringing them to the total group. We chose the former model.

In the production of the content itself, one assumed that there would be natural leanings of individuals towards some particular subject areas which they would prefer to work on--ones with which they were familiar. This would probably particularly be true of the practitioners. Therefore, the rationale for
for subgroup organization was to put the consumer people mixed in with the practitioners. The consumers' resource was to provide reality testing, practical cases and examples, etc. It was important that this part of the work was produced with mixed groups, rather than more homogeneous ones.

On the other hand, the group that emerged to develop an issue and posture statement was a self-selecting group of people who represented a variety of positions on a spectrum, but all held strongly. The model we used was one of the forced collaboration activity—bringing together the range of positions and the high commitment to relevance of the issue statement for a number of people who then could be required to produce a product.

Because of the fractionizing of tasks and the high energy involved in doing tasks in short time frames, we felt it necessary to frequently reconnect as a community, just to get some picture of progress on tasks. There are several reasons for such a general session. One is to provide individual participants some continuing sense of the whole and some connection between what they are doing and the end product. Another is to provide for the conference managers a quick feedback of information about where the various subparts are, in terms of where they are supposed to be, or committed to be. So that, "steering" is based on up-to-date and thorough data.
In the design groups, where we were producing designs for several different types of programs in several different settings, the groups were self-selecting by interests and experience. The selection was done in a general session.

The only criteria that we agreed as a group was that, again, there would be both professional practitioners and users in each of the groups, to assure continued connection between the knowledge and the application.

In addition to general sessions for review, we found that there was a continuing need for sharing information about how people were feeling about the entire event. With the heavy workload and the limited free time, people grabbed whatever time there was (cocktails, dinner, breaks) to make the myriad connections that such a group of people would be expected to want to make at such a conference. No one went to bed early.

One other significant change from the plan to the action was the out-of-phase quality of the different tasks. From the early general session when the new subgroup on issues was created, it became apparent that we would have to work in a less neat logic than I had hoped for, and would have to divide our resources and work on different tasks at the same time. This meant, in effect, that while some people were producing content outlines, others were working on issues. Some subgroups working on one set of content outlines finished ahead of others, and members were therefore free to join, or take another piece of work. We
experienced the same thing in the design task.

When it came to developing design subgroups, we first had to make a list of the types of designs we wanted. As a community, we agreed upon three in-house programs of varying lengths and types, two graduate course, three professional development programs, and a public one-week program for administrators and leaders.

We felt that breaking into that many different subgroups would not make optimum use of resources, so the total group selected those designs that we would want to work on first, and broke up into three subgroups to work on those. The issue subgroup completed its work, and members were able to join various design groups as they finished. What this meant in practice was that the groups were in different places, both physically and in task production. It also meant a much higher degree of keeping track of and coordinating, than was originally anticipated.

Another change from the plan to the practice was moving the conference evaluation up into Wednesday night, rather than at the end of the conference. This was partly provoked by the necessity of two members leaving early, but more significantly, because people felt a need for a change from the work tasks and were ready to share and were desirous of sharing some of their feelings about the whole event.

This was a meaningful evening session, in which we were surprised at the impact that the conference had upon each of us as individuals. We were perhaps even more surprised at what
we had been able to produce in that short period of time.
I would say that one consensus of output is inherent in the writing of this article—that there is a real opportunity for producing material in a short length of time, which can be made available to more people, perhaps years earlier.

We found one other form of structure of general session was necessary, and this was a decision-making meeting around, in this case, next steps—publication, follow-ups, bibliography preparation, etc. The other set of decisions was really around a new contract. People had committed to attend the conference, to participate in it, to help produce the product; nobody had made a prior commitment as to what to do with their energy after the 3½ days. The contract was that they would receive copies of the finished product at this time.

We agreed to the need for a working session to plan what to do with the product and the output. The group agreed on a process and procedure for immediate follow-up, editing, further contributions by members, and development of a second draft. We also agreed upon a process for deciding by mail whether, after the second draft, we would submit the manuscript to a publisher or disseminate it through reproduced copies to made available to each of the members. At the time of this writing, that decision has not been made.*

* The decision will be made by the fall of 1978 and meanwhile, there will probably be a working paper from the MIT Sloan School of Management, which can be purchased in limited quantities. When a decision has been made as to publication, it will be announced in this journal. (Editors)
In summary, persons anticipating a technology transfer conference should think carefully around the types of tasks to be done, the output for each task, the input of resources necessary. Wherever possible, parallel work is desirable in the sense that there is so much to do, that one can move the entire project forward faster if staff work is being done by several subgroups. At the same time, it is critical to maintain a good communications pattern and system between the subparts of the conference group. Review meetings, though short, should be frequent.

It is also important that various types of conflict and various pet schemes, etc. be noted and supported, insofar as is possible, but not at the risk of producing the agreed product.
ISSUES IN MANAGING A TECHNOLOGY TRANSFER CONFERENCE

As was said earlier, it is critically important that such a conference be actively managed. As I am sure the reader can see, just keeping track of the various activities is almost a full-time job. In addition to tracking the work, there is a need for tracking the subgroups, the motivation, the quality of the work, the morale of the conferees, the workload on the administrative and support groups and their morale, the need for review and evaluation or redesigning and replanning.

Some of the issues involved in managing the conference are:

1. There must be clear and continued focus on task output.

2. There must be awareness on the part of the management and the group, of both the group processes and interpersonal processes, as well as the tasks. There is an issue of what is the minimum time to be spent on group and interpersonal processes.

3. The decision management and conflict management load should be consensual. When a group of high-energy and high-talented people are brought together, it is essential that a variety of inputs be introduced and be allowed to develop.
It is equally essential that decisions be made on the tasks. This requires fairly active chairmanship around what issues consensus or autocratic decisions should be made.

4. Issues around conflict.

There are a variety of conflicts that inevitably emerge in such a meeting. There are conflicts over ideas, positions, values, stauts, etc. There is a need for the leadership to constantly assess and to report in general what type of conflict is going on. To illustrate from this conference, at the first session, it emerged quickly, as I have said before, that there was a strong need among a number of people for focusing more on the issues of the relevance of large system change than on the stated purpose of the conference of producing subject outlines and designs for teaching large systems change. This is a clear conflict over priorities and could have been polarized. What we were able to do was to decrease the tension by allowing the new issue to come in and be accepted and its relevance recognized, and by then, making a decision to work in parallel, based on different priorities of different people, certainly in the earlier part of the conference. We were then able to bring people back to work together, particularly in a design stage. It was less important that everyone participate in all parts of the subject outline task in the early part of the conference, than it was to have everyone's ideas and input in the designs later.
As could be expected, there were different types of participation patterns among this group of entrepreneurial types. There was a need for fairly strong chairmanship to limit the "speeches", to make sure that all parties are heard from, and to keep the group from going too far off an agreed track. This, therefore, involves some group management—identification of what the agenda of each meeting is, and some monitoring of the activities to stay on the agenda. To legitimize the conflict of ideas and priorities & to find ways of (??)______

5. Feedback

It is essential that feedback be developed and that it be of several kinds.

a. the chairman needs feedback on how each of the subgroups and/or tasks are progressing.

b. the participants need feedback on what is going on in other areas, so that they have some sense of connection to the total effort

c. the administrative people need feedback and need to give feedback about the transfer of raw product from groups to paper, for the final product.

d. the group needs feedback on the general tone and feelings about the conference.
At this conference, we used the formal (??) sessions for much of the feedback, we used me as a floating chairman to report what was going on in other parts of the conference between groups and in review session. We used the mealtimes to check out informally how things were going and to do some replanning and redesigning and regrouping. The administrative secretary performed an extremely important role in consistent sensing of the conference, and of the participants.

6. Physical location is extremely important. It should be isolated with minimum disturbances and no conflicts of activities. The setting of this conference was M.I.T.'s Endicott House, in Dedham, Massachusetts--a rural mansion. Services and amenities were excellent; we were able to concentrate on the work at hand.

7. Constantly test for the commitment of participants to the colleagueal product.

8. One needs to be aware of the potential stimulation and personal rewards in this kind of a group effort that are interdependent but very different from the task results. Although we had all agreed to focus on the "what should be taught" product, when we actually sat together, some deeper, underlying substantive issues of values, integrity, and this whole field assumed priority. Perhaps the most stimulating part of the conference was the learning and sharing and disagreeing and exploring that the whole group
did and what we were really talking about. In addition to a lot of clarification, these discussions produced stronger cohesion within the total group. They also established significant criteria against which design and content outlines could best be developed. I am convinced that the subject outlines are better because of this.

There were strong needs that diverged from the original stated tasks. Ways needed to be found for getting the inputs of people who had these strong needs into the conference. At the same time, it was necessary to allow some of these needs to be dealt with outside of conference general session time. For example, a sub-group of participants were more concerned with the substance and value issues around large systems change than in the teaching and learning issues. They became a sub-group and produced the material for the advanced practitioner programs in which this type of content would be highly relevant.

9. Participants have to have a commitment to do some of the follow-up work, even though it is a minimal commitment, if momentum is to continue.
IMPLICATIONS

As I said at the beginning of this article, there is a tremendous amount of knowledge being produced in the behavioral sciences; there are new techniques emerging, new practices and theories of practice, that for one reason or another remain the property of the inventors or practitioners in our field. One hesitates to guess how many times the wheel has been invented.

With the increasing need for new knowledge and technology applications in our organizations throughout the world, it seems that the quicker we can move from the discovery of knowledge to the application of the knowledge, the better for all concerned. Clearly, "large systems change" is not the only field where this applies.

If practitioners and other applied behavioral scientists could agree to be perhaps a little less elegant, a little bit more willing to focus on a group product, a bit more willing to put their energy together toward getting the information used, I believe a great deal of knowledge in our fields would be put to use more quickly.

One person at the conference said that it would have taken three years to achieve in print what we achieved in three days. The opportunity for getting information shared between researchers, teachers and practitioners and users is limitless. I believed this before the conference, I believe it more strongly after the conference. I feel supported in this belief by those participants who attended. Perhaps the readers of this piece will also find this true and will take it further in other activities. I certainly hope so.
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