HANDBOOK OF THE UNDERGRADUATE CURRICULUM

A Comprehensive Guide to Purposes, Structures, Practices, and Change

Jerry G. Gaff,
James L. Ratcliff, and
Associates

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CHAPTER THIRTY-ONE

STRATEGIES FOR CHANGE

Jack Lindquist

We carry in our heads, and lower, basic notions about how to bring about change. Some of these models, or strategies, are rather simple-minded, such as those based on carrot-and-stick assumptions: they promise to provide more of what the target of your change efforts wants, or they threaten to take away some source of security or status. Some are elaborate. Orchestrating a major change in the curriculum or a Total Quality Improvement initiative takes extensive understanding and skill to pull off.

Basically, however, four very different assumptions about what leads people or organizations to change are represented by four rather different change strategies. I call them the Rational Planning, Social Interaction, Human Problem-Solving, and Political approaches to planned change. The first three emerge from the seminal scholarship of Havelock and his associates (1971) at the University of Michigan's Center for Research on the Utilization of Scientific Knowledge. They

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Note: Before his much-too-early death, Jack Lindquist was a pioneering scholar of the fine art of changing colleges and universities. The editors believe that the first chapter of his pathbreaking book, *Strategies for Change* (1978), remains the best overview of the theory of planned academic change. As a tribute and memorial to Jack, we have decided to reprint it posthumously; it is a fitting way to keep his ideas alive and available to those who seek to improve undergraduate education, one of the passions of his life. To make the text more contemporary, we updated the examples and removed references to dated material, but virtually all his own words remain.

observe that all change strategies emphasize one of three particular aspects of the basic communication act: I create a message, which I deliver in such a way that the receiver (another person or a whole organization) accepts it and acts on it. One set of strategies, which Havelock calls Research, Development, and Diffusion (R&D), and which I call Rational Planning, concentrates mainly on developing a terrific message. Another set, called Social Interaction or Communication of Innovations, emphasizes the process and factors by which the change message gains the attention and acceptance of the receiver. It focuses on the social act of communicating new notions. A third group of studies and attendant theory, called Problem-Solving by Havelock, focuses upon how the receiver comes to feel the need and then the willingness to change. The Political model dwells on this same part of the communication act, but with quite different assumptions about how to generate change than those of the Problem-Solving model.

Havelock and later theorists see effective planned change as a combination of these approaches. But the separate models are well worth elaborating, for they represent strong differences in the ways academic and other changes are undertaken.

The Assumption of Rationality

Since we change on the basis of reason and evidence, the best way to obtain alterations in attitudes and behavior is to invest in systematic research and development of new knowledge, new practices, new products. Apply a rational process to attain a rational end. If the research is correct and the development sound, the proposed change will sell itself. That is the assumption that leads to heavy investment in basic and applied research and to considerable investment in the formulating, testing, and packaging of innovations based on research. Watson (1972) found these assumptions at work in the R&D efforts of AT&T Corporation. Clark and Guba (1965) found a similar rational sequence at work in the development and diffusion of educational innovations. Guba (1968) particularly stresses development, "which is at the heart of change, for while research may make change possible, it is development that actually produces an innovation that may be adopted."

Havelock and others identify five basic assumptions about change that underlie the Research and Development strategy:

> First of all, the R&D model suggests that dissemination and utilization should be a rational sequence of activities which moves from research to development to packaging before dissemination takes place. Secondly, this model assumes that there has to be planning, and planning really on a massive scale. It is not enough that we simply have all these activities of research and development; they have to be coordinated; there has to be a relationship between them; and they have to make sense in a logical sequence that may go back years in the evolution of one particular message to be disseminated. Thirdly, there has to be a division of labor and a separation of roles and functions, an obvious prerequisite in all complex activities of modern society, but one that we sometimes slur over. Fourth, it assumes a more or less clearly defined target audience, a specified passive consumer, who will accept the innovation if it is delivered on the right channel, in the right way, and at the right time. The particular process which is supposed to assure this happening is scientific evaluation, evaluation at every stage of development and dissemination. Fifth, and finally, this perspective accepts the fact of high initial development cost prior to any dissemination activity, because it foresees an even higher gain in the long run, in terms of efficiency, quality, and capacity to reach a mass audience. [1971, p. 5]

We can see around us plenty of examples of the rational change model. Cars and planes and other material products are made and sold that way. In postsecondary education, self-instructional systems such as computer hardware and software manuals are common. The development of instructional materials such as movies or videocassettes, or even the creation of whole televised courses such as those developed by the Annenberg project of the Corporation for Public Broadcasting, are other examples. The U.S. Department of Education has employed R&D assumptions in supporting an array of university-based centers to conduct research on various aspects of education, evaluate innovations, and then disseminate the results to supposedly eager recipients. Most foundations take Guba's advice and invest mainly in the development of model programs, which others supposedly will learn about and adopt.

Local schools, colleges, and social agencies also use the rational model, although high investment in R&D is usually not part of the scheme. Change in such organizations is often supported by encouraging individuals or committees to formulate proposals based on the best reason and evidence available. Review bodies, whether collegial governance or administrative heads, then judge these proposals and decide for or against, ostensibly on the basis of rational considerations. Although we all know too well that good reason and sound evidence are not the only grounds on which decisions to change are made, the formal system, the one we put on organization charts and admit in public, stresses the rational model. We formally act as if we all approach change rationally. Especially in universities, which Parsons and Platt (1973) claim are the fiduciary institutions for "cognitive rationality," it is hard to admit other approaches. Proponents of this approach claim that administrators need to establish more rational research and planning sequences, whether it involves assessment of student learning or preparation of

strategic plans for an institution. Certainly, there should be participation by those whose attitudes and behaviors are supposed to change, particularly faculty and students in colleges. But the emphasis in time and dollars is on generating an impressive change message.

Research and theory, however, have found the rational model inadequate in several respects as a way to go about the introduction of change in human attitudes and behaviors, the changes at the heart of academic innovations. In the main, criticism has focused on the isolation of R&D from its audience, the people who supposedly are going to use these newfangled ideas or behaviors. Rational systems may be good ways to research and develop change, but they do not explain all the motivations and activities by which those new things get used (Gross, Giacquinla, and Bernstein, 1963).

The dynamics of local implementation are especially critical to the actual use of planned change (Zaltman, Duncan, and Holbeck, 1973; Berman and McLaughlin, 1975). Organizations, like the individuals and groups in them, do not operate simply as rational systems thoughtfully buying the latest innovations. If a change proposal threatens individual or group security and status, it is in trouble no matter how elegant its reason. If faculty and students cannot do the new behavior, or are not committed to it, watch out. Informal systems of communications and social status may be far more potent than formal communications in persuading members whether or not to do the new thing. Certainly reason and evidence are part of the change equation. One will not get very far on lousy evidence and flimsy reason. But as many would-be curriculum reformers can attest, an adequate strategy for change must include much more than clear and compelling reason.

Social Interaction

We live in social networks. One connects us to professional colleagues; another unites us with family and friends. Through these connections we get news and views about what is happening in the world around us. We gain security, status, and esteem from these informal systems, just as we do from formal organizations. Some researchers maintain that these contacts are essential to change, for new ideas get communicated and validated through social networks; agricultural extension agencies are the organizational units that best represent this approach, in contrast with research and development centers.

Rogers, one of the originators of this school of thought, and his colleagues (Rogers and Shoemaker, 1971; Rogers, Agarwala-Rogers, and Lee, 1975) find that most empirical studies of innovation identify a few consistent types of "potential

adopters" and a few specific stages in the adoption of new ideas, practices or objects. In every organization or community, there will be a few innovators, eager to try new things and usually uncomfortable with the status quo (which in turn is uncomfortable with them). A second group, somewhat larger than the first but still rarely more than 12 percent to 15 percent of the organization, are the Early Adopters, usually cosmopolitan in contacts and open to new ideas, though not as eager as the Innovators. Following in sequence of adoption is the Early Majority, making up perhaps a third of the population; these are the cautious followers of the Early Adopters. Then comes another third, the skeptical Late Majority, which wants pretty impressive evidence that this new practice is possible, effective, and rewarded before it ventures a try. Finally, about 15 percent of most systems will be made up of Laggards, who probably will resist change until everyone else is already doing the next new thing. Each successive group needs substantially stronger persuasion in order to change. Researchers also find that while change messages delivered through impersonal channels (books, articles, formal addresses, memoranda, written proposals) can persuade Innovators and Early Adopters, as well as increase awareness generally, later adopters need more personal communication and contact in order to be willing to change. Although it can take a short time for a change to move from one category of adopters to another, several years is more common for new educational behaviors and several decades for new ideas such as progressive education. Clearly, the change advocate who thinks he or she can gain acceptance and use of new human behaviors or ideas by impersonal communication over a short period of time to a whole organization is in for bitter disappointment unless the group can be coerced and carefully controlled. College authorities just do not have that leverage over their semiautonomous professors. Frankly, Ford doesn't have that kind of leverage over assembly line workers, either.

Innovation diffusion researchers find that the best route into an organization or community is through Opinion Leaders, those persons (or institutions) to whom others turn for advice. As Hovland and Weiss point out, the most persuasive communicators are those whose expertise, experience, or social role establishes them as credible sources of information. Harvard University is an institutional opinion leader on almost anything. I found in a state university that a few professors and administrators rated high by their colleagues in academic expertise and experience and often placed on key academic committees were most frequently asked their opinions on current proposals for academic change. In fact, I saw faculty senate meetings turned toward a decision by the remarks of key opinion leaders while conducting research for my dissertation (Lindquist, 1972). Effective change strategists find out who the opinion leaders are, then seek to persuade them to persuade others.

Social interaction researchers also find that certain attributes of innovations besides impressive reason and evidence influence their adoption. Does the innovation have clear *relative advantages* for our particular situation, whether those advantages are better ability to meet institutional objectives, reduced costs, higher status, or greater enjoyment? Is the innovation *compatible* with our values, our structure, our skills and styles? Is the innovation *divisible* so that we can adopt only the parts we like, or adopt in some easy sequence, rather than buying the whole change at once? Is the new thing *simple* to understand and do? Does it involve *low risk and low uncertainty?* Can we *observe* it and *try it out* so we know better what we are getting into? Whether it is a professor's lecture or a proposal to change the whole curriculum, these ingredients will be important. Yet it is difficult to assess the relative advantages of academic innovations. They often clash with traditional academic values and structures. Professors and students rarely are trained to use them. Often, a whole, complex curricular reform package is laid on the faculty at once, with little promise that it will reap positive rewards. And such proposals are usually paper descriptions, not visible experiences that faculty can see and try before accepting. Small wonder significant academic change is such a rare occurrence.

Resolution of Human Problems

Parsons (1974, p. 271) has noted that "institutionalization [of a change] is imbedded in the non-rational layers of motivational organization. It is not accessible to change simply through the presentation to an actor of rational advantages in the external definition of the situation." Hagen (1970, p. 17) adds that as social change theory matures, "the units of analysis of society will not be roles, or persons, or social units. These are useful concepts only in the presentation of a descriptive framework. Rather, the units will be, within personality, such qualities as need for dependence, need for autonomy, and intensity of anxiety." There is, in short, a psychological dimension to change to which neither the Rational nor Social models do justice. Rational planning and social interaction do form part of the equation, but, as Watson (1972) observes, underlying interests, habits, fears, and prejudices compose the bulk of the iceberg. We often pretend that the essential aspects of planned change are out in the open, in our plans and public discussions. We know better. And if we seek a strategy for intentional change that will work, we need to get at these hidden sources of resistance. Human Problem-Solving approaches offer some assistance.

The general strategy is familiar enough to most people—change is a process of solving problems. Something is not going right, so we diagnose the problem, set some objectives, find a solution, make a decision, implement it, and evaluate

its worth. Simple. It really is the Rational approach. But not if the problem is my need to have control, your fear of a change that may endanger your security, or our general distrust of one another. Then, say advocates of Human Problem-Solving strategies, we need skilled intervention. We need someone or some process that can help us confront and reduce these hidden obstacles to change. Intervention may come in the form of leadership training (Blake and Mouton, 1969). It may involve building an effective problem-solving team (Sikes, Schlesinger, and Seashore, 1974). It may focus on the department (Boyer and Crockett, 1973) or on the relationship of the whole organization to its environment (Lawrence and Lorsch, 1969). Some intervention tactics, such as group therapy or role-playing, are quite psychological in their focus (Bennis, 1969). Others, such as survey research or focus groups, with appropriate feedback of the results, are more sociological (Bowers, 1973). But all aim to help us deal with the human resistances to change that we may otherwise avoid.

The Human Relations school of business administration, from Elton Mayo and Chester Barnard in the 1930s to Rensis Likert and Chris Argyris in the 1960s and 1970s, has used this strategy extensively in efforts to improve the functioning of business and industry. Such persons as Ronald Boyer and Walter Sikes have applied this general notion, called "applied behavioral science," to college and university change. In his synthesis of the literature in this field, Havelock and his associates (1971, p. 13) identify five basic tenets of this approach:

> (1) That the users' world (the person who is to adopt a new idea or practice) is the only sensible place from which to begin to consider utilization; (2) that knowledge utilization must include a diagnostic phase where user need is considered and translated into a problem statement; (3) that the role of the outsider is primarily to serve as catalyst, collaborator, or consultant on how to plan change and bring about the solution; (4) that internal knowledge retrieval and the marshalling of internal resources should be given at least equal emphasis with external retrieval; and (5) that self-initiation by the user or client system creates the best motivational climate for lasting change.

There frequently also is an assumption that collaboration and openness, rather than competition and closedness, are preferred ways to behave. Consensus is sought over majority rule or authoritative decree. Those who must carry out the charge need to own it as their solution to their concerns. Trust between the persons attempting change and the people to be changed is deemed crucial to genuine change. In all these assumptions, you can see the influence of humanistic psychology. Essentially, applied behavioral science takes a clinical model and applies it to groups and organizations.

This strategy for change is far more controversial in colleges and universities than R&D or Social Interaction, if for no other reason than that it probes sources of resistance we prefer to leave buried. Also, because it focuses at least part of its attention on our emotional needs, it conflicts with the claim that academicians are the protectors of *cognitive rationality.* We would like to think we are above all that. Even if we are rather irrational at times, we prefer not to admit it. Do bankers admit they sometimes lose things? Still, applied behavioral science is beginning to be used in postsecondary education. If Parsons and Hagen are right, we will not get very far toward effective strategies for change unless we face the human barriers to change that human problem-solving interventions confront.

The Political Approach

If we follow the Rational model, the route to change is to build and argue an impressive case. The Social strategy takes that case, puts it in terms attractive to its audience, personally introduces it to Innovators and Opinion Leaders, then, through them, to their various reference groups. The Human Problem-Solving path reduces the resistance to change within us and makes change our solution to our concerns. All well and good. There is much to learn from the experts in these three general schools of thought. But what if Laggards block the road, blind to our eloquent presentations and determined to let no touchy-feely interventionist get into their locked closet of fears, prejudices, and selfish desires? Not a few deans, members of curriculum committees, or faculty members have been characterized as obstructionists by those who want to turn their heads in new directions.

The most common answer is political power. Build coalitions among influential persons and groups, then seek an authoritative decision that requires others to comply with the new idea, employ the new behavior, or use the innovative product. Easton (1965) gives us a picture of the political process that depicts the course of intentional change in political systems, and organizations such as colleges certainly do have political systems. First, some range of gnawing concerns, some *wants,* arise. Things are not as they should be for some persons in a community or with influence over it. Unless these various wants are felt strongly by influential people, and the people who hold them bring together various subgroups, no change is likely. People are usually upset about something or other but not sufficiently so to press authorities into a decision. But if the income/expenditure gap widens alarmingly or if students become agitated over a racist or sexist event on campus, a demand to rectify the situation may be in the offing. Then, if those concerned feel they can make authorities take notice and have "confidence in the possibility of a more desirable state of affairs" (Lippett, Watson, and Westley, 1958),

they may take action. A high administrator probably has such a "sense of efficacy" (Gamson, 1968), as did student activists after the initial success of the Free Speech movement at Berkeley and African Americans after the initial successes of the Civil Rights movement.

Once a demand is made, it must gain access to the formal decision-making system if it is to become a change in policy or program. Key here is a sympathetic gatekeeper, a person or group to put the demand on the authorities' agenda. Without a supportive gatekeeper, demanders must be powerful enough to break the gate down and be willing to take that risk. Faculty committee chairpersons and deans can play gatekeeping roles concerning demands for academic policy change. Once on the agenda, the demand gets deliberated. It is studied and debated, often modified or changed, usually in some committee. If it survives this buffeting, it emerges as a formulated proposal for change, which then gets reviewed, modified, revised, reduced, and in general worked over by all the persons or groups concerned about its potential impact on their vested interests. Will this new curriculum give our department more students and faculty or less, more status or less, more autonomy or less? Usually, coalitions of interest form pro and con. Compromises are made to get some decision approved. Much of the debate may focus on the proposal's soundness of reasons and evidence, but savvy observers know that the issue is who gets what coveted goodies. Important to the survival of change proposals in this river of nibbling piranhas are the persistent efforts of highly influential "issues sponsors" who are determined to carry the change through. Without such determined advocates, the status quo powers will defeat any change attempt.

In organizations such as colleges and universities, academic change proposals can take the short route if the demander is a president who goes ahead and exercises formal authority to set policy, or they may take the long route through layer upon layer of governance committees. In either case, the outcome is not yet change. It is an authoritative decision to change. Now comes the problem of making it stick. Usually, an executive instructs organizational units and individuals to carry out the new idea or behavior. Unless, however, that executive can force units and individuals to comply, identify whether or not they are complying, and get rid of noncompliants, the Political model breaks down in implementation. The formal authorities turn out not to be the real authorities. In colleges, academic departments and professors have considerable autonomy as expert professionals; if they do not like a new academic policy, they often can avoid serious implementation and, meanwhile, build a new coalition to get the policy rescinded. As Baldridge (1971, p. 96) discovered: "The system has a remarkable tendency to solve one set of problems only to generate another set; to give advantage to one group, but to disadvantage another; to eliminate one structural strain; but to

create another. The political processes are self-generating, and there is constant feedback effect as the resolution of old conflicts creates new ones." The process is not one of open collaboration seeking consensus. It is instead a constant struggle for control. Losers of today's battles do not give up. They mount a new demand.

If vested interests and power were everything involved in planned change, an effective political strategy would be all one would need. But reason and evidence are sometimes heeded even by those whose vested interests are somewhat challenged and who have the power to ignore rational persuasion. Social dynamics are at work, and the more the change agent knows about how to make them work, the better. Often, it is more effective to seek to reduce resistance to change by human relations strategies than to try to overwhelm that resistance by force. If motivation researchers are correct that we all have need for achievement and affiliation as well as for power, we need a change strategy that speaks to all these motivations, not just to power.

Combining Change Strategies

Is it not possible to entertain the notion that humans are rational, social creatures who want to solve their hidden problems but also want to protect and enhance their vested interests? If we make such an assumption, we must combine our strategies for change. Rational research and planning are not enough. Nor is connecting innovations to opinion leaders in all the right ways. Nor is skilled intervention to diagnose human needs and to reduce resistance. Nor is the most effective political maneuvering. We must do it all.

Havelock was one of the first to provide a general change model that joined previously separate traditions of thinking (Havelock and others, 1971). He called his concept "linkage." Planned change starts with a "felt need" on the "potential user's part," on the part of the person, group, or organization that might change. Something is wrong; something needs improvement. A diagnosis is conducted and a problem statement emerges. Then there is a search and retrieval of alternate solutions both inside and outside the user. Some solution for the local situation then is developed and approved. Application follows. Often this implementation raises another need, which starts the cycle all over again.

Meanwhile, outside the potential user of a new idea, behavior, or practice is an external resource system of other persons or organizations, R&D centers, extension agents, consultants. They may be engaged in trying to solve a similar problem, either because it is their problem too or because they have a direct relationship to the user, say as its funder or consultant. They go through a similar problem-solving process.

If the external problem solver comes up with a solution in isolation from the potential user, that solution is apt not to fit local needs and circumstances nor to be of much interest to the user. If the internal problem solver develops a solution without contact with external resources, that solution is apt to be as inadequate, for it does not benefit from broader expertise, experience, and needs. Students can solve some problems on their own, but professors and books can help. The professor may be able to induce some change in students without paying much personal attention to them, but getting to their needs, their ways of thinking, their background and circumstances, can help. So it is, too, with the R&D center and the organization, the consultant and the client, and the committee making a proposal and those who must approve and implement its proposal.

Havelock's synthesis of planned change process is also a synthesis of planned change factors. Seven key ingredients in successful change efforts emerged from his and his associates' review of the literature. Applied to academic change, these guidelines would encourage several actions.

- Faculty, administrators, students and relevant outsiders (like trustees and funding agencies) should be well linked to each other and to information concerning problems and solutions.
- There should be an active openness, a real reaching out, to new information and new people across departmental and institutional boundaries.
- Change efforts should be well organized and there should be specific responsibility for follow-through, perhaps through efficient research, planning, governance, and implementation structures.
- Initiatives should enjoy capable leadership, skilled facilitation, and adequate time and materials.
- Useful information and other resources for change should be brought close together.
- Change efforts, at all stages of problem solving, should be rewarded.
- Change attempts should be numerous, various, and redundant.

This Linkage model for intentional change is very appealing in the abstract. It is far more complex than the carrot or the stick, and it has stronger evidence and logic to support it. On the rational level, it makes good sense. In the years since Havelock's synthesis, no other model for planned change has emerged that is as comprehensive and promising. It has provided a helpful way to view the academic innovation process and the faculty development process (Lindquist, 1974, 1975). It is quite compatible with the "mutual adaptation" model that emerged from the Rand studies of major federal educational innovations (Berman and McLaughlin, 1975). The authors find that local use of model programs occurs

when the local institution and its members change to fit the innovation and when the innovation changes to fit local circumstances. If proposed change and potential user do not adjust to each other, actual change is unlikely. Indeed, one investigator could not even find traces of $40 million given to ten experimental schools in New York several years ago, let along find traces of change.

But Linkage has several obstacles between theory and practice. One problem is its abstractness. Just what should we do differently than we do now if we plan to implement this approach? Zaltman and his colleagues (1973) have addressed this question generally. Another and very significant problem is that Linkage has not been tested in any multi-institutional, longitudinal study of just how intentional change does occur. A major contribution of [Lindquist's] book (1978) is to fill that gap, as it contains seven detailed case histories of attempts to introduce various academic changes into five liberal arts colleges and two universities. If Linkage or one of the four other basic change assumptions explains effective planned change, we can see it for ourselves in those cases.

Summary

What brings about changes in attitudes and behaviors? Some believe that humans are essentially rational, so reason and evidence should do the trick. Intentional change, therefore, takes the form of a rational sequence of activities to produce a change message based in theory and research, then developed and tested empirically and logically and finally accepted because of its sound evidence and reason. Research and Development centers, institutional research and planning offices, and formal governance systems are designed to operate as if change is mainly a rational process.

Others find that humans are social creatures. New attitudes and behaviors, though they may be developed by rational processes, raise awareness, interest, trial, and eventual adoption through a process of social interaction and persuasion in which opinion leaders and reference groups are influences perhaps as significant as the rational soundness of the change message itself. Intentional change under these assumptions puts time and skill into linking innovative ideas, practices or products to potential adopters through social networks. Professional associations, information clearinghouses, learning resource centers, conferences, workshops, and extension agencies use this strategy.

Still others feel that the main obstacles to change are not impressive messages nor social influences. Psychological barriers are the problem. What is needed is the skilled intervention of human relations consultation in order to diagnose and facilitate the reduction of those barriers. Leadership training, clinical counseling, application of group dynamics, and Organizational Development are examples of this assumption at work.

Yet another group maintains we are political animals at base, busy protecting and strengthening our vested interests. In order to accomplish change, we need to build powerful coalitions among interests and obtain authoritative decisions that will be enforced by requiring people to change their attitudes and behaviors. That strategy is visible in the informal governance process and in such administrative controls as policies concerning program and personnel.

Recent theorists find that all these assumptions hold, probably in varying degrees depending on the issue, the situation, and the people involved. Havelock's Linkage theory was an early attempt to combine change assumptions. More recent planned change theories confirm his general model and suggest that combining all strategies for change is wise. Despite the fact that scholars may disagree about details of different models and more research may make refinements, these basic ideas provide academic leaders with practical information about how they may succeed with the complex and intricate task of changing the curriculum.

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