MANAGING ORGANIZATIONAL ISSUES IN CURRICULUM CHANGE
USING AN EDUCATIONAL INTERVENTION STRATEGY

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Richard Beckhard and Nancy Gaspard

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This monograph is about two related issues -- the organizational issues involved in major program change, specifically curriculum change in health schools; and about using educational interventions as a strategy for managing some of these issues.

Health education and delivery organizations are increasingly undergoing major changes in structure, governance, priorities, and relations to environments such as consumers, the medical profession, etc.

The management of this set of conditions demands extensive and varied knowledge and skills from organization leaders; different skills and more knowledge than would be required to manage the more straightforward organizations of the past. Executive managers need to be able to apply management knowledge for which they are generally unprepared and untrained. For example:

Knowledge and skills in mapping the environment and its demands;

Organizational diagnosis methods -- understanding the current state of affairs;
Planning a change strategy and assessing alternative plans;

Managing the transitions state;

Determining appropriate management and governance structures for various phases of the change effort;

Getting a critical mass of involvement and commitment.

These are just a few of the areas around which there is knowledge and in which health leaders are increasingly asking for assistance.

The second focus of this monograph -- educational interventions as a strategy for managing change -- comes from the experience of the authors in the use of educational learning activities to "unfreeze" an organizational system and get it ready to move toward change.

Sometimes the most effective way of facilitating attitude changes is through some learning or educational activity. Because it is not "for keeps" and because it is more student controlled, such an activity allows both individuals and the organization to "unfreeze" from rigid attitudes and biases. It also provides an opportunity for clear definition of the problem, as opposed to premature solutions. Thirdly, it provides a method for getting help in the tools and techniques available for managing the change and managing the solution to the problem once the problem has been defined.

The managing of curriculum change, where values and priorities and definitions of care were part of the issue, was seen by several organization leaders as an area where a "marriage" between the applied behavioral sciences and health schools and teaching hospital management would really be productive.
To test the thesis about the potential effectiveness of educational interventions, the authors, all colleagues at the Sloan School of Management at MIT, and supported by a grant from the Robert Wood Johnson Foundation, conducted a two-year test at two nursing schools, both of which were planning a major and similar curriculum change. In one school we tracked the organization for more than two years via interviews, questionnaires, and site visits. In the second, the experimental school, we: (1) did a diagnosis of the social, technical, and organizational system; (2) did a series of educational interventions based on this diagnosis; and (3) collected data systematically before, during, and after the interventions.

The following sections of this monograph will:

-- provide a description of some of the major organization issues in curriculum change;

-- make a "case" for educational interventions;

-- describe the interventions into the experimental "nursing school";

-- discuss some of the interventions in more detail, as possibly useful methods for readers;

-- look at the effects of the two strategies, one an educational intervention into two similar organizations, conducting similar change efforts;

-- draw some inferences from these findings;

-- look at the implications for the use of educational interventions in managing a variety of organizational change issues.
ORGANIZATIONAL ISSUES IN CURRICULUM CHANGE

Many health schools periodically face significant and major changes in curriculum, either toward more of a programatic emphasis, or changing the focus from discipline-based to type of care — primary, secondary, tertiary; or moving from a disease-based curriculum to an organ-systems oriented curriculum. In any such major change there are changes in subject matter, changes in priorities of how financial resources are allocated to which activity, changes in human resource allocation (who teaches whom), changes in the decision-making about the curriculum (for example, from department heads to program heads), to joint decision-making, changes in the reward system for faculty, changes in the relationships between junior and senior faculty, changes in support patterns from funding agencies, and changes in the structure, the utility of the learning, and the application of the learning for the students.

Given these conditions and pressures, if a health school or a major teaching department in a health school decides on a basic change in curriculum, such as changing the focus from discipline-based teaching to system-based teaching, or focusing on primary care more than tertiary care, the change is one which affects the whole organization — its structure, roles, pecking order, work environment, etc.

Administrators and health professionals responsible for planning and managing the implementation of such changes often tend to be "underdeveloped" in knowledge and skills about managing organizational issues such as those involved in these changes. They have not been trained or exposed to the body of knowledge, technology, and skills that is available to executive managers for managing complexity and change. For instance, decisions as
to what form of management structure would be most appropriate during the transition stage between the old and the new curriculum. Where, and how should we decide, where the decision-making power should be located relative to the reallocation of faculty to new programs. Who should decide where professors spend their time. To what degree should student input be: (a) heard and (b) used. What happens to the department that loses a number of resources to new programs. What effects will the new roles have on the tenure system.

Organizational Issues

The principal organizational issues from the point of view of the process of managing the organization and its change are as follows:

I. Organizational Dynamics and Processes
   - decision-making process
   - information flow
   - norms (unwritten ground rules)
   - role clarity
   - conflict management processes
   - processes of problem-finding
   - planning processes.

All of these are characteristics or variables of organizations that need to be re-examined in an organizational change effort.

II. Change Processes

The process of change is a related but different area of analysis from the nature of the organization. The variables we look at in the change process are:
   - clarity of goals for the change
     -- the ability to define a "picture" of the desired new state
- a clear and thorough picture of the present state
  -- the forces in the environment that are putting pressure on the management and the present response to these forces
- a clear picture of the managerial choices
  -- whether to make the change
  -- how to make the change
- a clear picture of the transition stage
  -- management required
  -- governance required
- the development of a process or change activity plan
  -- the commitment process
  -- getting a critical mass, diagnosing the organization for commitment

III. The Phases of Planned Change

In the type of organizational change exemplified by curriculum change issues, there are really four phases that need to be clearly differentiated in order to plan intervention strategies.

A. Starting the effort
B. Planning the actual change
C. The transition stage - Part I: Implementation - early implementation
D. The transition stage - Part II: Maintaining and stabilizing the change while developing organizational renewal processes

As we will describe in more detail in the next section, it is this set of issues and change processes that determines whether and how to use educational interventions. If one introduces activities that will help significant numbers of the management of the institution to systematically analyze these processes, the end result is not only more effective, but
is much more lasting than either "seat-of-the-pants management" or overdependency on outside experts.
THE CASE FOR EDUCATIONAL INTERVENTIONS

We would like now to "argue" for the use for educational interventions in certain situations; to look at the advantages and some of the risks of such a strategy; to generate some general criteria that administrators and managers of change can use in deciding on an educational approach to an organizational change.

Why Educational Interventions

Conditions of high complexity, ambiguity, and instability exist in health educational and health delivery institutions today. Planned change efforts can be facilitated if the parties involved in managing the change and/or the organization can sit a period of time, in relative tranquility; examine the situational condition; see what tools they need to help them manage change; develop some practical and realistic goals for changes, practices, procedures, ways of work, role, decision-making; develop a plan for achieving these objectives; and allocate resources to carry out the plan.

Under the stresses of today's turbulent environment, planning effort that provides time to think about how to make the change and the steps and mechanisms that are needed is likely to be difficult. People in positions of responsibility in health education and delivery systems, because of relatively little training in the processes of management, have a limited cafeteria of options of how to address these complex problems. In a learning environment it is possible to both think through the kinds of actions needed, and to learn what's available from a body of knowledge and practice that might be applied to the solutions of the specific problems.

Some Assumptions About Behavioral Change

If all improvement efforts are designed to effect changes in individual
behavior, then, whether the intermediate goal is to change procedures or practices or decision-making or the communication system, it has to be seen in terms of outcome behavior. Some principles are:

1. for behavior change to occur, people need to have an opportunity to learn new ways of behaving;

2. for behavior change to occur, people need to integrate experience and a conceptual framework that explains it;

3. putting these two needs together -- new experience and a conceptual framework -- in a "learning" setting is desirable;

4. people, in order to change behavior, need not only to learn concepts and skills but also need to be able to practice these in a supportive climate: educational interventions provide the opportunity for people to learn not only from books and teachers but from their colleagues;

5. frequently a simulation or case or near-to-reality situation provides a better initial learning climate than the actual situation.

In order for change to occur in a complex organization, there must be some willingness of key people to actively participate in looking at what needs to get done to get the change, and what the consequences are to themselves and others in making a change. An educational activity provides:

1. high possibilities of the system examining the change;

2. a method for coping, in a relatively safe way, with resistance to change;

3. a reasonable risk in a learning environment versus an action environment;

4. fuller attention of participants to the problems -- less outside interference; and

5. an ability to experiment with change in a relatively safe setting.
Some Risks Involved in an Educational Effort

There are, of course, risks involved in this approach, as in any other. Some of the more common risks include:

1. low commitment of participants to being "learned";

2. lack of connection between the educational activity and the real life problems as seen by the participants;

3. over-dependence on the faculty or staff to manage a change that has to be managed by the organization;

4. setting up educational activities that provide a 'cop-out' from facing the necessary modifications;

5. problems of translation from one technology to another.

One could make a longer list. However, these represent the most common obstacles that have to be overcome if any effective educational effort is to occur and to lead to organizational improvement.
SOME POSTULATES GUIDING INTERVENTION EFFORTS

1. Introducing a new curriculum into a health school is an organizational change issue.

2. Managing the organizational issues is as central to success as the content of the curriculum.

3. Organization leaders in health schools are not particularly aware of or particularly skilled in managing such issues except in political terms.

4. Changes such as a new curriculum affecting the total organization will be optimally introduced and effective if:
   (a) significant leadership, faculty, and students understand the organizational issues involved:
   (b) this means the entire system needs to know what the problems are in moving from the old condition to the new one;
   (c) there needs to be an awareness of the fact that the transition state is neither the old state nor the new state;
   (d) the transition state requires a separate management system;
   (e) people in the organization must be prepared for less clear authority and decision-making during the transition state and, therefore, must develop mechanisms for handling the ambiguity;
   (f) there must be methods for building new teams to manage
the new parts with clear goals and effective team relationships;

(g) there must be methods devised for managing new interfaces, such as the new curriculum program leaders interfacing with the department chairman of the disciplines who previously "owned the faculty resources."

5. If a faculty and an administration with their different biases, priorities and interests, is to understand the complexity of the organizational issues and problems involved in the substance of change, and, if these groups are to support new decision-making structures that threaten old structures and ways of work, it is highly desirable to set up some method for people to examine these organizational phenomena and recognize their normalcy. Because of the unsettling effect of a major change, this tends not to be as effective if done in the "normal" course of operations as if done in some learning setting. In a learning setting, people can bring different biases and priorities together and not have to face these as win-or-lose issues. Given this increased awareness of the scope of the organizational problems, as well as substantive problems, there is a much higher degree of possibility of creating collaboration between the parts of the system -- old guard, new guard, administration, faculty and so forth.

Such a process of exploring these matters tends to provide perspective on the whole system. For example, many well-meaning faculties, in doing a diagnosis of what is facilitating or impeding change, tend to totally forget students. A full diagnosis of the consequences of various alternatives, and the various parts of the total organization whose needs must
be taken into account at each step of the process, would not allow the planners and managers to forget students.

We go on now to a description of an actual intervention. We will briefly describe the background, the strategy of intervention, the major educational activities, and the related changes in governance and ways of work.
EDUCATIONAL INTERVENTIONS IN A CURRICULUM CHANGE PROJECT

Introducing curriculum change may be very upsetting to organizations. Resistances, fears, anxieties, competitiveness, and backbiting are all likely to surface. And unless they are effectively dealt with, a program may get hopelessly stalled or may even be abandoned.

From the point of view of the person in charge of curriculum change, what, if anything, can be done to prevent these undesirable outcomes? What can he or she do to provide for an orderly progression from the old curriculum to the implementation of the new?

The experiment we will describe in this section is designed to investigate what types of educational interventions will make the change manager's job easier and will produce a better result.

Setting and Background

We worked with the dean and faculty of a large school of nursing located in an urban center in the Northeast. The school offers courses for juniors and seniors who are working toward a Bachelor's degree in nursing.

Like many other health institutions in the early 1970's, the school had initiated a process of curriculum change by setting up a task force and program to investigate the direction in which it should move. It brought together faculty from the various nursing departments to plan and teach an integrated program to selected students. The key objective of the new program was to integrate the curriculum by bringing together the faculties of different specialties in order to better prepare students for working in non-hospital as well as hospital settings.

The success of this pilot effort led to a decision to adopt a new curriculum for all undergraduate nursing students. Like the pilot, the
new curriculum would focus on the practice of nursing in various settings. Instead of teaching courses in medical, surgical, psychiatric, and pediatric nursing, the school would offer programs in primary, secondary, and tertiary care. In this way, the knowledge and skills necessary for effective practice in different clinical settings would be better integrated.

The major component of the curriculum was a series of courses related to each of the three levels of care -- primary, secondary, and tertiary. Primary care, for instance, would consist of didactic, laboratory, and clinical components. In addition, other courses such as pathophysiology, methodology, etc., would be taken by the students at the same time as the primary course. For the most part, the same faculty would be responsible for teaching all these courses. The faculty would be divided into three groups, with each group teaching a series of courses relating to one of the three levels of care and also supervising the students on their clinical rotations. The plan called for a three-year changeover period. Primary care would be introduced in year one, secondary care in year two, and tertiary care in year three.

Some of the implications of the new curriculum, which were discussed by the faculty at the time the decision was made, were: although very few of them had experience with an integrated type of curriculum, they would have to work in interspecialty teaching teams; they would have to find new clinical sites; almost all of the courses would have to be designed from scratch; and the old and the new curricula would have to be taught at the same time until the new one was completely phased in.

The people in charge recognized the complexity of the problems they faced and that they would need professional help in coping with them. It was at this point in the process that we became involved in the project.
The person responsible for our working in this program was a tenured senior faculty member and head of a department in the graduate school of nursing in the college. She had formerly been on the faculty of one of the first schools of nursing to experiment with an integrated curriculum. Also, she had recently collected data from faculty and students in a nearby school during the course of their implementation of a curriculum change program very similar to the one in the "experimental" school. Furthermore, as a member of a seminar on managing change previously conducted at M.I.T., she had been exposed to a number of behavioral science knowledges and techniques.

First Intervention

We first met with the dean to discuss our possible involvement in the project. The dean spoke of her concern about the new relationships between the faculty that would have to be developed. She identified the following issues: (1) How could new teams with members from the different nursing specialties overcome the problems of competition and communication barriers? (2) How could they learn to respect the knowledge and skills of those with different backgrounds? (3) How could the faculty cope with working in new health care settings that often would call for their involvement with whole families and even the community? (4) Would the new pressures likely result in unmanageable fear and resistance to the new curriculum? The faculty would be working for the first time with dual reporting relationships and allegiances -- they would be both a member of a teaching team and a member of a specialty department. They would have to teach in the old and the new curricula at the same time. (5) What could be done to help them in this schizophrenic situation?

It quickly became apparent that this change would involve much more
than just redesigning courses and lectures. It would mean changing the ways the faculty behaved and interacted, new relationships would have to be built, there would have to be shifts in values and changes in attitudes. The effort had to be understood as a problem in managing people's learning, their anxieties, and their fears of their own ignorance and failure.

The dean suggested that we attend the next faculty meeting, at which time she would introduce the idea of our working with the faculty. We would be there to answer any questions they might have.

Before moving on to the further interventions, we would like to describe some key factors that affected our thinking in the design of these interventions.

**Designing the Educational Interventions**

As already indicated, in designing the educational interventions, we drew on both our behavioral science technology and our experience in other organizations that had managed change projects.

We focused on four basic phases.

1. **Starting the Effort**

   The manager of a curriculum change effort needs knowledge and skills to enable him/her to deal with a curriculum change as an organizational phenomenon that can be planned and managed. The questions addressed at this stage include: Who needs to be involved in the change? How should they be organized? What are their responsibilities and authorities? How will the effort be managed and coordinated?

   We also felt it to be critically important that all the faculty
who would be involved in the change have a broad understanding of the issues, which would help to motivate them to start planning for ways to handle the critical problems they would be facing.

2. Planning Phase

Significant planning will invariably be accomplished in a variety of groups made up of the faculty members responsible for the design of an interdisciplinary course. To function effectively, these temporary teams or task forces would need to be able to deal with issues of leadership, decision-making, and conflict resolution. Coordinators of these efforts must be able to clarity their roles within their groups and with top management. Linkages would need to be developed to insure coordination between the various subgroups.

There would also be the need for skills and in bringing new members on board and gaining their commitment. The faculty would need skills for managing conflicting demands on their time, since they would have to concurrently plan new curricula while teaching the old one.

3. Implementation

At the implementation phase, the major intervention focus would become helping the teaching teams. How to get feedback and evaluate performance? How to cope with the anxiety that surrounds teaching new content in new ways? How to manage conflict and coordination problems?

4. Maintaining the Change

Once implementation has occurred, a significant drop in energy for working on evaluation and planning for the next go-around is often experienced (this is because implementation in itself is the goal of the faculty's work). Therefore, there would be a need
to help motivate the faculty to refocus on data analysis, problem solving and planning. Here our work would be with both the teaching teams and the management group to help them evaluate and plan for the next go-around.

The focus of our work would shift as the change program moved through this four-phase process. In each phase, we would select the organizational group or groups that we felt could benefit most from an educational intervention, always with the goal of moving the change program forward.

Another benefit of the phase approach would be to help clarify for the dean and change managers the process in which they were involved.

Another factor that we considered was the balance between "process" and content. For the most part, we wanted to focus on the specific skills needed to manage the necessary changes. This required presentation of new concepts, some applications through either cases or role playing experiences, and the preparation of relevant reading material.

Both the dean and the department head with whom we were initially involved made it clear that the faculty would not sit still for purely "academic" inputs, nor would they be anxious to focus on their own working process. Therefore, we had to design the interventions to deal with both the behavioral science content (the management skills) and the substantive question of curriculum change (the everyday experiences). We would have to be sensitive to this by encouraging discussion, dealing with individual problems as they arose, and by being able to readjust our agendas accordingly. We recognized that if the project was to succeed, it was far more important to meet the faculty's need to learn how to solve a particular problem than our
need to introduce certain behavioral science content at a certain time.

For example, in the interventions designed for the change management group, our concern was to provide them with the skills they needed to deal with relevant organizational issues, such as managing the coordination between the various groups within the new curriculum as well as liaison with the department heads who, in essence, represented the control over subjects and teaching. In practice, we found that considerable time and energy had to be spent on individual problems, both job-related and personal, for these affected people's motivation to manage the change and deal with the organizational issues. Therefore, the activities were designed to provide the time needed to deal with these individual issues before moving on to specific content and skill development.

The faculty was most comfortable dealing with specific issues and content at a rapid pace, in short spurts. They came to the sessions to work. They wanted to get the material, wanted to make some applications, but were not interested in working it through at any length in small groups. Therefore, we kept our sessions short (mostly two hours).

We made a major effort throughout to use cases, examples, and assignments which presented the material in a format that was familiar and dealt with subjects that were real for the faculty. We wanted to allow the faculty to work on their own problems by giving them similar examples, but we attempted to avoid defensive reactions so we changed names and places. For example, in the first major intervention, which dealt with organization analysis and planning for
change, we developed the case of "The Middle New England University." It was fictitious, but the issues were real and relevant to the problems being faced by the dean and the faculty.

The Educational Interventions

It would be hard to overemphasize the importance of the role that the dean played in supporting the educational interventions. She not only attended the first workshop, an intervention for the entire faculty, but in her introductory remarks she emphasized the importance she placed on the effort. This went a long way toward convincing the faculty that the educational interventions were an important part of the entire change effort. Furthermore, the dean continued to attend the interventions designed for all faculty members as well as those for program and department managers.

The department head with whom we had initial contact also played a key role in this introductory workshop by making herself available to answer the questions of individual faculty members and the teams about the consultants, relevance of behavioral science concepts, etc. She made a point of meeting with each team at least once to answer their questions. We were extremely fortunate to have this kind of support.

The interventions themselves, as we have already suggested, were designed to address the major organizational conditions that operated in each phase of the curriculum change. (An outline of the interventions is shown in Fig. 1, giving the major issues confronting the manager of the change for each phase of the effort;
the organizational condition that the intervention is planned to alleviate; and the nature of the educational intervention and the topics and/or issues that were addressed.) We will now briefly describe what we did in each of the four phases of the curriculum change effort.

The One-Day Workshop

The major objective for the starting phase was to provide the faculty with a broad perspective of the change and help them to begin planning for some of its implications. To meet this objective, we designed a one-day workshop on organization analysis, focusing on two subjects: (1) how an organization functions, and (2) planned change, or how change can be managed.

After a presentation of these subjects by the consultants, the faculty broke into small groups to work on the case of the Middle New England School of Nursing.* We composed small groups of representatives from the various positions and departments. The task

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* The assumption behind the simulation technique was that department heads and some senior faculty were, at this point, more concerned with protecting the organizational status system and "quality" of their own discipline in the curriculum than they were with worrying about the organizational problems in introducing and managing the curriculum. Some of the younger faculty, who had been advocates of this change and who were in stimulating and exciting roles as members of study groups and task forces designing the new curriculum, were more concerned with getting this new curriculum in than they were with the organizational problem around managing the change. The dean and other administrators were more concerned with how to manage the conflict and power struggles.
assignment of each group was to analyze the "Middle New England School" (which looked very much like the real school; to use the methods of organizational analysis and change planning that had been presented, including some models for planning change; and to develop a set of recommendations to the "dean" for managing the change in the simulated school.

Each group selected a representative who proposed her group's recommendations in a "discussion" in front of the total group with the actress dean. (The real dean was in the room.)

It was our hypothesis, which checked out, that given this simulated case -- which had all the elements of the real school -- it would be impossible for the faculty and administration not to focus realistically on the organization problems. We had designed a forced collaboration method, but one that also focused energy exclusively on the organizational issues. It was not cluttered with the substantive questions around what should be taught in the curriculum.

As a result of this set of "discussions" from the work groups, it became clear to the faculty that there was a need for prioritizing the issues and the ways of working on them. The rest of the workshop, therefore, became a planning session in which the faculty developed a list of fifteen action steps that needed to be taken; suggested a change in the management structure for the transition period, when the old curriculum would be taught and the new curriculum would be in the planning stage; for the period where both the
curricula would be taught (the new one on an experimental basis); and for a period where the new curriculum would become the core curriculum.

It was agreed that there needed to be a full-time coordinator for each of the curriculum areas: primary, secondary, and tertiary care. To provide linkage to the on-going system, the curriculum coordinator was made chairperson of this new group of coordinators. This group reported directly to the dean, in parallel with the senior department heads who reported directly to the dean. In other words, a matrix system was developed.

The faculty also identified the "crunch" points that could be anticipated. They began to explore the need for developing methods for resolving such conflicts as: Who works on curriculum planning teams? Who decides the amount of time a faculty member can give to planning new on-going curriculum vs. teaching in current programs? Who resolves conflicts between curriculum coordinators and department heads? Who has the last word on the actual content of a particular piece of curriculum? They separated the curriculum planning process from the teaching process and recognized that those who were members of the planning team of a particular curriculum might or might not be members of the teaching team in the same curriculum. Resource allocation for the two sets of activities would need to be differentiated.

A result of all this was a system of communication as well as decision-making being put in place. There was consensus among the total faculty that, for the change to take place, regardless of the
differences of opinion about curriculum substance, a management mechanism such as the one they developed would be absolutely necessary.

This workshop was held about eight months before the first course in the new curriculum was to be taught. Following is the Agenda for the Workshop and the description of the Case Simulation.
WORKSHOP ON "ORGANIZATION CHANGE"

AGENDA

Wednesday

7:30 p.m.  I. Objectives of Workshop
            A Relationship to New Curriculum Planning

9:30 p.m.  II. Specific Workshop Plan

III. Concepts of:
      (a) Organization Analysis
      (b) Planning for Change

IV. Assign Case
    Assignment to Work Teams
    Teams Plan Case

Thursday

9:30 a.m.  Teams Plan Case (continued)

10:30 a.m. Present Case Solutions
            Analyze Presentations

12:30 p.m. Lunch

1:30 p.m.  Review of Case and Implications
            Priority Issues for the Faculty
            Implications Discussion
            Possible Next Action Steps

3:30 p.m.  Adjourn
THE UNIVERSITY OF MIDDLE NEW ENGLAND

SCHOOL OF NURSING CASE

The University of M.N.E. School of Nursing is located at the University's main campus and has a total of 812 students evenly distributed over its 4-year program.

The curriculum of the school had undergone only incremental changes over the past 15 years and was generally based on the traditional medical model.

Planning for a major curriculum overhaul began in 1970 with the goal of developing an integrated curriculum with emphasis on prevention and health promotion.

Support for the overhaul only minimally exceeded the resistance to it and this continued to be a problem throughout the development and now through the implementation of the new curriculum.

Application was made for a curriculum improvement grant to support release-time and extra faculty to do the planning and the preparation of clinical agencies. The grant ultimately was approved but not funded.

Four multi-disciplinary (nursing specialty) teaching teams were formulated and they are planning the junior year (2 - 2 program) nursing courses while continuing to implement the courses from the old program from their traditional teaching specialty base.

The coordinators have been in place for a few months. They complain about having responsibility without authority and about the lack of forethought given to the organization of the faculty. They have difficulties getting the teams to meetings. They are finding some resistance to the time demands of the new program from some senior faculty. There is clearly a need for redefining their role from the original.

Because of many pressures, faculty were assigned to their teaching teams rather late. This has resulted in a number of complaints about lack of specific course plans, about inadequate time to work with others on their team around problems of joint teaching. Several faculty have expressed themselves as being in a bind between the challenge of the new curriculum and the resistance of colleagues to any innovation and inadequate time to resolve these. It is still unclear about what priorities the new curriculum has and how conflicts get resolved.
The dean, therefore, would like your thinking on her following dilemmas:

(1) Role of the coordinators - how much authority should they have?

(2) How would we get adequate time for planning without jeopardizing on-going responsibilities?

(3) How would we get people to do integrated team teaching. Should we do team teaching?

(4) How can we encourage creative and innovative curriculum design and teaching methods?

(5) How do we get the whole faculty to give this effort a high priority?

Instructions to teams:

(1) Assume the material you have just read has come to you in a letter from the dean.

(2) The dean wants one or two members of your "consulting team" to meet with her on Thursday to get your guidance.

In preparation for this meeting:

(1) Make a diagnosis of the problem as you see it.

(2) Think through how you want to work with the dean (advice, problem identification, suggested solutions, etc.).

(3) Think through the priority actions the dean should take around her problems.

(4) Think through how school should organize to cope with problems the dean has identified.

Select one or two members of your group as representatives. They will have a meeting with the dean tomorrow morning.
The Planning Phase

During the planning phase the major problems, as we saw them, were: (1) using team workshops to help the planning teams work effectively together, and (2) helping the team leaders perform their leadership roles of managing the planning. We first focused on the teams' difficulties in allocating work, planning and developing "ground rules" for working together. We designed a full-day session for the planning teams, which had as its theme "planning for the four months that directly preceded the start of the teams' new courses."

The first part of the workshop was spent listing the main clusters work that had to be done, such as finishing the course outlines and finalizing agreements with clinical agencies. Responsibility for these tasks as assigned to two-to-three person groups of faculty members. During the latter part of the day, the groups responsible for the courses met for the purpose of preparing a rough draft of their course outline which was then shared with the entire group.

The idea of doing a rough, "just for now" draft allowed the groups to overcome their resistance to finalizing the courses, and to move closer to examining what the program would look like. It mobilized their energy.

Individual Leaders

We also worked individually with the curriculum team leaders on several areas including handling conflicts, coordinating the various activities, running meetings, and giving support and encouragement. The purpose of these interventions was to strengthen the leaders'
Individual Leaders

We also worked individually with the curriculum team leaders on several areas including handling conflicts, coordinating the various activities, running meetings, and giving support and encouragement. The purpose of these interventions was to strengthen the leaders' ability to function on a one-to-one basis with us rather than during the team meetings. We postulated that the extra pressure she would be subjected to in the group meetings would be counterproductive. These interventions were initiated one to two months into the team's life.

The Coordinators

Another major focus during the planning phase was the group responsible for managing the change, the coordinators. Involved were the three team leaders and the coordinator of the undergraduate curriculum. The intervention, (designed to help them develop as an effective group), consisted of four half-day sessions focusing on setting goals (personal as well as team); clarifying their roles and authorities; handling important decisions; and getting them to be supportive of each other. These sessions started halfway through the planning phase.

Early Implementation Phase

Major management problems for the early implementation were to get the teaching teams to work together and to make the department heads and program managers more effective in solving the problems and conflicts that arose. Two interventions were conducted during this phase.
Workshop for Change Faculty: The first was a one-day workshop for the entire faculty who had roles in the change. The primary focus was on handling conflicts and stresses and problems of coordinating many activities. For the most part, the teaching teams consisted of the same faculty as the planning teams, so by the time they were ready to teach, they had become a pretty cohesive and effective group. This workshop was held just prior to the time when the teams began to teach.

Course in Management: A second intervention consisted of a course in the "basics of managing change" which ran for six evening sessions, each two to three hours long. It was designed primarily for the department heads and the leaders of the teaching and planning teams, but it was open to the entire faculty, and continuing education credits were given for attendance. The sessions included lectures, discussions, role plays, and practice of management skills.

The purpose of this intervention was twofold. One was to provide systematic input on management content that might help the faculty have some conceptual frameworks and ways of attacking the organizational problems they were now experiencing. The second purpose was to provide a forum, in a safe setting, where, outside the formal structure of departments and curriculum planning teams, large segments of the faculty could come together and discuss their problems, issues, and conflicts with each other. The subjects taught in this course became the triggers for discussions around the real dynamics in the organization at various points in time.
This intervention was run during the first semester that the first new courses were being taught. Following are the types of subjects dealt with in this course.

**Summary of Content**

1. Leadership styles -- this session will focus on differences in leadership styles as identified by Blake and Moulton, Fiedler, and others, and implications for groups and organizational performance. The focus will be on understanding these differences and how this understanding can be applied in individual functioning.

2. Group characteristics -- this session will focus on identifying the characteristics of effective group performance. These will be looked at from the point of view of how group performance can be diagnosed, improved and facilitated. Participants should gain a better understanding of how to build effective teams.

3. Developing missions and goals -- this session will be oriented towards gaining an understanding of the importance, implications and processes involved in setting meaningful goals. The emphasis will be on the development and utilization of goals for managing change and improving performance.

4. Work allocation -- this session will introduce theory and techniques for dividing responsibility and identifying division of labor for accomplishing stated goals. This includes the process of identifying decision-making responsibility.

5. Handling conflict -- this session will put emphasis on managing conflict so that it leads to productive solutions. This will include negotiation and collaboration techniques for individuals and groups, drawing on the work of Harrison, Beckhard, and others. It will also include techniques for identifying and allocating resources in an optimum way.

6. Planning change -- this session will introduce the theory and practice of change as a managed process. Techniques of diagnosis, strategy, implementation and evaluation will be looked at. We will also discuss the roles of facilitators, managers and participants.
Maintaining the Change Phase

The focus of our effort during this phase was to provide the management group and the teaching teams with additional skills which they had indicated they needed and to motivate the teams to evaluate what they had done to date in order to plan for the second use of the new curriculum.

Management Group: The interventions with the management group dealt with issues of bringing a new member on board (one replacement occurred) and on handling some of the tensions experienced during the time that both new and old curricula were being taught. These sessions were held at the end of the first year and into the second year of the curriculum change effort.

Teaching Teams: Our work here consisted of one half-day workshop on "planning for the evaluation". The objective was to get them to set up a process that would insure their having time and energy to do this planning. The concept we were applying here was "positive tension", which postulates that after a goal has been reached, tension is reduced. If one's objective is to keep momentum, then one must introduce new goals that provide new tensions and energy. This process of repetitive goal setting and tension induction was at the heart of this intervention.

This workshop was held six weeks before the end of the first semester of the new curriculum.

Results and Evaluation

We have described the interventions in the "experimental" nursing school. We want now to examine what difference these made in the implementation and running of the change effort. To do that, we will compare this school with another nursing school which underwent the same type of curriculum change, but without any major outside intervention.
We will briefly describe the research design, types of data collected, and some comparisons of finances.

The Research Design

The design for the evaluation of the educational interventions called for the collection of data from both schools of nursing. In the "control" school, one in which there were no educational interventions, interviews were collected from faculty and students after the new curriculum had been implemented for 2 semesters. Each of the team leaders was interviewed, and there were interviews with faculty and a random group of students. The interviews were conducted by Dr. N. Gaspard and several graduate students in a school of nursing.

In the "experimental" school interviews were conducted after the new curriculum had been implemented for two-and-a-half semesters and two-thirds of the new courses had been implemented. Interviews were conducted with the dean, assistant dean, coordinators (three present and one past coordinator), a sample of faculty selected randomly from each team, and a random group of students. These interviews were conducted by Mr. Michael Green, a research assistant at M.I.T., who used the structured interview schedule.

Additional research at the experimental school consisted of a questionnaire that was administered before and after the "Basics in Management" course, and a questionnaire administered before and after each new curriculum was implemented. The former was designed to evaluate this particular educational intervention, while the latter was designed to look at changes, if any, in the ways in which the faculty as a whole spend their time.*

* This questionnaire was designed and implemented by Laurel Eisenhauer.
Types of Data Collected

The data collected from the faculty covers the following areas.

1. The effects of new and different clinical teaching settings.
2. The effects of the new orientation and priorities in health care that are implied in the new curriculum.
3. The effects of working in new faculty groups and teams.
4. The changes and effects of these changes in student/teacher relationships.
5. The changes and their effects on the new content in the curriculum.

In addition to this data, the following areas were covered with the coordinators: (1) factors associated with their effectiveness; (2) their style of managing the teaching/planning faculty teams; and (3) the effectiveness of the management team (the three coordinators and the assistant dean).

Data collected from the students focused on the following: (1) the values and drawbacks of the new curriculum; (2) the parts of nursing found most interesting; (3) ideas about how they will practice; and (4) the type of first job they would like. Our early conclusions from the experimental school can be summarized as follows. (We stress early conclusions because the significant follow-on data is only now being collected after the program has been repeated a few times.)
The educational interventions had a generally positive impact.

Evidence

After the first intervention:
1. A reorganization of governance.
2. A new system of reporting.
3. Feelings of higher satisfaction.
4. Dean and others report change of climate.

After the coordinator training:
1. Team effectiveness increased.
2. Priorities set.
3. A support system established.
4. More interaction with the dean and the department heads.

After the management course:
1. Faculty redefined priorities.
2. Improved communication between the parts.

After new curriculum taught:
1. Faculty positive about the new experience working with families.
2. Energy redirected.
3. High ownership in the new program.
4. Feedback system in place.
5. More concerned with substance -- improved care, improved students, than with organization.
6. Neither school totally happy, however, energy was highly mobilized in the experimental school, people were energized. In the control school both faculty and administration were generally depressed.
Comparison of Control and Experimental Schools

The findings gave an indication of some of the effects of the educational intervention. In viewing the data, however, the reader should recognize the following limitations: the data are preliminary, following closely on the heels of very recent implementation of the curriculum. There were other factors, besides our interventions, which could influence the results. This latter problem we recognize as a problem in any type of "field" research; in this case it may have been less controllable than we would have liked. We intend to collect data at a point in the future when the curricula are more firmly in place, which should allow us to provide a clearer picture of the long-run consequences of the interventions.

The data are presented below in the following format. Starting with the faculty, the categories of information described above are presented for both the experimental and the control schools. For each of these categories, responses to several questions from the interview schedule are listed, using statements as directly as possible. The data from the coordinators, administrators and students are presented in identical fashion, each having categories of information containing responses to several questions on the interview schedule.

For purposes of emphasis, some of the more obvious outcomes of the intervention are listed below, followed by the details.

**Most Obvious Outcomes of the Experiment**

Data from the Faculty: In comparing the two schools, the following can be said about the experimental school:

- most of the energy goes toward the teaching/planning teams (not the specific departments)

- one department, the psychiatric department, is the "battered child"
- Team members are afraid of losing their expertise in a specialty area

- Team members learn about specialty areas other than their own

- Faculty are very positive about change in the health field (at the control school they feel that faculty, community, and hospitals do not understand it)

- Faculty much more positive about working with families

- Faculty doing much more advanced planning and evaluation on their teaching teams

- Faculty much more positive about the new curriculum

- Less stress produced by working together

- Faculty see many more benefits in working together

- There is no lack of "ownership" of the new curriculum by the faculty (which there was at the control school)

- Students less competitive for grades (more competitive at control school)

**Data from Coordinators:** In comparing the two schools, the following can be said about the experimental school:

- A better support system among the coordinators

- A more clearly defined role for the coordinators

- Coordinators are more in control

- The management team (coordinators plus Assistant Dean) is effective

- Working as a management team is seen as positive

- Coordinators are less concerned about loss of control to the specialty departments

- More sure about what is gained in new curriculum and more consistent in thinking about it

- Less polarization of faculty

- Strong support system (weak at control school)

- Few overt splits in faculty
I. Assessment of the New Curriculum

**Greatest Value**
1. Looking at the whole person (3)
2. Get theory so can work in any area
3. Less memorization
4. Think that they will make leaders and change agents out of us -- not nurses
5. More goal directed
6. Waste less time
7. More of a helping relationship
8. See integration
9. Better outlook on job possibilities
10. Being oriented to the future of nursing

**Greatest Drawback**
1. Not enough emphasis on clinical skills (5)
2. Guinea pigs (3)
3. Too much emphasis on psych.
4. Too much pressure
5. Have to relate to too many faculty

II. Interests in Nursing

**Parts of Nursing Most Interesting**
1. Primary course (2)
2. Theory courses are integrated (2)
3. Pediatrics
4. Obstetrics
5. Health care teaching

**Parts of Nursing Least Interesting**
1. Testing
2. Course-systems of health care
3. Psych.
4. Crisis intervention
5. Obstetrics
6. Community health
III. "How Will You Practice Nursing Compared to the Way You Thought You Would When You Entered Nursing School"

1. Will not work in an institution
2. Will be considering all of patient's needs
3. Want to work in the community (3)
4. Want to join the air force
5. Want to be a pediatric nurse practitioner
6. Want to go to grad school

From the Control School

I. Assessment of New Curriculum

1. **Material Lost**
   1. Perfection of skills
   2. Hospital experience
   3. Pharmacology

   **Material Gained**
   1. Learning how person really feels -- not just doing physical on them

2. "How do you feel about changes in orientation and priorities in health that are implied in new curriculum"
   1. Need more supervision and experience
   2. Correct health problems before become serious

3. "Problems of working with families rather than individuals"
   1. Nervousness -- no instructions beforehand
   2. Do not know enough

II. Effects of New Ways of Working Together

1. "Good things produced by changes in student/teacher relationships"
   1. Teachers and students on same level (2)
2. "Stresses and strains produced by these changes"
   1. Lack of direction
   2. Hard to trust

3. "Areas of confusion"
   1. Who to pass papers in to
   2. Learn on thing from films and another is correct on exam

4. "Things to improve situation"
   1. Make assignments clearer
   2. Make LAPs fit together
   3. Combine basic technical skills with present experience (2)
   4. More supervision (2)
Data from Faculty

1. Effects of Changes in the Work Place

1. "Problems of working with families rather than individuals"

**Experimental**

1. Basic area of acute care
2. Always worked with families
3. Interpersonal problems
4. Involvement in sociocultural issues
5. Can't work with individuals when working with expectant families
6. Hospital resisted family involvement with high risk families
7. Hard to get families
8. Students have trouble communicating
9. Family in control: student is guest
10. Can't deal with one and forget the other family members
11. Recognizing healthy areas within families
12. Family made student low priority

**Control**

1. Finding families (5)
2. Student transportation (2)
3. No agency back up; legal aspects (2)
4. Student safety (3)
5. Community is scary
6. Working with children
7. Affluent families don't see need
8. Preliminary work with agencies needed
9. Faculty-student ratio

2. "How do you think others feel about working with families"

**Experimental**

1. Had to change own thought processes
2. Some very much in favor
3. Concern about learning clinical skills (2)
4. Concern about taking state boards (2)

**Control**

1. Should see people where they are at
2. Concerned with students' basic ignorance (2)
3. Frustration by students in feeling that they don't know
5. Concern about heavy work load
6. Lots of hesitancy (4)
7. Complaints about day to day changes
8. Will students really be nurses
9. Suffer hassle of delivering content
10. Excitement and satisfaction

4. Fuzzy
5. Ambiguity
6. Frustrated
7. Lack of ownership
8. Lack of knowledge other than in own specialty
9. Concern over product
10. Curriculum implemented too soon
11. Concept of family not yet grasped by faculty
12. Some say harder, others say easier

3. "Effects of working in new types of clinical settings"

**Experimental**

1. Med Surg most acutely uncomfortable
2. Time consuming (4)
3. Tiring and frustrating (6)
4. Reeducation process for agencies, faculties and students
5. Neighborhood health centers want limited numbers of students and a faculty member around all the time

**Control**

1. Frustrating (2)
2. Confusion (2)
3. Faculty spreading themselves too thin
4. Anxieties increased when agencies not set up (6)
5. Students need more supervision, structure and direct guidance

6. Being effective
7. Stressful

I. Effects of Change in Orientation and Priorities in the Health Care Field That Are Implied in the New Curriculum

1. "How do you feel about it"

**Experimental**

1. More concern about keeping healthy people healthy or focusing on what is healthy about them

**Control**

1. Prevention is the way to go (4)
2. Very realistic
3. Country going toward preventive care
4. Change in the entire health care field, not just in nursing
5. Consumer oriented
6. Peer review
7. More public control
8. More a health care team with a client
9. More humanistic health care
10. Nursing has the opportunity and responsibility to change
11. Not sure there is a change in priorities

2. "How do others feel about it"

Control
1. Nurses don't understand the reverse in orientation
2. Community is receptive (2)
3. Poor role models in the hospital
4. Consumers don't understand new role until they experience it
5. Half for and half against (3)
6. Feel strongly positive
7. Agree on concept or we wouldn't be here
8. Broader concept of nursing
9. Will issues be covered in depth
III. Effects of Faculty Being Required to Work Together in New Ways

1. "Effects of being a member of a teaching/planning team on relationship with the specialty group"

**Experimental**

1. Psych. specialty is "battered child"
2. Main energy has to go toward teaching team
3. Lonely
4. Read, attend conferences, try to keep up
5. Concern that specialty wouldn't be given equal attention
6. Can learn about more specialized areas
7. Don't feel confident about crossing specialties
8. Miss consultation from own specialty team
9. Made small investment in team

**Control**

1. Time consuming
2. Broadens it
3. None (3)
4. No time for professional sharing and feedback

2. "What is done as an interspecialty teaching/planning team"

**Experimental**

1. Teaching (8)
2. Planning (9)
3. Evaluation (5)
4. Some work in clinical
5. Class preparation

**Control**

1. Planning (6)
2. Team teaching (3)
3. Decision making (2)
4. Placement of students
5. Teaching side by side, not team
6. Checking progress
7. Checking on each other
8. Dealing with a crisis
9. Meet once a week
10. Share concerns, ideas, frustrati
3. "Benefits produced by working together as a teaching/planning team"

**Experimental**

1. Different points of view, background
2. More cohesive unit
3. Everyone's opinion is considered
4. Better course participation because
5. Can use group participation
6. Can use different teaching styles during the course
7. Greater varieties of skills
8. Learn to respect others for what they know

**Control**

1. Confusion
2. Lack of confidence
3. Specialty contact retained only in senior year (2)
4. More autonomy as only specialist or on a team (2)
5. Med. surg. not teaching seniors
   two of these on each junior team
6. No one had any to start -- just switching groups
7. Med. surg. afraid of losing identity
8. "Boxed in" feeling
9. Actually there is no intermingling
10. Snare and support new curriculum
11. Communication lapses (2)
12. Increased anxiety
13. No structure
14. Frustration
15. Criticism of curriculum
16. Faculty looking to others for support and cooperation

4. "Stresses produced by working together as a teaching/planning team"

**Experimental**

1. Friction between 2 specialties
2. Getting everyone together difficult (2)
3. Slow decision making (2)

**Control**

1. Autocratic coordinator
2. Pressure of time commitments
3. Difficulty in becoming a team (2)
4. Leaders need more training
5. Anxiety producing
6. Time pressure (3)
7. Different styles, different language, different perspectives

4. Decision making process is slow
5. Communication poor (2)
6. Not being able to handle everything yourself and having to send student to someone else
7. High anxiety
8. Misinterpretation
9. Lack of support
10. Disagreement re: plans

IV. Effects of Curriculum Change on Student/Teacher Relationships

1. "Gained in teaching relationships"

Experimental

1. Family planning
2. Emphasis on primary prevention and rehabilitation
3. Put things together in a whole framework
4. Increased ability to conceptualization
5. Family theory and practice
6. Greater understanding of what health and disease is
7. Different picture of nursing and what it ought to be
8. Adapt to a multitude of settings and experiences
9. Look at psychological and sociocultural aspects
10. Better communication

Control

1. Students stimulated by ability to make choices
2. Students get to know faculty better
3. Varying growth groups and varying the clinical faculty is enriching
4. Support from team members (2)
5. Extend reading
6. New lesson plans
7. More exposure to information of other specialties (2)
8. Exposure to more teaching skills and methodologies (2)
9. Help each other improve teaching skills (2)
10. Develop relationships with community agencies
2. "Lost in teaching relationships"

<table>
<thead>
<tr>
<th>Experimental</th>
<th>Control</th>
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</thead>
<tbody>
<tr>
<td>1. Knew students better in old curriculum</td>
<td>1. Some autonomy (2)</td>
</tr>
<tr>
<td>2. Miss communication with students in clinical areas</td>
<td>2. Nothing (2)</td>
</tr>
</tbody>
</table>

3. "Good things produced by changes in students/teacher relationships"

<table>
<thead>
<tr>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students more verbal</td>
<td>1. Students feel close to faculty preceptor (3)</td>
</tr>
<tr>
<td>2. Get into situation more quickly (2)</td>
<td>2. More openness (4)</td>
</tr>
<tr>
<td>3. Take the time to get involved</td>
<td>3. Varying points of view enrich student experience</td>
</tr>
<tr>
<td>4. Students more independent</td>
<td>4. Less emphasis on grades</td>
</tr>
<tr>
<td>5. Students share ideas</td>
<td>5. Instructors are a team</td>
</tr>
<tr>
<td>6. Close feeling in seminar group</td>
<td></td>
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<tr>
<td>7. Clinically responsible for a lot of students</td>
<td></td>
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<tr>
<td>8. Open door policy (2)</td>
<td></td>
</tr>
<tr>
<td>9. More open with students</td>
<td></td>
</tr>
<tr>
<td>10. Students more competitive for grades (2)</td>
<td></td>
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<tr>
<td>11. More appropriate limit setting</td>
<td></td>
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<tr>
<td>12. Students more responsible</td>
<td></td>
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</tbody>
</table>
V. Material Lost in Content of New Curriculum

"Material lost in new curriculum"

**Experimental**

1. Fewer hours in acute care (2)
2. Legalities
3. Professional conduct
4. Much specific disease left out (2)
5. Clinical skills (2)

**Control**

1. Less emphasis on basic skills
2. No communication re: what the skills are
3. Nothing (3)
4. Difficult to tie material together
5. Readings not brought up in class
6. Tradition is the foundation on which nursing is built
7. Expectation that a great deal will be lost
8. Community profile
9. Epidemiological, Environmental issues

VI. Overall Reactions

1. "Reactions from other faculty regarding the new curriculum"

**Experimental**

1. Some very positive
2. Some very conservative
3. Loss of clinical skills (3)
4. Excellent
5. Hard for some to do (2)
6. Challenging
7. Threat
8. Being asked to look at profession in a new way

**Control**

1. Frustration
2. Not sure what doing (3)
3. Mixed messages
4. Not everyone is highly enthused
5. It can't be done
6. It won't work
7. Uncertainty
8. Bitterness
9. On the whole it's a pretty traditional school

10. Have to develop new settings and learn new things

11. Agreement as to change in orientation

2. "Things to change that would have the most positive effect"

**Experimental**

1. Have all courses presented to the faculty for approval

2. More power for the leaders

3. Better communication and coordination of all faculty

4. More creative use of faculty and clinical time

5. More guidance -- not just pressure re: research and publication

6. Stronger focus on clinical procedures

7. Better evaluation of what has been done so far

8. Different leaders

**Control**

1. Somebody completely responsible for coordination of the curriculum (3)

2. Give the coordinator time to do community education

3. Plan realistically for faculty utilization (2)

4. Well planned ongoing faculty education program (3)

5. Get rid of noncommitted people

6. Hire new committed people

7. More faculty

8. More preplanning (2)

9. Share faculty expertise

10. Sharing faculty expertise from one learning lab to another

11. More structure in learning lab

12. More depth
Data from Coordinators
(Assistant Dean Included in Experimental School)

I. Effects of Changes in the Work Place

**Experimental**
1. Creates a lot of anxiety (2)
2. Least problematic

**Control**
1. Faculty has become involved in internal problems of agency
2. Power struggle among faculty re: knowledge of agencies
3. Clinical coverage difficult with 2 programs running
4. Agencies won't take large numbers of students
5. All students don't get all experiences
6. Instructors spending too much time on the road -- unproductive
7. Numbers of schools using agencies
8. Haven't had time to develop resources of community
9. Faculty are asked to do other things in the community when they make their presence known
10. University has to be more specific with agency re: student objectives

III. Effects of Being Required to Work Together in New Ways

1. "Effects of being team member on relationship with specialty group"

**Experimental**
1. Initially, faculty talk from specialty background
2. Feeling of loss

**Control**
1. Faculty may continue to divide by years within teams
2. Learn from each other -- like interdisciplinary groups
3. Hard to keep balance

3. Team teaching limited so far -- actually "turn" teaching (2)

4. Get together in senior curriculum

5. Fight for own specialty in terms of content -- how much of the curriculum do they get

2. "Stresses produced by working together as a team"

Experimental
1. Teams meet too much
2. Work load high (2)
3. Role identification -- losing expertise in specialty
4. Pressure for academic preparation -- publish or perish
5. Help faculty to see where other faculty expertise lies and can be drawn upon (2)
6. Readiness is at different levels

Control
1. Win-lose re: content
2. Giving up clinical area when no longer teaching seniors
3. Difficult to give up ideas re: all having identical experiences in identical agencies
4. Polarization of faculty -- supportive vs. nonsupportive (2)

III. Subject Matter Lost/Gained in New Curriculum

1. "Subject matter lost"

Experimental
1. Nutrition
2. Pharmacology (2)
3. Ethical and legal issues (2)
4. Physical assessment skills
5. Principles of public health -- epidemiology and community needs
6. Clinical practice skills

Control
1. Content in specialties -- maternity, med. surg. (2)
2. May have 4 separate curricula in 4 satellite learning centers. No evaluation procedure to measure whether or not this has occurred and which is better
3. Basic skills (2)
4. Minimal clinical application of content -- "paper nurses"
5. Pathophysiology -- concurrent -- and may have to get some on own
2. "Subject matter gained"

**Experimental**

1. Focus on health maintenance (6)
2. Community involvement, student accountability
3. Course on change (2)
4. Learning in more efficient ways
5. 3 new courses
6. More focus on chronic illness

**Control**

1. Theoretical framework, conceptual framework for use in all situations
2. No repetition
3. Building on concepts -- simple to complex (2)
4. More exposure to more ideas
5. Students looking at man as a totality -- individual in family, community, etc.
6. Students are learning for learning's sake
7. Better relationship -- faculty to student
8. Students learning to organize, political techniques

IV. Overall Reactions

1. "Reactions from other faculty about new curriculum"

**Experimental**

1. Frustration with specialty loss followed by enthusiasm for team development
2. All theory
3. Will they pass state boards
4. Good (2)
5. Apprehension -- do I have to be all things to all people

**Control**

1. Need more clinical application "hands on"
2. How are LAPS going to get done?
3. Uncomfortable without blocks of course time given to specialties
4. Don't buy but will implement
5. Need a fair grading system.
2. "Changes that would have had a positive effect"

**Experimental**

1. Knowing the teaching teams earlier
2. More preparation of certain blocks of faculty for change process
3. Faculty should be hired, oriented and on board with philosophy
4. More public health people on teams
5. More time (2)
6. Unclear channels of administration and communication
7. Get agencies involved more completely

**Control**

1. Time for coordinators to do orientation for new faculty
2. Do pre-planning (2)
3. Definite time for teams to meet (2)
4. Clarify decision making process (2)
5. Team maintenance and team building activities
6. Do something about faculty's lack of ownership of curriculum

V. Coordinator's Management Style

"How do you manage your team"

**Experimental**

1. Meeting every other week with agenda setting (2)
2. Goal setting
3. Availability to faculty
4. Elicit expertise from one another
5. Tasks decided by coordinator and the Dean
6. Follow ground rules with consistency of process

**Control**

1. Information conduit (4)
2. Meetings -- very basic decisions like where students go next (3)
3. Managed conflict by direct confrontation once
4. Faculty had freedom to teach in own style
5. Tries to get faculty in conflict to talk out problems
6. Role reversed -- students manage faculty conflicts
7. Hard to tell how much is resistance; how much is real problem
VI. Management Issues

1. "Forces that help coordinator/leader in fulfilling role"

**Experimental**
1. M.I.T. helped with change process (3)
2. Faculty behind the change
3. Support of the Dean
4. Support of other coordinators

**Control**
1. Small support system within team
2. Small support system within faculty
3. Support of students by end of semester
4. Easier to coordinate a group when you define own role
5. Large support system within team (2)
6. Meetings with other coordinators

2. "Barriers to coordinator/leader being as effective as possible"

**Experimental**
1. Needed to be in role before change was implemented
2. Being enrolled in a doctoral program
3. Needed to know theoretical background of team building and group process
4. Breaking down barriers of ties to disciplines (2)
5. Time commitment
6. Needed clearly defined help from M.I.T.
7. Inexperience

**Control**
1. Work load -- new program and old program at the same time (3)
2. Organization -- who is responsible for implementing decisions and where. What decisions can be made in team and which ones by whole faculty (3)
3. Isolation of teams from each other (2)
4. Equating unfinished business (content not yet covered) with failure
5. Expectation that the new curriculum will fall immediately into place
6. Overt split in faculty -- each side thinking they are promoting curriculum development
7. No clearly described role for coordinator -- variety of expectations of team members can't be met
8. Planning done too late (2)

9. People don't attend meetings — then don't like decisions made. Not issues not resolved

10. Dumping on coordinator

11. Denial that curriculum must be implemented

12. Normal channels of communication not working

13. No way to give recognition to those who have worked the hardest

14. Coordinator needs sanction, definition, power, status, differentiation in salary

15. Coordinators are junior faculty — difficult to have authority over senior faculty

16. Community development in satellite learning centers not done before September (2)

17. Faculty save experiences for preferred groups — in this case, seniors in old curriculum

VII. Effectiveness of the Experimental School's Management Team

1. How effective has management team been
   1. Curriculum implemented
   2. Mutual support for individuals in the group
   3. Assisted in integrating materials
   4. Personal growth
   5. Use it to get information
   6. Publication of article on the process of change

2. Benefits produced by working as management team
   1. Better information flow (2)
2. See problems earlier
3. Support

3. Stresses produced by working as member of management team
   1. Time (3)
   2. Secondary -- personality conflicts
   3. Tertiary -- 2 years away from implementation
   4. Not sure whether want to be member of management team (2)
   5. Uncertainty as to degree of authority

VIII. Comments on M.I.T.'s Educational Interventions

1. Primary team -- very effective
2. Secondary team -- personality conflicts
3. Tertiary team -- 2 years away from implementation
4. Introduced very useful, simple techniques
5. Needed to learn how to use a consultant
6. Help reduce anxiety
7. Objective outsiders
8. Great deal of assistance and support
Evaluation of Educational Intervention -- Dean

1. Support for change
   a. Has to support financially in budget
   b. Faculty supports change -- biggest strength is the morale and willingness of the faculty
   c. Students support

2. Stresses -- some for primary, secondary, and tertiary -- not knowing who exactly will be on teaching team
   a. Trust in the dean that she would honor preferences as possible
   b. How to select competent coordinators and trust them
   c. Changes in agencies and the use of them
   d. If student fails course that will not be offered again -- how to cope with that

3. Gains -- more logical look at nursing -- content designed in more logical structure

4. Generally, faculty has reacted well to change

5. Needed overall curriculum director to spend more time for planning. Turned down on grant application

6. Strength of M.I.T. intervention -- support to coordinators, help in faculty development. Gave support that the dean didn't have to give. M.I.T. not really like outsiders -- if we had to pay for that kind of help, we couldn't afford it. Gave credibility to curriculum change, prestige to effort.
Finally, we want to list some guidelines for administrators who are faced with the decision of what interventions are best in a change project. Unfortunately, there is no cookbook or protocol that is fully reliable in making this decision. The best that can be offered at this point are some guidelines.

A. If the organization or problem is complex and has many constituencies with strong positions - particularly polarized positions - it is likely that a neutral activity of an educational nature will offer a good chance of at least getting a better problem definition and some commitment to the organization improvement issues.

B. A systematic assessment of the organization's attitudes toward the change and capability to make it happen, is always helpful. Aspects of such an assessment include:

1. Developing a real consensus of the definition of the problem. What is to be changed? What will it look like when "changed"?

2. Assessing types of changes in attitudes, behavior, policies, procedures that will be required for the change to occur.

3. Assessing the readiness (willingness) of key people in the system (organization) and its environment to do what is required to implement the change:
   a. Let it happen
   b. Help it happen
   c. Make it happen

4. A careful assessment of their capability (resources - people/money) to make the change.

C. If there is not a "critical mass" of key people with active commitment
to the change, it may be important to use an educational or learning mode to get them to see the problem in perspective — to differentiate the substantive problem (e.g., curriculum change) from the organization problem of mobilizing necessary resources for the change.

D. If there is a lack of "technical" capability in managing the new conditions — due to lack of expertise or skill — an educational activity, helping people understand the organization dynamics and process of managing change is facilitative and desirable.

An educational intervention is no panacea but is often the "best" way of getting clarity on the problem, consensus on the steps needed and commitment to action.

About Educational Interventions

1. Based on these experiments and other similar interventions in organizations, we would reaffirm that training and education in the management of change (on the job) for leaders, at several levels of health schools, has a positive effect on the actual management of change.

2. An "unfreezing" intervention — an activity designed to bring together significant members of the system, to clarify problem definitions, and to participate in and influence the action plans for managing the change, produces:

A. more clarity on the situation and more objectivity,
B. more commitment to the change,
C. a better transition governance,
D. a better feedback system,
E. conflict management mechanisms, and
F. better communication between sub-systems.
3. The use of educational interventions speeds up the processes of self-management inside the organization.

4. An increased awareness of the need for on-going feedback systems is another result.

About Organizational Change

Although these experiments were conducted to help health schools manage the organizational issues concerned with curriculum change, the principles would apply equally to a health delivery system or a teaching hospital. The issues or questions around change for managing any of these institutions are:

A. the need for change.
   1. How is the need for change determined? Outside or inside the organization?
   2. Is there a choice for the management of whether to change, or only how to change?

B. What is the desired change state?

C. What is the diagnosis of the organization's and its sub-systems' (readiness) and its capacity to make the change?

D. What activities will need to be programmed?

E. How will the transition period be managed?

F. What commitment is needed - from whom? What plans are necessary for getting a critical mass of support?

G. How will the new state be managed?

H. What needs to be programmed to insure:
   1. Some stability in the new state.
   2. Flexibility and self-renewal.

It is our belief that providing educational assistance to organization leaders in understanding these questions, plus the skills of managing the
answers, can significantly affect the (efficiency)(internal productivity) of organizational change; but more significantly can redirect energy toward the organizational mission - providing health care or educating health deliverers - and can minimize the amount of dysfunctional energy often expended on internal organizational activity.
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