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The University of Michigan, Ph.D., 1974
Education, secondary

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FORCES AFFECTING THE MAINTENANCE OF AN INNOVATION: FLEXIBLE/MODULAR SCHEDULING IN A SENIOR HIGH SCHOOL

VOLUME I

by
Earl Franz Newman

A disseration submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education)
in The University of Michigan
1974

Doctoral Committee:

Professor William M. Cave, Chairman
Professor Ronald Lippitt
Professor Allen Menlo
Assistant Professor Eugene Weiss

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This effort is dedicated with appreciation to all those who told me I could do it, and with apologies to my family, who have put up uncomplainingly with so many disappointments and inconveniences.

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CHAPTER I

THE PROBLEM

Introduction

An interest in the promotion of innovation and change in schools was an important characteristic of American education in the 1960's. In 1964, Miles wrote:

> Whether we are actually moving into anything like an educational revolution will probably not be clear for a decade or so. But it is apparent that comprehensive changes in the structure and functioning of American educational institutions are now occurring, partly as a result of the steadily accelerating demands on these institutions. There is a good deal of professed public concern about the adequacy of education, and an expressed interest in educational reform which is nothing short of striking.[1]

This interest was reflected in the actions of diverse agencies both inside and outside the school system. The Federal government became involved through the funding of programs intended both to institute particular innovations and to press forward with research and development on still others. Private foundations, scholars in the several academic disciplines, and professional groups within the educational system were also involved in the development and promotion

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[1]Matthew B. Miles, "Educational Innovation: The Nature of the Problem," Innovation in Education, ed. Matthew B. Miles (New York: Bureau of Publications, Teachers College, Columbia University, 1964), pp. 1-2.

of various kinds of educational innovations.[1]

The interest in educational innovation has been paralelled by a concern in scholarly circles with the diffusion of innovations as a general problem in other areas of endeavor. Havelock has written: "There is a new field of knowledge emerging in the 1960's which might be described as the 'science of knowledge utilization.'"[2] He notes that the development of such a science is accounted for by two contemporary social forces; these are the knowledge explosion and a wifely-held belief that knowledge "should be useful to man."[3] Thus, simultaneous with the increased interest in substantive innovations in education, there has been developing a concern with the process by which innovations are disseminated and instituted in educational systems, as well as in other fields.

The Purpose of this Study

The purpose of this study in general terms is to contribute to the understanding of the institution and maintenance of innovations in educational systems through a case study of a particular innovation effort. The case in point

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[1] Ibid., pp. 3-5.

[2] Ronald G. Havelock et al., Planning for Innovation Through Dissemination and Utilization of Knowledge (Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, The University of Michigan, 1971), p. 1-1.

[3] Ibid.

is The Franklin Plan for Instructional Improvement,[1] an innovation which was implemented and maintained for a period of five years, 1966-1970, at Franklin High School in Livonia, Michigan, a suburb of Detroit. More specifically, an effort will be made to do the following:

1. Identify the forces operating within the system to either support or defeat the innovation during the years it was being instituted and maintained.
2. To describe the efforts which were made to maintain the innovation during the time indicated.
3. To assess the relative effectiveness of the maintenance efforts.
4. To explain and account for the variable levels of support for and participation in the innovative program over the term of its adoption.

These purposes are enumerated with the conviction that gaining a greater understanding of the factors affecting the maintenance of a particular innovation will facilitate the introduction and maintenance of innovations in other settings.

A fundamental assumption upon which this study is based and from which the purposes enumerated above are derived is that the theory of social change articulated by Kurt Lewin[2] is particularly suited to examining situations

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[1] The Franklin Plan: Operational Position Statement for Instructional Improvement at Franklin High School (Livonia, Michigan: Franklin High School, Livonia Public Schools, 1966).

[2] Kurt Lewin, "Frontiers in Group Dynamics," Field Theory in Social Science: Selected Theoretical Papers by Kurt Lewin, ed. Dorwin Cartwright (New York: Harper & Row, 1951), pp. 188-237.

like the case in point. According to Lewin, any social situation can be characterized as a "quasi-stationary equilibrium," in which forces are present, some of which tend to change the situation, and some of which tend to maintain it as it is. The problem of change is to so alter the forces that a new equilibrium level is arrived at and maintained. It is our position here that The Franklin Plan as an innovation effort provides an example of such an effort to move a social system to a new and different quasi-stationary equilibrium. Approaching the problem of change in educational systems from this perspective seems to hold promise as a way of understanding the process of maintenance of innovations. Using Lewinian terms, Thelen has written:

> Let us reserve change for a situation characterized by these two criteria: there has been a change in the force field (emphasis mine)--a new quasi-stationary equilibrium has been struck; and a major component within this new pattern is altered "own" forces of the persons whose performance constitutes and maintains the change.[1]

In connection with this, one of the purposes of this study will be to discover whether The Franklin Plan was an example of change in these terms. If such a change took place, we will be interested in knowing how it was accomplished; if a change, as defined by Thelen did not take place, we will want to identify the barriers which prevented change.

---

[1]Herbert A. Thelen, "Concepts for Collaborative Action Inquiry," Concepts for Social Change, ed. Goodwin Watson (Washington, D.C.: National Training Laboratories, Institute for Applied Behavioral Science, 1967), p. 37.

The Problem and Its Setting

Franklin High School is one of four public high schools in the city of Livonia, Michigan. Incorporated as a city in 1950, its current population of 110,000 is housed primarily in single-family dwellings, most of which have been constructed in the last decade. These houses are distributed among a number of development tracts or subdivisions; residents are primarily middle-income. The city is on a firm financial base, with a good location on rail and trunk lines west of Detroit, and with well-developed commercial and industrial areas.

Livonia schools have enjoyed a reputation in the metropolitan area as being among the most dynamic and innovative. This is probably attributable to the fortuitous combination of a youthful teaching staff, an enlightened administration, and adequate financing. Additionally, the suburb has experienced rapid growth which has drawn a large number of people with high aspirations and an interest in building a good educational system. A generally high level of support for education is indicated by the community's willingness over the past fifteen years to finance an extensive building program.

Franklin High School enrolled its first students in the fall of 1962. Stimulated by the visit of an accreditation team from the North Central Association in 1964, the staff began a period of self-study which culminated in the decision to institute the Franklin Plan for Instructional

Improvement.[1] During the period of self-study the staff had determined that their objective ought to be to increase the individualization of instruction, "to better structure the teaching process in order to reach the individual--to make him an active participant in the teaching/learning process--to help him develop responsibility for his own learning."[2] It appeared that the most promising vehicle for this effort would be the institution of flexible/modular scheduling, because of the options provided under such a system for flexibility in use of time, size of instructional groups, and use of facilities.

A one-year pilot project incorporating elements of the innovative program was established in September of 1966. The pilot program involved sixteen teachers from seven of the academic departments in the school. Approximately 750 students were involved to some degree in the pilot program. The teachers involved in this first year were all volunteers; students who were involved were those who were scheduled into the classes of the teachers who elected to participate in the program. This policy of permitting teachers the option of deciding whether to schedule their classes flexibly was continued through the five years the program was in effect. The fact that this policy was followed has several implications for the present study. The first implication

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[1] The Franklin Plan, 1966, p. 1.

[2] Ibid.

is that we can regard individual teachers as adopting units. In this respect The Franklin Plan as an innovation event can be distinguished from situations in which an innovation-decision made at the administrative level commits everyone in the system to participation. Another implication of the optionality of teacher participation is that if we make the assumption that a teacher's decision to schedule his or her own classes in the modular system is an indicator of support for the innovation, then we can use aggregate data on the level of participation for the years during which the innovation was in effect as indices of the level of support and acceptance of the innovation. This assumption will be made in this study. It should be noted that in addition to having the option to participate or not participate in the innovative program, teachers also could elect to schedule as many or as few of their classes in this manner as they chose, subject to certain restrictions which will be described later in the study under the discussion of maintenance efforts.

The decision to allow teachers the option of deciding whether or not to participate in the modular scheduling program meant that two scheduling systems would have to be in use simultaneously; some teachers and students would be following a traditional schedule while others would be following a modular schedule. A third implication of this policy for this study is that the relative strength of forces tending to either support the innovation or defeat it will be reflected in the number of class sections offered each

year in each of the two modes, i.e., flexible/modular or traditional. That such a phenomenon was in evidence is indicated by the data on participation for the years in question. This is illustrated by Figure 1.1, which shows the percentages of total class sections in each year which were scheduled in the flexible/modular system.

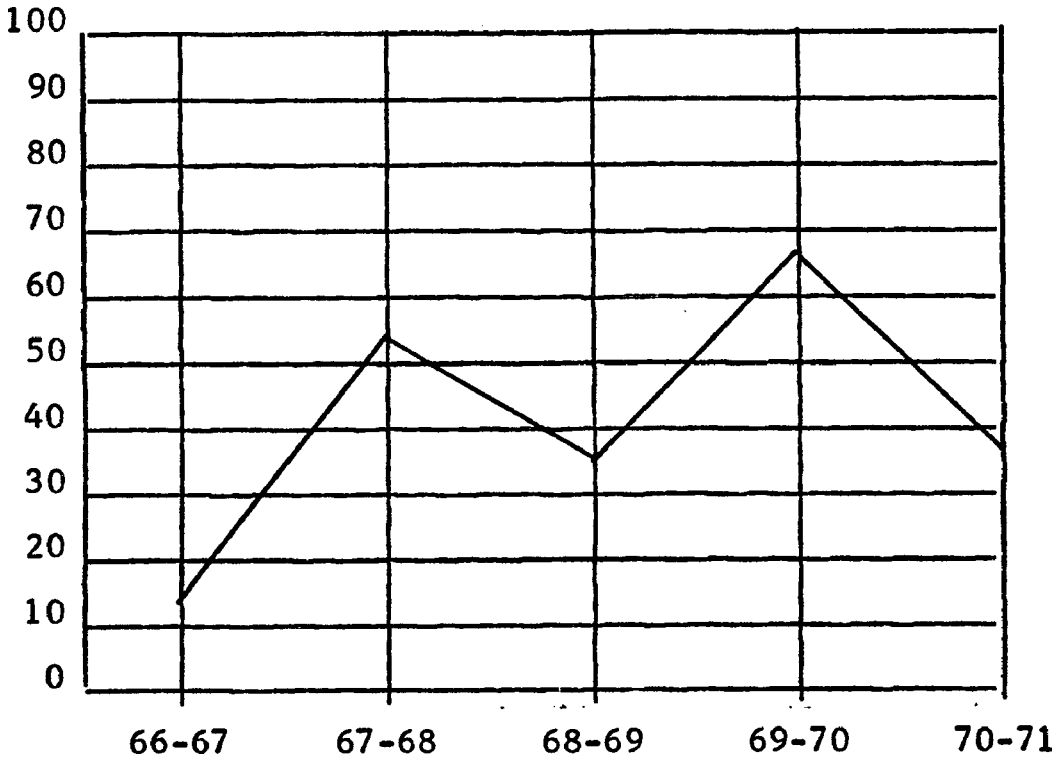


Fig. 1.1--Level of participation in the Franklin Plan as measured by the percentage of classes scheduled in the flexible mode for the school as a whole.

The first year, 1966-67, was the year of the pilot program, which was purposely kept small in order to test the feasibility of the innovation. The second year was characterized by large-scale participation; the third year witnessed a regression to a largely traditional schedule, and was followed in the fourth year by a resurgence of support for the innovation. In the fifth and final year there

was another decline in the level of participation in the innovation. These are very interesting data and we would like to be able to account for the fluctuations in the level of support for the innovation during these years. The Franklin Plan was terminated as an innovation at the end of its fifth year, and in September of 1971 the entire school reverted to a traditional schedule. This followed the defeat of two attempts in the spring and summer of 1971 to pass millage levies in the Livonia school district. We are concerned primarily with the forces within the system, here defined as the school, which had a bearing on the varying levels of support for the innovation during the years in question, and would prefer to regard the millage defeats and the resultant budgetary reductions as the imposition of external forces which are not a part of the study. Our concern here will be with the maintenance processes by which the innovation was continued for five years and the forces within the system which affected the level of the quasi-stationary equilibrium.

Need for the Study

In the Introduction to this chapter some allusion was made to the high interest in the process of innovation in educational systems. Sarason writes:

> There are few, if any, major social problems for which explanations and solutions do not in some way involve the public school--involvement that may be direct or indirect, relevant or irrelevant, small or large . . .

> Therefore, it should not be surprising that discussion of any major social problem--be it violence, drug addiction, sex, illegitimacy, malnutrition, unemployability, smoking, or racial discrimination--quickly centers on what schools are and what they should be.[1]

The key words here with respect to schools are "what they should be." To the extent that what they should be differs from what they are, change is required to correct the deficiency. That significant groups believe that schools should be and do things different than they are and do is implicit in the attention being paid to the problem of changing schools by government agencies, scholarly groups, and others.

Notwithstanding the high level of interest in changing schools, the idea persists that the American educational system does not change as rapidly as it ought to, that it is not as adaptable as required by the times in which we live, and has generally been unable to make use of new knowledge as efficiently as other institutions within our society. Orlosky and Smith made a study for the U.S. Office of Education in which they identified 63 major change efforts in education of the past 75 years. Of these, they found only 23 to have been "successfully installed and (to have) permeated the educational system."[2] The schools have

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[1]Seymour B. Sarason, The Culture of the School and the Problem of Change (Boston: Allyn and Bacon, 1971), p. 7.

[2]Donald Orlosky and P. Othanel Smith, "Educational Change: Its Origins and Characteristics," Phi Delta Kappan, LIII (March, 1972, p. 412.

a reputation for being resistant to change. The Committee for Economic Development has written:

> The Future of the schools depends in large part on whether they can overcome in educational policy and practice what is frequently an extreme conservatism and a strong resistance to change. This depends in turn on whether they can develop a genuine openness to experiment and innovation.[1]

Havelock and his staff catalogued 4,000 studies; of these, 674 were in the field of education, the largest single category. Notwithstanding the size of this body of literature, there remain gaps to be filled. One gap is suggested by Havelock's classification of studies on the basis of their focus on a significant part of the innovation process. He found that of 4,000 studies, 36.2% were concerned with "to whom," i.e., the characteristics of the adopting unit; 21.6% inquired into channels of communication of innovations; only 9.5% attempted to answer the question, "to what effect?"[2] This implies that additional research on the outcomes of innovation efforts is needed. Rogers strikes a similar note:

> An innovation is of little use until it is distributed to others and put to use by them. Thus, invention and diffusion are but immediate means to an ultimate end: the consequences from adoption of an innovation.
>
> Researchers have given little attention to consequences; so have change agents. They often assume that adoption of a given innovation will produce only beneficial results for its adopters. Change agents should recognize their responsibility for the consequences of the innovations they introduce. They should be able to predict the

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[1] Committee for Economic Development, Innovation in Education: New Directions for the American School (New York: Committee for Economic Development, 1968), p. 14.

[2] Havelock, Planning for Innovation, pp. 1.7-1.16.

> advantages and disadvantages of an innovation before introducing it to their clients, but this is seldom done.[1]

Another gap is cited by Havelock:

> We were disappointed to find so few case studies. Of the thousands of dissemination and utilization events that take place each year it is unsettling to find so few documented in such a way that others could learn from them.[2]

It is the objective of this study to add to our understanding of the change process in schools through the use of a case study approach to documenting and analyzing the consequences of an educational innovation in a particular setting.

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[1]Everett R. Rogers, Communication of Innovations: A Cross-Cultural Approach (2d. ed. rev.; New York: The Free Press, 1971), p. 319.

[2]Havelock, Planning for Innovation, p. 1.17.

CHAPTER II

REVIEW OF LITERATURE

The Problem of Innovation in Education Systems

In Chapter I the proposition was advanced that schools are widely regarded as slow to change and to take advantage of new technologies. The problem can be stated in this way: given that new technologies and new knowledge may have the potential for improving the schools' capacities for dealing with their problems, how can these technologies be communicated to and integrated into the education system? The assumption is that schools, as other social institutions, ought to be responsive to and able to make use of advances or improvements in the fields of knowledge on which they are dependent.

Innovation Defined

Miles defines an innovation as "a deliberate, novel, specified change which is thought to be more efficacious in accomplishing the goals of a system."[1] Rogers says an innovation is:

> an idea, practice, or object perceived as new by an individual. It matters little, so far as human behavior is concerned, whether or not an idea is "objectively" new as measured by the lapse of time since its first use or discovery. It is the

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[1] Matthew B. Miles, ed., Innovation in Education, p. 14.

> perceived or subjective newness of the idea for the individual that determines his reaction to it. If the idea seems new to the individual, it is an innovation.[1]

These are two elements, then, which define innovation for the purposes of this study. An innovation is a practice which is new to the particular individual, school, or school system which is the potential adopter, and it is thought to be an improvement over existing practices.

Models of the Change Process

Havelock has identified three broad classifications of approaches to the study of the process of planned change.

1. The Social-Interaction perspective.--The emphasis in this approach is on the individual adopter. It is assumed that social change takes place through a process of communication involving the members of interested groups. The objects of study are the characteristics of individual adopters and the character of their communications with one another. He notes that this perspective is rooted in the anthropological study of the diffusion of cultural traits.

2. The Research, Development, and Diffusion perspective.--This is a rational perspective in which the diffusion of an innovation is followed from its origin in basic research through ultimate adoption. Its focus is on the broad spectrum of the innovation process, unlike the social-interaction perspective, which is not particularly concerned with the

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[1]Everett R. Rogers, Communication of Innovations, p. 19.

origin of innovations but primarily with their transmission.

3. The Problem-Solver perspective.--This approach focuses on the potential user of an innovation. The ability of the user to make use of new knowledge to solve problems felt and identified by the user is regarded as more important than the diffusion of any particular innovation. Change in this view is thought to be a product of the problem-solving processes which are internal to the user system and the emphasis is on helping the user through these processes.[1]

Havelock notes the failure of any one of these perspectives to adequately describe the total innovation process, although he acknowledges the contributions each has made to understanding particular stages in the process. He sees "linkage" as a missing element in the relationship between these perspectives, and proposes the development of what he terms a "macrosystem" of knowledge usage. In this view each of the several stages in the total process can be conceived as a subsystem of the total system. Thus there are knowledge-building, knowledge-disseminating, and knowledge-consuming subsystems. The role of a linkage system would be to provide communication between these sub-systems. Improved communication flow between systems would enable those systems to sharpen their own internal problem-solving processes while making the needs and abilities of each better known to the others.[2]

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[1] Ronald G. Havelock, Planning for Innovation, pp. 10-26--10-69.

[2] Ibid., pp. 11-15--11-17.

Special Problems of Change in Schools

Studies on the diffusion and utilization of innovations have examined the process of change in a number of different fields. Rogers lists seven discrete fields in which research traditions have been developed,[1] and Havelock identifies eleven.[2] These fields include agriculture, medicine, communication, and education, in addition to others. Each such field is marked by its peculiar needs as dictated by differences in purposes and structure. A number of writers have commented on the special problems of education in this respect. Some of these are discussed in the paragraphs which follow.

Characteristics of the Educational System

The field of education as a system has certain attributes which tend to inhibit the diffusion and use of new knowledge. Carlson identified three barriers to change in education as: (1) the lack of any established role of change agent analogous to the county extension agent in agriculture; (2) the weak knowledge base on which education decisions are made; (3) the schools' status as "domesticated" institutions which do not compete with each other for students and thus have little incentive to improve their practices.[3] The weakness of the research tradition in education

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[1]Rogers, Communication of Innovations, pp. 48-69.

[2]Havelock, Planning for Innovation, p. 1-16.

is similarly cited by Pellegrin. He notes that there is among educators a lack of appreciation for research, much of the existing research is low in quality, and the area is so large that research efforts have been diffuse, rather than concentrated.[1]

Miles sees the schools as characterized by the following properties which inhibit their ability to adapt:

1. Goal ambiguity--Differing philosophies and expectations make it difficult for practitioners to agree on the direction change should take.

2. Input variability--Students are not homogenous, nor are their teachers; therefore innovations which seem to succeed in some settings may not succeed in other settings.

3. Role performance ambiguity--There is lack of agreement about the behavior that is expected of teachers and others in the system.

4. Low interdependence among teachers--The diffusion of innovations from teacher to teacher is limited by the structure of the work organization. Practices adopted by any particular teacher are not likely to directly affect the behavior of other teachers.

5. Vulnerability to environmental influences--Schools are dependent institutions--dependent on public financing and subject to political pressures.

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[1] Ronald J. Pellegrin, "The Place of Research in Planned Change," in Change Processes in the Public Schools, ed. by Richard O. Carlson (Eugene, Oregon: The Center for the Advanced Study of Educational Administration, The University of Oregon, 1965), p.

6. Lay-professional control problems--As professionals, teachers are not free to exercise professional judgment in many instances because the ultimate authority in educational matters is in the hands of the lay public or their representatives.

7. Low technological investment--Education is a highly labor-intensive enterprise; effecting change in educational systems is thus more complicated than in fields where change can be effected by introducing new equipment.[1]

Lippitt finds education distinguished from other knowledge-utilizing communities by the following characteristics:

1. Change in education requires significant changes in the values, attitudes, and skills of the practitioners.

2. Changes in educational systems are adaptations rather than adoptions.

3. We do not have systematic ways of validating and cataloguing innovations in education.

4. Practitioners in education get little feedback about the effectiveness of new practices.

5. There is no payoff in education for the innovator.

6. The communication network between basic research and practice is poorly developed.[2]

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[1]Matthew B. Miles, "Planned Change and Organizational Health," in Carlson, Change Processes, pp. 15-33.

[2]Ronald Lippit, "The Use of Social Research to Improve Social Practice," in Concepts for Social Change, Goodwin Watson, pp. 76-78.

These comments indicate some of the ways in which education is perceived as different from other knowledge-utilizing communities. In general, the impression is that education is characterized by a weak research base, communication channels within the system are not successful in reaching practitioners, and there is little incentive for practitioners to change. In addition, there is lack of agreement about goals and hence what kind of change would be desirable, and the effectiveness of given practices is difficult to measure.

Characteristics of Schools

In the paragraphs above, some of the attributes of the larger educational system were cited as contributing to the system's resistance to change. Although some of the characteristics described above are operative at the local school level, it is possible to discern special barriers to innovation that are internal to schools as organizational entities. In short, given an improvement in the educational system's ability to generate and disseminate new and useful knowledge, there would still be the problem of integrating such knowledge into the level of practice--individual schools and classrooms. Sarason has identified the existence of certain <u>regularities</u> in the practices in schools as a barrier to change efforts. "any attempt to introduce a change into the school involves some existing regularity, behavioral

or programmatic."[1] Programmatic regularities are such things as the way in which time is allocated to certain activities during the school day, the nature of the subject-matter included in the curriculum, and the organization of the physical facilities. Behavioral regularities are the ways in which persons in the school, e.g., teachers, students, and administrators interact with each other and other elements in the school situation. These are termed regularities by Sarason because long practice has standardized them. For each such practice, there are conceivable alternative modes that may accomplish the same intended outcomes as the regularities. One of the obstacles to change in schools is the unwillingness to seek such alternatives.[2]

Gallaher looks at the school as a formal organization which is characterized by a centralized authority, a status hierarchy, and a system of norms. Important variables which affect the ability of a school to innovate successfully in his view are: (1) the level of dependence on authority which characterizes the situation, (2) the extent to which the members of the target system expect change to occur, (3) the extent of the felt need for change, (4) other factors in the situation which address the question of whether the time is right, and (5) the size and complexity of the organization. In his view, a problem which is endemic

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[1] Seymour B. Sarason, The Culture of the School, p. 3.

[2] Ibid., pp. 62-87.

to the school as an organization is that the norms by which schools operate do not endow the administrators with the authority which is needed to direct change. The authority of school administrators is diminished, in his view, by the informal relationships and attitudes which exist within the system between the administrator and his subordinates, and as well by the effect on schools of the problems of the larger community. The school administrator is, in Gallaher's terms, "the man in the middle" between these groups, and his effectiveness as an advocate of change is diminished correspondingly.[1]

Johnson also sees the norms of the school as barriers to change. These norms consist in large part of the framework of beliefs which govern the behavior of students, teachers, administrators, and other personnel in the school. Therefore, he says, if teachers' behavior is to change, school norms and role expectations must be changed as well as teachers' values and attitudes. In his opinion teachers are "low-level bureaucratic functionaries" with little power to initiate change on their own. He also makes note of the difficulty of measuring instructional output:

> Most theories of planned change . . . are based on the assumption that the major forces for change in behavior are dissatisfaction with, or disconfirmation of present behavior. Since empirical disconfirmation of a teaching practice is rare,

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[1]Art Gallaher, Jr., "Directed Change in Formal Organizations: The School System," in Carlson, ed., Change Processes in the Public Schools, pp. 37-51.

> teachers may rarely be highly motivated to accept new teaching practices.[1]

The nature of daily tasks also interferes:

> The time pressures, the crowded conditions, and the fast pace of classroom life all interfere with teachers' freedom to analyze, evaluate, and modify what is happening in the classroom. Any innovation that does not take this busyness (sic) into account will not be accepted.[2]

Regarding the school as a system, Watson postulates that all forces which contribute to stability in personality or in social systems can be perceived as resisting change. He notes that if people and organizations do not change, it must be because the natural drives toward innovation are being stifled or held in check by countervailing forces. He believes that change typically passes through five stages, as measured by the quantity and quality of resistance. In the early stage there are only a few proponents of the change: others are opposed. In the second stage the forces for and against the innovation have begun to take shape as each side grows in numbers, and in the third stage the forces are engaged. If the proponents of change are successful, in the fourth stage they are in control and resistance has been reduced to a nuisance level, although the possibility of regression remains. In the fifth stage the innovation's success is established--it has been institutionalized and is part of the status quo, subject to challenge from new

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[1] David W. Johnson, "Influences on Teachers' Acceptance of Change," Elementary School Journal, December, 1969, p. 146.

[2] Ibid., p. 147

innovations. He classifies sources of resistance to change as of two types: personality, and system. Personality resistance is rooted in the habits, perceptions, and attitudes of persons; examples of system sources are the conformity to norms, vested interests, and rejection of outsiders.[1]

In viewing any situation from the perspective of those who wish to promote change, opponents of change are regarded as obstacles to progress. Klein, however, notes that among those who are opposed to change in any given instance there may be some who ground their position in very substantial and justifiable reasons. He terms these people "defenders," and suggests that they may play a useful role in fending off precipitous, poorly planned change. Outspoken, they often do articulate the concerns of others in the group. He says that to some extent, opposition to change is desirable in complex organizations--it serves to maintain the integrity of the system.[2]

Summary

Students of the change process in schools have found barriers to change both at the level of the total system and within the units that comprise the system (schools and school districts). At the system level, research and the

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[1]Goodwin Watson, "Resistance to Change," in Concepts for Social Change, pp. 10-23.

[2]Donald Klein, "Some Notes on the Dynamics of Planned Change: The Defender Role," in Goodwin Matson, ed., Concepts for Social Change, pp. 26-36.

generation of knowledge are diffuse and poorly communicated to those who would be in a position to make use of them. At the level of practice a number of writers find that the local school or school system is characterized by norms that resist change, is poorly equipped to measure output which might indicate the need for change, and does not have the structure and roles established which would provide an effective way of institutionalizing change.

Suggestions for Improvement

Miles has suggested that students of the process of planned change in education have erred in concentrating too much attention on the characteristics of innovations as entities, and not enough on the states of the target systems. He says the organization receiving an innovation is as important as the innovation itself. He puts forth the concept of "organizational health" as a requisite for successful innovation. He lists ten properties that organizations should try to promote in order to improve their internal health and thus their adaptability. These properties include goal focus, communication adequacy, optional power equalization, resource utilization, cohesiveness, morale, innovativeness, autonomy, adaptation, and problem solving adequacy. He suggests certain kinds of interventions which can be used in the social setting:

1. Team Training--Members of a work group are brought together in special meetings to diagnose and develop solutions to problems. A work group consists of persons whose

jobs are closely related, such as the administrative staff or the counseling staff.

2. Survey feedback--The opinions and concerns of a significant public within the organization are solicited through the use of a survey instrument.

3. Role workshop--All the persons who occupy a given role are brought together to work on common problems (all principals, all counselors, etc.).

4. Target-setting and supporting activities--Superiors meet with each of their subordinates individually for the purpose of mutually agreeing on targets to be met.

5. Organizational diagnosis and problem-solving--This calls for the meeting of an intact work group, preferably in a residential setting at a site away from the school.

6. Organizational experiment--An effort is made to change or improve a given variable in the organizational setting (e.g., communication, goals, decision-making).

Miles sees these approaches as enabling an organization, with the assistance of expert facilitators, to develop norms which enhance adaptability and problem-solving. These are the norms of self-study, communication, and interdependence of roles.[1]

Gallaher distinguishes between two models of change which might be selected by an organization. They are the utopic model and the pragmatic model. In the utopic model,

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[1]Matthew B. Miles, "Planned Change and Organizational Health," in Carlson, ed., Change Processes.

the advocate of change attempts to manipulate a situation to bring about the adoption of a particular innovation. The focus is on the act of acceptance. In the pragmatic model, the goal of change efforts is that of creating a climate which is favorable to change; no particular innovation is selected as the end of the effort.[1] Gallaher favors the latter model,which appears to be similar to the concept of organizational health described by Miles.

Buchanan sees the way to helping an organization to improve its goal-attaining abilities through planned change as a project in what he terms organization development. The process of organization development focuses on the organization itself, and attempts to make use of the members' own ideas and insights. It involves members in identifying problems, working out solutions, and assessing the results. He believes a key factor in this process is that all individuals in the organization function as parts of the organization. The network of interpersonal relationships thus is important. He cites several conditions which enhance the effectiveness of improvement efforts: (1) the efforts should be planned by the members themselves, (2) efforts should be in response to needs, (3) mutual trust and respect should prevail, (4) feedback should be available.[2]

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[1]Art Gallaher, Jr., "Directed Change in Formal Organizations: The School System," Ibid., pp. 37-51.

[2]Paul Buchanan, "The Concept of Organization Development, or Self-renewal, as a Form of Planned Change," in Watson, ed., Concepts for Social Change, pp. 1-7.

Thelen suggests that if the persons whose behavior is to be changed are involved before the fact, the change will be more likely to prevail. He believes one of the factors that makes change difficult is that change agents and practitioners tend to respond to problems differently. He says that change agents and practitioners need to be involved together in diagnosing the realities of the situation, formulation of general policies to guide action, and exploring the conditions under which given policies can contribute to achieving the desired outcomes, i.e., applying behavioral science understandings. He proposes the use of Lewinian force-field analysis as a means of identifying the forces which must be strengthened or overcome in order for change to take place.[1] This suggestion is also put forth by Klein.

Summary

A number of writers regard the problem of innovation and change in education as related to the organizational properties of the target systems. There is particular difficulty in introducing innovations as finished products into such systems. The goodness of a particular innovation is not as important a consideration as gaining the assent of the practitioners whose behavior will be affected by the change. The concept of organizational health or

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[1]Herbert A. Thelen, "Concepts for Collaborative Action Inquiry," in Goodwin Watson, ed., Concepts for Social Change.

organizational development describes efforts to create within organizations a capacity and a willingness to develop and exercise problem-solving skills so intelligent choices can be made from among innovative practices available. Focii of such efforts can be such elements within the system as the distribution of power, communications channels, role relationships, or interpersonal relationships. The role of outside experts in such efforts can involve assistance in developing the requisite skills as well as a linkage to sources of data outside the system.

Related Research Findings

Orlosky and Smith, in a study conducted for the U.S. Office of Education, attempted to evaluate the staying power of a number of selected educational changes attempted during the last seventy-five years in this country. The changes they selected for study were those which in their opinion were of broad significance. Sixty-three innovations were selected, and were rated by the authors according to their source--whether they originated inside or outside the education system--their degree of success or failure as measured by the extent to which they are currently in use in schools, and the element of school operation to which they were directed--either instruction, curriculum, or organization and administration.[1]

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[1] Donald Orlosky and B. Othanel Smith, "Educational Change: Its Origins and Characteristics," Phi Delta Kappan, March, 1972, pp. 412-414.

Innovations were rated according to staying power on a four-point scale. The rating of (4) was assigned to those changes which have been successfully installed and remain prominent in the educational system. An example of an innovation receiving a rating of (4) is the kindergarten. Changes having been successfully installed and still operative although not universally so were assigned a rating of (3). Head Start is an example, as is ability grouping. Those which have not been widely accepted but which have left a residue of influence were assigned a rating of (2). Flexible/modular scheduling was given a (2) rating by the authors. A rating of (1) was given to innovations which would be difficult to find today in any school system. The core curriculum was such an innovation.

Orlosky and Smith drew several conclusions from their study--conclusions which they believe can help to guide practice. They found that changes in methods of instruction seem to be more difficult to implement successfully than changes in curriculum or administration. Specifically:

> A change that requires the teacher to abandon an existing practice and to displace it with a new practice risks defeat. If teachers must be retrained in order for a change to be made, as in team teaching, the chances for success are reduced unless strong incentives to be retrained are provided.[1]

Initial faculty support for an innovation is no guarantee of ultimate success, in Orlosky and Smith's opinion:

> Complete or considerable displacement of an existing curriculum pattern is not likely to be permanent

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[1] Ibid., p. 414.

> even if the faculty initially supports the change. This can be attributed partly to cognitive strain on the faculty, partly to upsetting the expectations of pupils and consequent parental distrust, and partly to faculty mores which tend to become stronger when threatened by change.[1]

The concept of cognitive burden drew additional comment:

> The weight of the cognitive burden is one of the significant factors that determine the permanence of a change. If the cognitive load is light, i.e., if not many people are required to learn many new facts and procedures, a change is more likely to persist than if the burden is heavy. The weight of the burden is proportional to the number of factors involved in the change. For example, if the total administrative structure is the object of change, the chances for successful innovation will be low. The same observation can be made about changes in methods of instruction or curricular changes.[2]

The observations noted above refer largely to conditions which are internal to innovating systems. With respect to external situations, Orlosky and Smith concluded that changes have a greater chance of success if they enjoy the support of influential groups outside the system. They cited particularly the support of study commissions, organized groups, and professional personnel. In their view the two factors which are most influential in affecting the success of a change effort are the extent and nature of its support, and the degree of strain it puts on school personnel.

Chesler and Barakat, in a study of schools in three midwestern communities, found that secondary school teachers who felt alienated from their schools were less likely to

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[1] Ibid.

[2] Ibid.

either innovate or to share information about innovations with their colleagues. Alienation scores in this study were derived from teachers' responses to items inquiring about their feelings of powerlessness, isolation, involvement in school activities, and dissatisfaction.[1] Another avenue of inquiry in this study was the matter of staff cohesiveness and its effect upon innovation and sharing. Although there was a tendency for teachers who perceived their school staffs as more cohesive to report more innovation and sharing, these results did not attain statistical significance. It was found that teachers who were well liked by their colleagues appeared to innovate more frequently and to share their innovations with colleagues more frequently.[2] Among their conclusions, Chesler and Barakat noted that there did not seem to be a great amount of sharing going on among school staffs. They drew this implication from their findings:

> It must be incumbent upon every school administrator to attempt to reduce teacher alienation, to increase teachers' sense of their own power and direction in school affairs, and to encourage and facilitate the development of informal and formal mechanisms for the creation of dialogue and communication among professionals. This very energetic creation or utilization of a human network to encourage creativity and sharing may be seen

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[1] Mark A. Chesler and Halim I. Barakat, The Innovation and Sharing of Teaching Practices I: A Study of Professional Roles and Social Structures in Schools, Final Report, Project No. 2636, Contract No. OE 5-10-241, United States Department of Health, Education, and Welfare, Office of Education, Bureau of Elementary-Secondary Research (Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, The University of Michigan, 1968), pp. 99-118.

[2] Ibid., pp. 128-129.

as the most critical skill to be developed by emerging school administrators.[1]

Havelock studied a stratified ramdom sample of all operating school systems in the United States with the purpose of documenting the types of innovation occurring in schools during the 1970-71 school year, and of assessing the processes by which the innovations had come about. Superintendents in 500 school systems were contacted with mailed questionnaires, and responses were ultimately received from 353 of them. Respondents reported that a total of 3,185 innovations were then being attempted in their schools--innovations which met the study criterion of "major changes," i.e.,

a. a substantial reorientation on the part of staff,
b. a reallocation of resources,
c. adoption of new practices, programs, or technology.[2]

Respondents were asked to select the most significant among the innovations being tried in their systems during the year in question. Innovations so selected were dubbed "showcase innovations" in the study report.

Flexible/modular scheduling received relatively few citations as a showcase innovation by the responding districts, being selected in only 2% of the cases.[3] The class

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[1] Ibid., pp. 218-219.

[2] Ronald G. Havelock and Mary C. Havelock, Educational Innovation in the United States, Vol. I, The National Survey: The Substance and the Process (Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, The University of Michigan), p. 11.

[3] Ibid., p. 42.

of innovation receiving the greatest number of selections was "individualized instruction and team teaching," selected in 21% of the cases.[1] The data do not suggest the extent to which flexible/modular scheduling may be represented in those innovations which were labelled by the respondents as "individualized instruction and team teaching." (In the case of The Franklin Plan, flexible/modular scheduling was the organizational vehicle for the program of individualized instruction, and team teaching was an important element.)

Findings of the Havelock study which seem to have the most relevance for the current study are the following:

1. Individualized instruction and team teaching was the most-frequently selected showcase innovation type (29%), but the one which received the smallest proportion of positive consequence ratings among the five types classified by Havelock, and the one type which superintendents were most reluctant to advise other districts to attempt.

2. Overall, the consequences of 83% of the showcase innovations were adjudged favorable by the respondents.

3. Teachers were mentioned most frequently as key participants in the innovation process (66% of responses), with assistant superintendents (56%), and principals (47%) following.

4. In response to the question of which were "key factors" accounting for the success of the innovation or

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[1] Ibid., p. 44.

its lack of success, teachers again led (38%), but principals were far down the list of key factors (10%).

5. Given a list of twenty-one items to respond to, each of which represented an element of change strategy, respondents were asked to rate them according to how much emphasis had been given each in the change process affecting the adoption of the showcase innovation in their system. The highest rated items, in order, were: (1) persistence by those who advocated the innovation, (2) systematic planning (3) providing a climate conducive to the sharing of ideas, (4) selecting a competent staff to implement change, (5) creating awareness of the need for change, (6) adequate definition of objectives, (7) adequate diagnosis of the real educational need. Lowest-rated items were participation by community leaders, and taking advantage of crisis situations.

6. Outside resources received very little mention as key factors in the innovation effort. University participation was mentioned in less than 2% of the cases; regional labs were cited by less than one-half of 1%; and state agencies were mentioned by a little more than 1% of respondents. Havelock notes that even allowing for the possibility that these figures may be understated, these are low proportions.[1]

An important section of the questionnaire dealt with "barriers" to the innovation. Havelock reports

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[1] Ibid., pp. 10-21.

disappointment with the responses on this section of the questionnaire, inasmuch as the range of responses was too narrow to draw dramatic distinctions. He attributes this to the fact that since 83% of the superintendents responding labelled their showcase innovations successful, they were unable to assign much weight to barriers.[1] For all the innovations in the showcase category, the leading barriers in order, were: (1) confusion among the staff about the purpose of the innovation, (2) unwillingness of teachers and other school personnel to change or listen to new ideas, (3) shortage of funds allocated for the innovation, (4) staff's lack of information about the innovation.[2] With respect to individualized instruction and team teaching, the class of innovation most similar to The Franklin Plan, "inadequacy of plant, facilities, equipment, or supplies" was a most important barrier, as was "frustration encountered by teachers or staff in trying to adopt."[3]

One of the conclusions drawn by the Havelock study was that there is much more innovation currently going on in American schools than is usually supposed. This was an unexpected finding.[4] Under "implications," Havelock noted that although a large number of innovative programs are being undertaken in schools, there is a lack of

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[1] Ibid., p. 19.

[2] Ibid.

[3] Ibid., p. 19.

[4] Ibid., p. 21.

communication between school districts; each district in effect is going it alone, and there is much unnecessary duplication of effort. Additionally, although respondents had indicated that the key to successful innovation was widespread participation of persons within their systems, there was a recognition that planning for innovation could be assisted by the use of outside expertise and guidance.[1]

Medeiros postulated a five-stage model of innovation adoption in which the stages were: awareness, interest, evaluation, trial and adoption. He interviewed fifty-eight teachers and administrators representing a stratified random sample of thirty schools drawn from a population of 173 public secondary schools in Connecticut which reported they had innovative programs. He wanted to determine to what extent the stage model reflected the processes schools actually go through in the introduction of innovations. He found that all the stages he postulated were in evidence in the schools he surveyed, with the principal perceived as the primary decision-maker at the adoption stage. Although all the stages were in evidence, he found that the stage most frequently skipped was the trial stage. Noting that there are appropriate strategies for each of these stages he recommended that staffs should become familiar with and should use the strategies that are suited to each stage.[2]

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[1] Ibid., p. 23.

[2] Joseph V. Medeiros, "A Stage-Process Analysis of the Adoption of Innovational Programs in Selected Public Secondary Schools" (unpublished Ed.D. dissertation, Boston University, 1967).

As noted by Medeiros, Rogers and Havelock, most research in the area of innovation in education has been directed to the processes of diffusion and adoption, with relatively little attention to the consequences of innovation. Rubenow attempted to make a connection between the process of innovation and its effect on retention and/or abandonment of innovation. He found that the chances of an innovation's being continued were enhanced if its adoption was initially suggested by the building principal. He also found that those innovations that were continued had been characterized by a consideration of students' needs during the planning stages. Conversely, the innovations that had been abandoned had been subjected to a greater degree to student evaluation after implementation than had those which were continued. Without attempting to draw a connection between these factors and continuation of innovations he added that his research seemed to indicate that as a general rule secondary schools did not make much provision for the involvement of non-school groups in planning for innovation, and that in general, well-defined plans for the implementation of innovations were lacking.[1]

In another study that sought to determine the influence of process variables on the fate of innovations, Salmon used a panel of professional educators to develop a list of key variables which in their opinion ought to

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[1]Robert Carl Rubenow, "The Effect of the Innovative Process on the Retention and Abandonment of Educational Innovations in Chicago Suburban High School Districts" (unpublished Ed.D. dissertation, The University of Arizona, 1971).

accompany an innovation effort. He then surveyed ten principals of schools in which innovations were continuing and five principals in schools that had abandoned innovative programs. He found statistically significant differences between continuing and abandoning schools on only two variables--the extent to which specific educational needs of students had been considered, and the extent to which school objectives had been analyzed prior to the adoption of the innovations. In both instances the continuing schools had devoted relatively greater attention to these matters. Although statistically significant differences between continuing schools and abandoning schools did not show up, Salmon indicated that administrators should also consider involving numerous teachers in the development of innovations, providing consultants during the development and evaluation phases of the innovation, and providing students an opportunity to react to the innovations as important parts of the innovation process.[1] Similar findings were reported by Carlson in a study of successful and not successful innovations in selected Arkansas high schools. A significantly greater proportion of the schools reporting innovations rated as successful had cited meeting specific

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[1]Vincent Morgan Salmon, "The Retention or Abandonment of Educational Innovations in Selected Arizona High Schools" (unpublished Ed. D dissertation, The University of Arizona, 1969).

needs of students as a reason for the innovation effort. Those schools reporting successful innovations had also included larger proportions of the teaching staff in the planning process.[1]

Beggs studied eleven schools which had had three years' experience with flexible/modular scheduling and one school which was in its first year with the program. His study was concerned more with the process of institution than with the maintenance of the innovative programs in question, and in reporting his findings he did not attempt to evaluate the success of the several programs. He found that in every instance the building principal favored flexible/modular scheduling before it was introduced. In each case, also, an intensive in-service program was used to introduce the faculty to the innovation. Although some faculty resistance was common before the system was introduced, he noted that this generally diminished after a year's experience with the program. The purpose most often cited for selecting this innovation was the improvement of individualization of instruction.[2]

Lawrence studied ten secondary schools that had each had one year or more of experience with flexible/modular

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[1]Robert Alfred Carlson, "Relationship of Variables in the innovative Process to the Success of Educational Innovations in Selected Arkansas High Schools" (unpublished Ed.D. dissertation, The University of Arizona, 1972).

[2]David Whiteford Beggs, II, "A Study of the Implementation Strategy Employed by Selected Schools Using a Flexible Class Schedule" (unpublished Ed.D. dissertation, Indiana University, 1965).

scheduling. He classified them into three groups: (1) those which were having a successful experience, (2) those which had had problems but were continuing the program, (3) those which had abandoned the program. He sought to find the differences in the experiences of these schools which might be associated with the different levels of success they had with the innovation. He found that in those schools reporting successful experiences the initiator of the innovation was most often the building principal, whereas in those schools which abandoned the innovation teachers had most often been responsible for initiating the program. Success with the innovative program seemed to be directly related to expansion of the curricular offerings in these schools; those with the most success reported the greatest effort to expand curricular offerings, while the unsuccessful schools reported no such expansion. He was unable to find statistically significant differences among the schools studied in matters such as per-pupil expenditure, training and experience of teachers or principals, and size of school. The major problem encountered in each of these schools was the inability of students to make good use of unstructured time. Teachers in the two classes of schools rated as successful reported they felt considerable stress and strain as the result of the program, whereas those in the unsuccessful schools did not.[1]

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[1]William Robert Lawrence, "Identification and Description of Problems and Procedures Involved in the Transition from Traditional to Flexible Programs in Selected Secondary Schools" (unpublished Ph.D. dissertation, The University of Iowa, 1969).

McClure studied twenty-one secondary schools in which flexible/modular schedules had been instituted; his purpose was to learn common problems encountered by secondary school administrators following the implementation of flexible schedules. He found that attendance procedures, scheduling difficulties, inefficient use of unscheduled time by students, and additional demands placed upon the principal were the most frequently encountered problems.[1] Unsatisfactory student use of unscheduled time was also found by Smiley in a study conducted at one high school which was in its third year of a flexible/modular schedule, even though in general he evaluated the students' behavior as responsible.[2] Coombs studied six schools, three with traditional schedules and three with flexible/modular schedules. He found that students in the traditional schools reported that they spent ten hours per week in studying, whereas the students in flexibly scheduled programs reported spending seventeen hours per week in studying. He also found that students with higher grades studied more than students with lower grades.[3]

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[1]Charles Thomas McClure, "A Study of Problems and Solution Strategies Following Implementation of Flexible Class Schedules in Secondary Schools" (unpublished Ed.D. dissertation, Indiana University, 1970).

[2]Larry Lee Smiley, "Student Use of Time in Flexibly and Traditionally Scheduled Schools" (unpublished Ph.D. dissertation, The University of Iowa, 1971).

[3]Arthur Ferrell Coombs, Jr., "Students' Study Time in Flexibly and Traditionally Scheduled Schools" (unpublished Ph.D. dissertation, Stanford University, 1972).

Teachers in three secondary schools who had had no experience with flexible/modular scheduling were interviewed by Duncan, and then re-interviewed after they had completed one semester's experience with it, in order to determine the degree to which the programs had met their initial expectations. He found that teachers' responses were very favorable to the program. They indicated that the job of teaching was more rewarding, student achievement was higher, classroom management was easier, and that interpersonal relations had improved. The sole negative findings in this study were related to the exhaustive demands on teachers' time under flexible/modular scheduling.[1]

Summary

The readings which relate to change efforts in general stressed the importance of process design in introducing innovations. Successful innovations were those which had the active support of the building principal and which involved the staff extensively in the planning stages. It was also asserted that the more successful innovations were those that had been directed at specific needs of the students to be served. Careful data gathering, a clear statement of objectives, and an evaluation design which truly measures the desired outcomes were other elements which were regarded as important. It was noted by two researchers that

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[1] John Richard Duncan, "A Study of Teachers' Expectations of Flexible Scheduling in Three Selected Secondary Schools" (unpublished Ed.D. dissertation, Indiana University, 1967).

secondary schools were frequently deficient in this regard of having a well-planned and coordinated system for the installation and evaluation of innovations.

Schools which attempted flexible/modular scheduling as an innovation appear to have had varying levels of success. Several researchers based their studies on the differences between schools reporting successful and unsuccessful experiences with this innovation. Most of the schools which introduced flexible/modular scheduling cited an effort to improve the individualization of instruction as the reason for doing so. In one study the success of this innovation appeared to be closely related to the extent to which the change was accompanied by alterations in the curricular offerings of the school. The most common problems encountered by schools instituting flexible/modular scheduling programs were unsatisfactory student use of unassigned time and excessive strains on faculty and administration time and work load.

CHAPTER III

METHODOLOGY

Theoretical Assumptions

The method of the study was based on two assumptions: (1) that Kurt Lewin's characterization of a change situation as one in which the outcome of change efforts is determined by the relative strength of forces would provide a useful perspective from which to analyze The Franklin Plan, and (2) adequate data to support this kind of analysis could be gathered by the use of a case-study approach using a combination of documentary and personal interview sources.

The Case-Study Approach

The case study as a means of gathering data is particularly suited to the problem presented by The Franklin Plan. Kerlinger gives the name, "field studies" to this type of study, and says that they have in common that they feature the systematic study of relationships, are ex post facto, and are carried on in life situations. He says:

> The investigator in a field study first looks at a social or institutional situation and then studies the relations among the attitudes, values, perceptions, and behaviors of individuals and groups in the situation.[1]

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[1] Fred N. Kerlinger, Foundations of Behavioral Research: Educational and Psychological Inquiry (New York: Holt, Rinehart and Winston, Inc., 1964), p. 387.

He rates this kind of study as strong in heuristic quality and realism, but not without certain inherent difficulties. One of these is that so many variables are present in such a situation that it is often difficult for the investigator to sort out the most appropriate ones. He regards their most serious difficulty as their ex post facto character and the resultant inability to control variables.

Selltiz, et. al. characterize the case-study approach as "insight-stimulating." They list the following as important features of investigation:

1. The attitude of the investigator is one of receptivity, of seeking, rather than testing.
2. Each of the units of study, whether an individual, or group, or incidents, is investigated intensively; individuals may be regarded as informants about the subject, rather than as objects of analysis.
3. This approach produces a great variety of diverse information; the investigator's task is to draw these diverse data together and make sense of them.[1]

Glaser and Strauss propose a method of social research in which qualitative data can be used to generate theory. They draw a distinction between the verification of theory, which is the objective of most quantitative studies, and the process of generating theory from data. In the former case, theories are logically deduced either from other theories or by speculation. After being deduced in this manner, the new theories are translated into testable

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[1]Claire Selltiz, et. al., Research Methods in Social Relations (One-Vol. ed. rev.; New York: Holt, Rinehart and Winston, 1959), pp. 60-61.

hypotheses. These are then tested in order to either verify or modify the theory. Glaser and Strauss favor an approach in which data collecting and theorizing are carried on simultaneously.

> We wish to emphasize one highly important aspect of generating theory that pervades this and other chapters of our book. Joint collection, coding and analysis of data is the underlying operation. The generation of theory, coupled with the notion of theory as process, requires that all three operations be done together as much as possible. They should blur and intertwine continually, from the beginning of the investigation to its end.[1]

They term this process of joint collection, coding, and analysis theoretical sampling. Theoretical sampling differs from random sampling:

> Since accurate evidence is not so crucial for generating theory, the kind of evidence, as well as the number of cases, is also not so crucial. A single case can indicate a general conceptual category or property; a few more cases can confirm the indication . . . . Generation by comparative analysis requires a multitude of carefully selected cases, but the pressure is not on the sociologist to "know the whole field" or have all the facts from "a careful random sample." His job is not to provide a perfect description of an area, but develop a theory that accounts for much of the relevant behavior.[2]

In the process of theoretical sampling put forth by Glaser and Strauss, the investigator begins with a general sociological perspective. This perspective guides the selection of comparison groups and the kinds of questions which will be asked.

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[1]Barney G. Glaser and Anselm L. Strauss, The Discovery of Grounded Theory: Strategies for Qualitative Research (Chicago: Aldine Publishing Company, 1967), p. 43.

[2]Ibid., p. 30.

> Beyond the decisions concerning initial collection of data, further collection cannot be planned in advance of the emerging theory (as is done so carefully in research designed for verification and description). The emerging theory points to the next steps--the sociologist does not know them until he is guided by emerging gaps in his theory and by research questions suggested by previous answers.[1]

This approach enables the investigator to consider and evaluate hypotheses as they emerge from the data, and to adjust the process of data collection to meet emergent needs.

In this study we began with the assumption that an examination of changes in the force field affecting The Franklin Plan over time would illuminate the maintenance process. This process was conceived as the efforts expended over a period of time to solve problems and to maintain the innovation at a viable level. Additionally, because individual teachers were the adopting units, it was assumed that their perceptions and attitudes would both shed light on the factors affecting the innovation's institution and maintenance and disclose the bases upon which teachers decided to adopt or not adopt the innovation. Teachers could be categorized as either innovators, adopters, or rejecters of the innovation. These then, were the comparison groups with which the study was begun. Documentary data consisting of administrative records and annual reports describing the progress of The Franklin Plan were examined first in order to identify salient events in the history of the innovation and to make tentative identifications of forces.

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[1] Ibid., p. 47.

This preliminary study of the documentary data was then used as the basis for a series of interviews with a purposive sample of the present and past Franklin High School staff.

Force Field Analysis

As developed by Kurt Lewin, field theory is a method of conceptualizing the relationships between variables in such a way as to permit analysis of causal relationships in the fields of psychology, sociology, and social psychology. The breadth of applicability of field theory is due to the fact that it is not "theory" at all in the usual sense. Rather, it is as Lewin says, "probably best characterized as a method: namely, a method of analyzing causal relations and of building scientific constructs."[1] Fundamental to this kind of analysis is the idea that whether we are talking of an individual or a group, behavior can be conceptualized as occurring within a field.

> A basic tool for the analysis of group life is the representation of the group and its setting as a "social field." This means that the social happening is viewed as occurring in, and being the result of, a totality of coexisting social entities, such as groups, subgroups, members, barriers, channels of communication, etc.[2]

The alignment of forces within this field determines the behavior of the individual or the group, as the case may be.

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[1] Lewin, Selected Theoretical Papers, p. 45.

[2] Ibid., p. 200.

Field Theory and Change

An effort to introduce change into an institution can be characterized as social engineering.

> This question of planned change or any "social engineering" is identical with the question: What "conditions" have to be changed to bring about a given result and how can one change these conditions with the means at hand?[1]

The Franklin Plan was an effort to increase individualization of instruction at Franklin High School. The introduction of flexible/modular scheduling and attendant alterations in the school program were designed to reach this end. The process of instituting and maintaining the innovation required the changing of many "conditions" and a continuing assessment of the effects of those changes. It is a common experience that change efforts produce resistance to change. In order for such resistance to be overcome, it is important that the forces affecting change and resistance to change be understood. Lewin presents us with field theory as a means of understanding these processes.

> The practical task of social management, as well as the scientific task of understanding the dynamics of group life, requires insight into the desire for and resistance to, specific change. To solve, or even to formulate these questions adequately we need a system of analysis which permits the representation of social forces in a group setting.[2]

The Field in Quasi-Stationary Equilibrium

According to field theory as set forth by Lewin, a

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[1] Ibid., p. 172.

[2] Ibid., p. 200.

social system at rest is said to be in a condition of "quasi-stationary equilibrium." This refers to the fact that although the system may appear to be very stable, the potential for change is ever-present. In such a situation there are forces tending toward change, and also forces tending to maintain the status quo. Whatever stability exists in such a situation exists because the forces promoting change and the forces resisting change are in balance. The differences between forces in the direction of change and those arrayed against change is termed the resultant force. If the resultant force is equal to zero, no change will take place. Looking at a situation in this way makes it possible to regard "change" and "no change" as variables along the same dimension rather than as polar opposites. Thus it can be said that even in a state of apparent stability there is activity, and the equilibrium which results can be described as "quasi-stationary." The production of change in the quasi-stationary equilibrium which characterizes a situation requires a changing and a realignment of the forces which maintain the situation.

Kinds of Forces

We have already mentioned resultant forces. They are the outcomes of combinations of forces. If the combinations of forces in different directions balance one another the resultant force will be zero; when an imbalance exists, the resultant force will be greater than zero and a change will take place. Resultant forces are observable; a change

in position, condition, or behavior will be seen to take place or not take place. Resultant forces, however, are the products of deeper-lying forces. These latter can be divided into two types: driving forces and restraining forces. Driving forces promote locomotion in a given direction while restraining forces inhibit locomotion. Locomotion refers to a change in position; this change may be a physical change of position, or it may be a change in psychological position, i.e., a change in tendency, attitude, or motivation. Forces may also be classified according to their source. There are those arising within the individual and corresponding to one's own needs ("own" forces), those stemming from another's attempt to influence ("induced" forces), and those arising from the situation ("impersonal" forces). Persons are most often considered to be responsive to forces which act on them and affect them directly. Lewin terms this the point of application of a force, and notes that although the point of application of a force is frequently the person, individuals often respond to forces in terms of the forces' effects upon others.[1]

Field Theory Applied to The Franklin Plan

The Franklin Plan was an innovative program designed to increase the individualization of instruction. It was introduced into a school which prior to the institution of the innovation was a rather typical high school. The school

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[1] Ibid., pp. 259-260.

could be described as a system in quasi-stationary equilibrium in which the resultant of forces had been to support and maintain a relatively traditional program. Over a period of two years the Franklin High School staff was engaged in a number of activities designed to alter and realign the forces in such a way as to move the system to a new equilibrium level--one in which the particular forms of time arrangement, grouping of students, and types of learning activities which characterize flexible/modular scheduling would be introduced. The type of organization of learning which has come to be known as "traditional" is supported by a wide range of forces, including teacher and student expectations about how things ought to be done, the means of evaluating school productivity, course syllabi, and even by the physical structure of the school building. To change the resultant of these forces and produce a successful innovation required not only an initial effort to move in the desired direction, but a continuing process of problem-solving to maintain the initial movement and to counter regressive forces.

Summary

Force field analysis is based on the assumption that any social situation is characterized by a complex interplay of forces. A stable situation is not static, but contains within itself the possibility of change, dependent upon the relative strengths of the various forces. Planned change is a process of manipulating the situation in such

a way as to increase the forces tending in the desired direction and to decrease those forces acting as barriers to the desired movement. This assumes that such forces can be identified and their strength measured. Understanding of the forces present in a situation makes possible the intelligent management of change.

Stages of the Change Process

> A change toward a higher level of group performance is frequently short lived; after a "shot in the arm," group life soon returns to the previous level. This indicates that it does not suffice to define the objective of planned change in group performance as the reaching of a different level. Permanency of the new level, or permanency for a desired period, should be included in the objective. A successful change includes therefore three aspects: unfreezing (if necessary) the present level L^1, moving up to the new level L^2, and freezing group life on the new level. Since any level is determined by a force field, permanency implies that the new force field is made relatively secure against change.[1]

The three stages according to this construct are unfreezing, moving, and freezing. Our purpose in studying The Franklin Plan was to document the forces affecting the innovation in each of these stages of the change process at Franklin High School, in order to better understand the nature of the forces which contributed to the success or failure of innovation efforts.

Sources of Data

Two sources of data were used in the study; these were documentary sources and personal interviews with

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[1] Ibid., p. 228.

participants in The Franklin Plan. These sources are described in greater detail in the pages which follow.

Documentary Sources

Documentary sources were of three types: (1) administrative records, which were primarily in the form of staff rosters and teacher schedules for the years from 1966 through 1972; (2) annual progress reports describing The Franklin Plan at different stages in its development; (3) an assorted mixture of materials, including newsletters and other descriptive materials, as well as the results of studies of teachers' opinions which were not directly related to The Franklin Plan. The administrative records were used to develop a staff roster which was the basis for the selection of the sample, and also to reconstruct the scope of the program in each of the years The Franklin Plan was in effect. The most important documentary source of data, in a quantitative sense, was the series of annual Franklin Plan reports. The form and substance of each of these is described in the paragraphs which follow. These reports were compiled to serve evaluation and monitoring functions within the Livonia school system and also to be disseminated to the public under the terms of an ESEA Title III dissemination grant.

The Franklin Plan; Project Proposal

This document was published in the spring of 1966, prior to the inception of The Franklin Plan, and was a report on the results of two years of study conducted by the

Franklin High School staff, plus a request for Board of Education support for the institution of a pilot program to test the feasibility of the changes that were proposed. The full title of the document is: The Franklin Plan: Operational Position Statement for Instructional Improvement at Franklin High School. The document is divided into three parts: (1) "Position and Basic Assumptions," (II) "Ground Rules for Operation," and (III) "Request for Approval of The Franklin Plan." The first part sets forth the objective of increasing the individualization of instruction at Franklin and relates this objective to the staff philosophy. The second part describes the flexible-modular program as proposed in considerable detail, defining terms, the form and function of different-sized groups, and the respective responsibilities of teachers and students. This section also recounts the in-service education program out of which the idea for the innovation was developed and sets forth objectives for the continuation of in-service programs. The third part describes the scope and form of the proposed pilot program.

The First Progress Report

There was not a formal report issued at the end of the pilot program in June, 1967. The first formal progress report was published in February, 1968, mid-way through the first year of full-scale implementation of The Franklin Plan. It was entitled: The Franklin Plan: Progress Report on Evaluation. It contains a brief recapitulation of the

origins of the program and describes the experience in the first semester, which had begun in the fall of 1967. The results of various kinds of assessment data are presented, including responses to teacher and parent surveys, student attendance and achievement, and an evaluation of the scheduling program. Problems which had arisen the first semester are discussed, and corrective measures undertaken and in the planning stage are described.

The Second Progress Report

The document described above was followed in April, 1968, by a second report, entitled: The Franklin Plan: Report on Evaluation--Recommendations for 1968-69. This report contains additional interpretations of the data presented initially in February, and also adds to that earlier data by reporting the results of continuing assessments of student performance and teacher opinion. Its chief distinguishing feature is that it contains an extensive section entitled, "Proposed Changes--1968-69." These changes were comprehensive, including discussions of the scope of the program, facilities and materials, the scheduling system, in-service education, and attendance procedures.

The Third Progress Report

This report was issued in March, 1969, near the end of the second year of full-scale implementation, and the third year of Franklin High School's experience with the innovation. It is similar in format to the April, 1968 report. It contains a quantity of assessment data on the

same dimensions as in the earlier report, although the assessment instruments used and the manner of presentation are not in all cases the same. This factor made it difficult in some areas to make comparisons between the different years. For example, although both the April, 1968 and the March, 1969 documents contained teacher- and student-comments about the program, the same questions were not asked in both years. This document also contains recommendations for alterations in the program for the succeeding year, similar in nature to those proposed in the preceding year.

The Fourth Progress Report

The fourth, and final, progress report was issued in May, 1970, and was entitled, The Franklin Plan: Progress Report--1969-70. It is considerably less detailed than its predecessors, both in the quantity of assessment data presented and in its recommendations for change. There is some assessment data of a general nature, consisting of standardized test results over the course of the innovation and a comparison of students' marks in the several subject areas, but the qualitative measures of teacher and student attitudes which were found in earlier reports are missing from this one. There is a detailed assessment of two aspects of the innovation, independent study programs, and continuous progress programs, but unlike earlier documents, this one does not contain a detailed agenda of changes and improvements.

Summary Discussion of Documentary Sources

We have described five progress reports which provided the largest quantity of data about the innovative program. They cover the course of The Franklin Plan from beginning to end, and were issued on a more or less annual basis, except for the fact that there was no report for the year of the pilot program nor for the final year. In the text which follows, when these documents are referred to the notations will indicate the year of issuance and the month. For example, the project proposal will be referred to as "Franklin Plan, 1966," and the first progress report will be noted as "Franklin Plan, February, 1968." The titles of each are so long and so similar to each other that this procedure will help in pin-pointing the references. Other documentary data sources used in the study will be described in the text at the time the data is presented.

Personal Interview Data

The personal interviews were conducted with the purpose of verifying the implications drawn from the documents and to shed additional light on what appeared to be gaps in the documentary data. Additionally, because the annual reports described above were developed under the aegis of the Franklin administration it seemed advisable to obtain primary data directly from members of the teaching staff.

The Sample

The sample chosen was a purposive, not a random, sample. The objective of sample selection was to include persons who had had different experiences with the innovation and would be able to provide information from different perspectives. Therefore, the following guidelines were adopted for the selection of the sample:

1. It ought to include innovators, adopters, and rejecters.[1]
2. It ought to include persons having held different status positions on the staff, i.e., teachers, administrators, and other non-teaching professional staff.
3. It ought to include representation from several academic departments.
4. It ought to include some persons no longer on the staff of Franklin High School.

The population from which these people were chosen included persons who had at least two years' experience on the staff of Franklin High School during the period of The Franklin Plan. It was reasoned that persons would need to have had this much experience on the staff to have developed a perspective on the processes and events. Accessibility to the investigator was a practical criterion that limited the larger part of the sample to persons currently on the staff of Franklin High School. The sample was narrowed further by a decision to concentrate on six of the eleven

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[1] Innovators were defined as those who had been participants in the pilot program in 1966-67; adopters were those who became participants in 1967-68 or after; rejecters were those who never participated in the flexible/modular program.

instructional departments in the school. This decision was reached after a study of the administrative records disclosed different patterns of participation among the several departments. These patterns are shown in Appendix C.

Table 3.1

CURRENT FRANKLIN STAFF WITH TWO OR MORE YEARS' EXPERIENCE WITH THE FRANKLIN PLAN

Department	Innovators	Adopters	Rejecters	Total
English	3	10	4	17
Fgn. Lang.	1	1	1	3
Home Econ.	1	1	0	2
Ind. Educ.	1	1	4	6
Mathematics	0	7	1	8
Science	1	5	0	6
Total	7	25	10	42

A comparison of these patterns with that for the staff as a whole shown in Figure 1.1 shows interesting differences between the departments and the aggregate participation for the staff generally for each of the years. The decision to concentrate the interviews on respondents from a few key departments was motivated by an interest in whether there were special forces acting within departments which may have affected staff members' decisions to adopt or not adopt the innovation.

Rationale for Selection of Departments

On the basis of a comparison of their levels of participation, the following departments were selected as the ones from whom respondents would be sought: English, foreign language, home economics, industrial education, mathematics, and science.

English department.--The English department's pattern of participation is very similar to that of the school in the aggregate. Additionally, this department is the one which enrolled the largest number of students for the longest time, inasmuch as every student was required to take three years of English. This department was selected, then, as the one which seemed most representative of the school as a whole, at least in terms of the students served.

Foreign language department.--This department started from a very low level, and in the final two years over 80 percent of the total number of sections taught were taught in the flexible/modular schedule. No other department shows a similar pattern, and for this reason it was assumed that there might be something significant in the experience of this department to account for this pattern.

Home economics department.--This pattern is quite different from any other. It shows that scheduling in this department resisted the decline in participation that marked the school as a whole during 1968-69 and was the only department that attained a level of 100 percent modular

scheduling; yet in the final year the level of participation declined precipitously.

Industrial education department.--Although the shape of the curve describing this department's history of participation in The Franklin Plan is very close to that of the school as a whole, the percentages for each year are lower than that of the aggregate. Additionally, courses taught in this department are "doing" types of courses; there is more physical activity and less traditional studying-about activity. In this respect, the industrial education department can be regarded as the male counterpart of the home economics department, which enrolls females primarily.

Mathematics department.--Unlike the other departments, this department's level of participation remained stable during the final three years of the innovation. In other words, there is a suggestion here that this department was relatively immune during these years to whatever forces affected the levels of participation of other departments and the school as a whole.

Science department.--Participation in The Franklin Plan by members of this department was relatively high throughout the course of the innovation, reaching 100 percent in 1969-70. This relatively higher level of participation was the reason this department was selected for the sample.

Rationale for exclusion from the sample

The patterns of three departments were similar in shape and level to that of the school as a whole; these were the English, social studies, and business education departments. The English department was judged to be the best representative of departments sharing this pattern, for reasons described above. The remaining departments not included in the sample were the music, physical education, and art departments. They were excluded because they are very specialized in terms of subject matter, learning activities, and characteristics of students served.

Summary

The most important criterion for selection of departments to be included in the sample was their respective similarities or dissimilarities with the patterns and levels of participation in the innovation that characterized the staff as a whole. Secondarily, an attempt was made to include departments dealing in different kinds of subject matters and serving different students. It was fortuitous that the selections made on the basis of these criteria resulted in a mix of departments that ranged in size from very small to very large; over the course of the innovation, home economics numbered three staff members, whereas the English department membership varied between nineteen and twenty-four, with the other departments ranged between. Had the selection not turned out this way, it would have been necessary to alter the selection process to ensure the

inclusion of different-sized departments, on the presumption that department size would prove to be a significant factor.

The numbers of persons still on the Franklin staff in the three categories for each of the selected departments at the time the sample was selected in the spring of 1973 are shown in Table 3.1.

Selection of the respondents

A list of eighteen persons was selected from the forty-two individuals still on the Franklin staff who had had at least two years' experience with The Franklin Plan. An attempt was made in choosing these persons to include some who had been on the staff since the innovation's inception and others who had joined the staff later, and to include at least one innovator, one adopter, and one rejecter from each of the six departments. This latter purpose was not attainable in every case; there were no rejecters on the staff from the home economics or science departments, and there were no innovators remaining from the mathematics department. The Principal of the high school assisted by inviting the persons on the list to attend a meeting with the investigator. The meeting was held in the conference room at Franklin High School, with fourteen of the eighteen who had been invited in attendance. The project was explained to this group, and each of the fourteen agreed to be interviewed. Of the four who were absent, one agreed to be interviewed and the others declined, when contacted individually

later. Thus, a total of fifteen members of the current teaching staff were included in the sample--this out of a total of forty-two who met the minimum criterion of two years' experience with the innovation.

The sample of teachers was extended to twenty by selecting persons no longer on the Franklin staff but still accessible, either by virtue of being employed elsewhere in Livonia Public Schools, or by residing in the area. Two considerations affected the choice of whom from this group was to be chosen. One of these was the need to fill gaps in the sample chosen from the current staff (this group, for example contained no innovators from the English or math departments). Another concern was to find persons who would be good informants, in the sense of being knowledgeable, sensitive, and willing to be interviewed. Five persons meeting these criteria and not currently on the Franklin staff were selected. Each of these was contacted and all agreed to be interviewed. Suggestions as to which persons not currently on the staff would be good informants were solicited from the principal and members of the current staff. The sample as finally constituted then, contained twenty persons who had been teachers at Franklin during the innovation period. Table 3.2 shows the composition of the sample.

In addition to the teacher-respondents described above, interviews were conducted with the Principal, an Assistant Principal, and the Director of the Instructional Materials Center. Included among the teacher-respondents

were one current and two former department chairmen. One of the teachers had also had experience as a counselor during the course of the innovation, and one of those not currently on the staff had been both a teacher and an assistant principal during the period of The Franklin Plan. The sample thus was chosen in a manner designed to elicit responses from persons who could speak from a wide variety of perspectives about events at Franklin High School during this period.

Table 3.2

COMPOSITION OF SAMPLE TEACHERS

Department	Currently on staff			Not Currently on staff			Total
	Innovators	Adopters	Rejecters	Innovators	Adopters	Rejecters	
English	0	1	2	1	0	1	5
Fgn. Lang.	1	1	1	0	0	0	3
Home Econ.	1	1	0	0	0	0	2
Ind. Educ.	0	0	1	0	0	0	1
Math	0	2	0	1	1	0	4
Science	1	3	0	1	0	0	5
Total	3	8	4	3	1	1	20

Delimitations

Both Kerlinger and Selltiz, et. al., in the works cited, mention the problem posed by the abundance of data which confronts the investigator in a case study situation. This imposes on the investigator the responsibility to resist being led astray by interesting, although irrelevant, bits of data. The Franklin Plan as an innovation presented a number of potential areas for study. One such area might have been to study its efficacy in accomplishing what it set out to do. To have studied this aspect of the innovation would have led to an entirely different set of problems. We were interested to some extent in the efficacy of the innovation as perceived by the participants, but only to the extent that these perceptions were a factor in the maintenance of the innovation. No attempt was made in this study to make a judgment as to whether The Franklin Plan was a pedagogical success.

Another course of inquiry that might have been of some interest would be the question of community influence in affecting the continuance or discontinuance of the innovation. Assuming that the ill-fated millage elections in the spring and summer of 1971 represented an expression of community protest against either The Franklin Plan or other innovations or practices in the Livonia school system, one might profitably have studied this as a phenomenon, i.e., community perceptions and reactions to school practices and their effect on voting behavior. Whether the defeat of the millage proposals was so motivated is problematical and was

not taken up in this study. We were concerned, however, with whether perceptions of community attitudes by persons within the system influenced those persons' attitudes toward and support of The Franklin Plan.

Kerlinger regards field studies as "scientific weak cousins" of laboratory and field experiments.[1] He attributes this evaluation to the fact that the lack of control over variables in field studies makes for weak statements about causality. Similarly, Selltiz notes:

> It is important to remember that exploratory studies (insight-stimulating, or case studies) merely lead to insights or hypotheses; they do not test or demonstrate them. In selecting cases that have special characteristics, one has by definition taken cases that are not typical. Although marginal, deviant, or "pure" cases are likely to be fruitful sources of ideas about processes that may occur in more typical cases, one cannot assume that these processes do in fact occur in cases other than those one has studied . . . . An exploratory study must always be regarded as simply a first step; more carefully controlled studies are needed to test whether the hypotheses that emerge have general applicability.[2]

Accordingly, no a priori assumptions are made about the generalizability to other contexts of the findings of this study.

Notwithstanding the reservations expressed by others cited above, Glaser and Strauss are supportive of the case study approach as a legitimate research method. They are in effect speaking to the points raised by Kerlinger and Selltiz when they state:

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[1]Kerlinger, Behavioral Research, p. 390.

[2]Selltiz, et. al., Research Methods, p. 64.

> The frequent discrediting of grounded theory . . . stems from sociologists' taking as their guide to credibility the canons of rigorous quantitative verification on such issues as sampling, coding, reliability, validity indicators, frequency distributions, conceptual formulation, hypothesis construction, and presentation of evidence. . . . we have raised doubts about the applicability of these canons of rigor as proper criteria for judging the credibility of theory based on flexible research. We have suggested that criteria of judgment be based instead on the detailed elements of the actual strategies used for collecting, coding, analyzing, and presenting data when generating theory. And on the way in which people read the theory.[1]

As stated, findings of this study cannot be generalized to other contexts, nor can the responses of those interviewed be generalized in any quantitative sense to the faculty of Franklin High School, because the sample was not randomly chosen. They were chosen, however, on the basis of their ability to provide different perspectives on the phenomena under study. Because the phenomena under study are matters of record, and assuming the respondents were knowledgeable and reliable witnesses, it is expected that the results of the study will be credible in the terms set forth by Glaser and Strauss.

Collecting the Data

Documentary sources were used to develop a chronology of the innovation and to make an initial identification of the forces in the system tending to either support or defeat it. Implications of these data were then used in the construction of an interview schedule to be used

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[1]Glaser and Strauss, Grounded Theory, p. 224.

with the respondents in the sample. The personal interviews were conducted during the period from June 10, to July 13, 1973. Prior to these interviews, an interview schedule containing a series of open-ended questions was tried with a member of the staff not included in the sample. This test interview lasted slightly less than one hour, and the interview schedule was judged, with minor adjustments, to be satisfactory for use with the sample. When this interview schedule was used with the first three respondents, however, a number of problems arose: (1) although the respondents had been told the interviews would last approximately one hour, these initial interviews took considerably longer, two hours and fifteen minutes in one case; (2) the open-ended questions produced a good deal of information not relevant to the study; (3) because of the wide-ranging nature of many responses, coding was difficult.

The deficiencies in the initial form of the interview schedule were corrected by the following measures: (1) the questionnaire was reconstructed to include a greater number of forced-choice items, in order to focus the interviews more sharply on the salient questions and to ease the coding problem; (2) to shorten the length of the interview sessions without eliminating important questions, the questionnaire was divided into two distinct forms. The form used in the personal interviews was termed the "interview schedule." Each respondent was also given a second form, termed the "self-report form," which they were asked to complete in private. Those persons who had been interviewed

with the original interview schedule graciously consented to be interviewed again with the new forms.

Conducting the Interviews

Interviews were conducted either at Franklin High School or at other places of convenience to the respondents. In the cases of three individuals no longer on the Franklin staff, the interviews were conducted at their current schools. A number of the interviews were conducted at the respondents' homes. In each case, respondents were given a copy of the interview schedule and were asked to dictate their responses to the investigator, who recorded them on another copy of the form. Respondents were also asked to elaborate on their answers to any of the questions as they saw fit during the course of the interview. These responses were recorded and form the basis for the qualitative data reported in Chapter VI. Thus for each of the items in the interview schedule there was collected a mix of quantitative and qualitative responses. The interviews with members of the non-teaching staff were conducted after those with the teaching staff had been completed, and followed a less-structured format, with questions on the same topics, but limited to open-ended responses.

The Plan of the Paper

Chapter IV, which follows, presents an historical overview of the innovation and establishes a conceptual framework for the analysis of the data. Chapter V focuses on the documentary data and implications about the forces

drawn from that source. Chapter VI presents the results of the interviews. In Chapter VII we will discuss the congruence between these two sets of data and based upon this, makes an assessment of the forces which accounted for the level of adoption of the innovation during the several years of its institution at Franklin High School.

CHAPTER IV

HISTORICAL OVERVIEW

Planning for Innovation

The first document which describes The Franklin Plan is the proposal which was submitted for Board of Education approval in the spring of 1966. In it the background of the innovation was described:

> As a result of a thorough investigation and intensive study consisting of visits to innovating schools, viewing of films and filmstrips, the reading and discussion of varied materials, and listening to authoritative speakers, the Franklin faculty has indicated a readiness and willingness to venture forth to try new techniques and methods of teaching which a more flexible master schedule would facilitate, keeping in mind the overall objective of individualization of instruction.[1]

One of the outcomes of this period of study was the identification of twelve barriers to the individualization of instruction which were present in the system as it existed at that time.

1. Resource materials should be more readily available to students.
2. Classes should be of variable length.
3. The length of the school day should vary for individual students.
4. Joint planning time for teachers is needed.

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[1] The Franklin Plan: Operational Position Statement for Instructional Improvement at Franklin High School (Livonia, Mi.: Franklin High School, 1966), p. 2.

5. Students need individual study-spaces throughout the building.
6. Individualized learning materials should be produced and available to students and teachers.
7. Lower class size is needed.
8. More flexible facilities are necessary.
9. More time is needed for teachers to plan and work with individual students.
10. A more flexible, variable school week should be able to be scheduled.
11. We should make more efficient use of teacher skills and talents.
12. School facilities should be modified.[1]

These barriers can be divided into three categories: (1) problems relating to materials and facilities, (2) problems relating to the use of teacher and student time, and (3) problems relating to the manner of interaction between students and teachers. The identification of barriers seems to have anticipated the innovation. "The Franklin Plan grew directly out of these identified needs as an approach to the introduction of flexibility in the place of rigidity."[2]

The Form and Structure of The Franklin Plan

In the preceding paragraph it was noted that the twelve barriers identified by the staff could be divided into three categories. In practice these matters of time, materials, and the manner of interaction between teachers

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[1] The Franklin Plan: Evaluation, 1968-69; Program Plans, 1969-70 (Livonia Mi.: Franklin High School, 1969), p. 2.

[2] Ibid.

and students are closely interrelated. The initial Franklin Plan proposal set forth a description of the way in which these elements were to be structured in the innovative program.[1] The treatment which follows is an attempt to summarize the important aspects of The Franklin Plan design, for the purpose of clarity in understanding subsequent presentations of data.

The relationship of the design of The Franklin Plan to the objective of individualization of instruction was described by the planners in these terms:

> The flexible/modular schedule is a significant improvement in the technology of providing teachers with the flexibility for decision making about how their subjects and students should be taught in terms of time and group sizes. But as good as a flexible/modular schedule may be, technologically, it is only a tool with which to break the lock-step in program. Through the implementation of a flexible/modular schedule, traditional time blocks are no longer sacred and immutable. As long as students are taught in groups, and do homework in groups, it is impossible to adequately differentiate the learning environment for each student so that it is most appropriate for his needs, abilities, and interests. On the other hand, the way to provide for individual differences is to make it possible for each student to learn individually and to progress individually at his own rate and pace. This should be and is our ultimate objective.[2]

In this view, "individualization of instruction" is seen as something teachers can make happen if appropriate conditions are provided.

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[1] Franklin Plan, 1966, pp. 6-57.

[2] The Franklin Plan: Report on Evaluation: Recommendations for 1968-69 (Livonia, Mich.: Franklin High School, April, 1968), p. 48.

> The Franklin staff has been asked to use their imaginations and professional talent to find ways of organizing their instruction which will result in (1) more personal contact with students, (2) the tailoring of the student's learning environment to his needs, abilities, and interests.[1]

It was noted that this also implied a new role for the teacher--that of "diagnostician, prescriber, and counselor."[2] The paragraphs which follow describe the salient features of The Franklin Plan as they were set down in the initial proposal.

Grouping

Four kinds of grouping for instruction were provided for in the Plan. These were: (1) combined, or large groups of 50 to 150 students; (2) middle groups, of 15 to 30 students; (3) small groups of 12 to 15 students; (4) independent study, in which students would have the opportunity and responsibility for planning and executing their own use of time on class-related activities. Certain kinds of learning activities were prescribed for each of these kinds of grouping, and each teacher would be given the option of deciding how the total instructional time allotted to him for a given group of students would be divided among these formats. This was in contrast to the kind of grouping used in the traditional scheduling system, in which most classroom groups range in size from 20 to 35 students and meet

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[1] The Franklin Plan: Progress Report on Evaluation (Livonia, Mich.: Franklin High School, February, 1968), p. I-1.

[2] Ibid.

daily for class periods of uniform length.

Use of Time

A typical class period in a traditional schedule is from 50 to 60 minutes in length. In a flexible/modular schedule the traditional class period is replaced by the module as the basic unit of time. In the initial Franklin Plan proposal the length of a module was set at fifteen minutes. The objective of flexibility was to be met by permitting teachers to schedule the meetings of the different groups for differing lengths of time, subject to the rule that no meeting could be shorter than two modules. Thus a teacher responsible for teaching a particular subject with 150 students assigned to him might decide to have the entire group meet once a week at a predetermined time for a period of three modules, or forty-five minutes; this group might then be divided into ten groups of fifteen students, each such group scheduled to meet on three days of the week for a period two modules long. The large group meetings were to be for activities that would be most efficiently conducted in a large group--such things as films, tests, lectures, and receiving directions. The small groups were to be for in-depth discussions and to provide opportunities for teachers to get to know students better in a more intimate setting than the traditional classroom.

It was estimated that twenty to forty percent of a student's time would be spent in independent study, during which he would work on preparation of assignments for class

and hopefully on other educational activities; a portion of this time would be spent in conference with the teacher. Relieving both students and teachers of the necessity of meeting classes for a full five hours each day would provide time for individual teacher-student conferences.

Facilities and Materials

It was projected that special kinds of facilities would be needed to accommodate the different-sized groupings; these would include areas for small group and large group meetings and appropriate places for students to spend their independent study time. Such spaces were to be created by altering the internal structure of the building. Regular-sized classrooms were to be divided into small group meeting rooms; areas in which students could pursue independent study were to be created in the library and adjacent areas. The library and these adjacent areas were to be renamed "resource centers" in recognition of their changed function and heightened responsibility.

> One of the most important activities in the learning situation is that in which the student independently arranges for and uses materials of a wide variety of types to further his learning in either depth or breadth. If this activity is to be successful, the necessary materials and equipment must be readily available in sufficient quantity with the adequate personnel to advise in the selection of the materials and to aid in the operation of equipment.[1]

It was proposed that rooms near the library be assigned to specialized subject areas where students and materials could

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[1] Franklin Plan, 1966, pp. 25-26.

be brought together in an atmosphere that was conducive to scholarly work. Materials of a wide variety would be necessary to suit the different needs of students using the facility. This was especially true because students on independent study time would be interacting with learning materials rather than directly with their teacher.

Summary

Individualization was to depend heavily on the ability of the teacher to make accurate judgments about the most efficacious way of organizing groups, time, and materials to realize his instructional objectives. In order to further this objective The Franklin Plan was conceived to provide the conditions under which teachers would have sufficient latitude in these matters to make individualization possible. The teacher would not only have to make judgments about the most logical way of organizing subject matter as between the different kinds of instructional groups, but would also have to decide what kinds of special provisions in terms of assignments, materials, and personal contact would be most helpful to individual students. These responsibilities are not unlike those of teachers in traditional programs, but it was apparently the opinion of the planners that the flexibility envisioned under The Franklin Plan would help teachers do these things better.

Implementing the Program

The Pilot Program--1966-67

Sixteen teachers took part in the first year (pilot program) of The Franklin Plan. Approximately 750 students were involved in the flexible/modular schedule for some part of their school day. Table 4.1 shows the level of participation in the pilot program by academic department.

TABLE 4.1

PARTICIPATION IN THE FRANKLIN PLAN
BY DEPARTMENT 1966-67

Department	Number of Staff Involved	Number of Staff with Completely Modular Schedules	Number of Modular Classes
English	4	2	14
Foreign Language	1	1	4
Home Economics	1	0	2
Industrial Arts	1	0	2
Mathematics	3	0	11
Science	3	3	15
Social Studies	3	0	12
Total	16	6	60

Seven of the eleven instructional departments were represented in the first year of the program's implementation. Non-participating departments were the art, business, physical education, and music departments. Modifications were made in portions of the building sufficient to support the program at this level. Each teacher-participant was free

within practical limits to allocate time for instruction between large-group, small-group, medium-group and independent study.

There is not a written evaluation of the first year of the program. The satisfaction with the program was apparently sufficient, however, that the decision was made to go ahead on a larger scale for the 1967-68 school year. Thus after a year of experiment flexible/modular scheduling was instituted in the fall of 1967 with the provision that a concurrent traditional schedule would be run for those who either did not want to participate in the innovation at all or who wanted to continue to schedule some of their classes in the traditional manner.

The Second Year--1967-68

Each of the instructional departments was represented in the second year of The Franklin Plan. The level of participation by department is shown in Table 4.2.

In September of 1967 when The Franklin Plan was instituted on a large scale, over fifty percent of the total classes scheduled were scheduled in the flexible mode. Although this was only slightly more than one-half the total classes it represented a commitment at least in part, of over two-thirds of the staff. Over one-third of the teachers elected to schedule all of their classes modular. It appears that at this stage in the change process there existed a high level of support among the staff for the innovation.

TABLE 4.2

PARTICIPATION IN THE FRANKLIN PLAN
BY DEPARTMENT 1967-68

Department	Number of Staff in Department	Number Participating in Plan	Number with Completely Modular Schedules	Total Number of Modular Classes	Total Number of Classes (Traditional and Modular)	Proportion of Total Classes Schedules Modular
Art	4	2	1	5	19	.26
Business	11	8	3	28	52	.54
English	26	19	8	66	117	.56
Foreign Language	6	3	1	8	23	.35
Home Economics	5	5	5	12	12	1.00
Industrial Arts	8	3	1	7	32	.22
Mathematics	14	9	8	23	59	.39
Music	3	2	0	5	11	.45
Physical Education	7	2	0	7	24	.29
Science	11	10	6	32	45	.71
Social Studies	14	12	8	48	62	.77
Total	109	75	40	241	456	.53

The scale at which the innovation was instituted in the second year exposed a number of problems that had not been evident in the pilot year. Coping with these problems necessitated an extensive rescheduling for the second semester and other alterations and adjustments in the program. These will be described in greater detail in Chapter V.

The Third Year--1968-69

A smaller proportion of the total staff and students were enrolled in the third year than in the second year. Whereas over one-half of the total classes scheduled in 1967-68 had been scheduled in the flexible/modular program, in 1968-69 only a little over one-third were so scheduled. Participation by departments is shown in Table 4.3.

The Fourth Year--1969-70

In the fourth year the Franklin Plan attained its highest level of implementation, with two-thirds of the total classes offered scheduled on the modular plan. Seventy-five percent of the staff had at least one modular class. Table 4.4 indicates the scope of the program in the fourth year.

The Fifth Year--1970-71

In the fifth year, participation in the innovation declined from the high level of the previous year. This is shown in Table 4.5. An evaluative report was not issued at the end of the fifth year. In the spring of 1971 and again

TABLE 4.3

PARTICIPATION IN THE FRANKLIN PLAN
BY DEPARTMENT 1968-69

Department	Number of Staff in Department	Number Participating in Plan	Number with Completely Modular Schedules	Total Number of Modular Classes	Total Number of Classes (Traditional and Modular)	Proportion of Total Classes Scheduled Modular
Art	4	2	0	6	20	.30
Business	11	5	2	18	48	.38
English	23	13	3	39	107	.36
Foreign Language	6	2	1	7	26	.27
Home Economics	3	3	3	15	15	1.00
Industrial Arts	8	1	0	3	29	.10
Mathematics	13	6	2	18	54	.33
Music	3	0	0	0	10	.00
Physical Education	6	0	0	0	22	.00
Science	11	9	9	35	45	.77
Social Studies	9	5	2	22	45	.49
Total	99	49	26	163	421	.36

TABLE 4.4

PARTICIPATION IN THE FRANKLIN PLAN
BY DEPARTMENT 1969-70

Department	Number of Staff in Department	Number Participating in Plan	Number with Completely Modular Schedules	Total Number of Modular Classes	Total Number of Classes (Traditional and Modular)	Proportion of Total Classes Scheduled Modular
Art	5	3	0	5	25	.20
Business	11	8	5	27	47	.54
English	23	16	8	66	108	.61
Foreign Language	6	5	4	19	23	.83
Home Economics	3	3	3	15	15	1.00
Industrial Arts	8	3	3	15	36	.42
Mathematics	11	7	2	20	54	.37
Music	4	4	0	8	14	.57
Physical Education	7	6	6	25	26	.96
Science	10	10	10	50	50	1.00
Social Studies	13	12	10	58	64	.91
Total	101	77	51	308	462	.68

TABLE 4.5

PARTICIPATION IN THE FRANKLIN PLAN
BY DEPARTMENT 1970-71

Department	Number of Staff in Department	Number Participating in Plan	Number with Completely Modular Schedules	Total Number of Modular Classes	Total Number of Classes (Traditional and Modular	Proportion of Total Classes Scheduled Modular
Art	5	1	0	4	24	.17
Business	9	4	1	10	43	.23
English	22	9	3	37	105	.35
Foreign Language	6	5	4	20	23	.87
Home Economics	3	1	0	2	14	.14
Industrial Arts	8	0	0	0	40	.00
Mathematics	12	8	1	24	59	.41
Music	4	3	1	9	16	.56
Physical Education	6	0	0	0	26	.00
Science	10	7	3	25	49	.51
Social Studies	15	10	8	44	74	.59
Total	100	48	21	175	473	.35

in the summer the voters rejected requests for millage increases. In the fall of 1971 when school reopened, Franklin High School had returned to a fully traditional schedule. In a communication to parents, the Franklin administration explained the return to a traditional schedule as attributable to these factors:

> Budget cuts have affected Franklin as follows:
>
> 1. Faculty--The total professional staff has been reduced by 18 positions. The reduction includes counselors, classroom teachers, librarians, and a special education teacher--personnel who would normally have been assigned to Franklin if we were to maintain a program comparable to 1970-71.
>
> 2. Instructional Materials Center--One librarian and six aides have been cut from the staff. As a result, two-thirds of the Center has been closed to students and staff. Library services will be severely limited.
>
> 3. Organization of the school--All classes will meet one hour per day, five days per week. There will be no unassigned time. It is impossible to continue the variable time schedule with the number of teachers assigned to us and with the Instructional Materials Center unavailable for more than minimal student and staff use. The increased load for teachers prevents the scheduling of small groups, one main reason for a variable time schedule.[1]

Summary

The most striking feature of the innovation experience at Franklin when viewed from afar is the variation in levels of participation in the innovation from year to year. This variation was depicted in Figure 1.1. The presence of such fluctuations in level of participation suggests

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[1] "Looking Ahead," Franklin Newsletter (Livonia, Mich.: Franklin High School, August, 1971), p. 1.

the existence of forces which varied in strength and direction during the course of the innovation. It appears that a process of problem-solving may have been going on in an effort to maintain the innovation.

The graphic representations in Appendix C show that there were considerable differences between the participation patterns of the several departments. This raises the question of whether intra-departmental variables may have influenced the levels of adoption of the innovation in the several years.

Stages in the Innovation Process

We have mentioned that the life span of The Franklin Plan spanned seven years, including two years of study and planning and five years during which the program was instituted to one degree or another in the instructional program at Franklin High School. According to Lewinian theory the change process can be conceptualized as having three stages: unfreezing the system from its prior equilibrium level, moving to a new equilibrium, and re-freezing at the new level. Figure 4.2 depicts the relationship between these stages of the change process and events at Franklin High School.

Figure 4.1a is a time-line which covers the period under study; Figure 4.1b indicates how this period of time can be divided conceptually into the three stages of the change process. Figure 4.1c shows how selected events in the history of the innovation can be located temporarily

both with respect to the particular year in which they occured and according to the stage of the innovation process into which they fit. Figure 4.1d shows the sequential changes in the scope of The Franklin Plan from the first through the fifth years of its institution. Each of the panels in Figure 4.1d represents a year of The Franklin Plan. The horizontal lines labeled L_0 . . . , L_5 represent the several levels of the quasi-stationary equilibrium attained by The Franklin Plan, in which the measure of the equilibrium level is the percentage of total classes scheduled modularly. The arrows represent forces whose presence we suspect but the identity of which is undetermined. The presentation of documentary data in Chapter V will be organized in accordance with the division of the innovation process into its unfreezing, moving, and re-freezing stages.

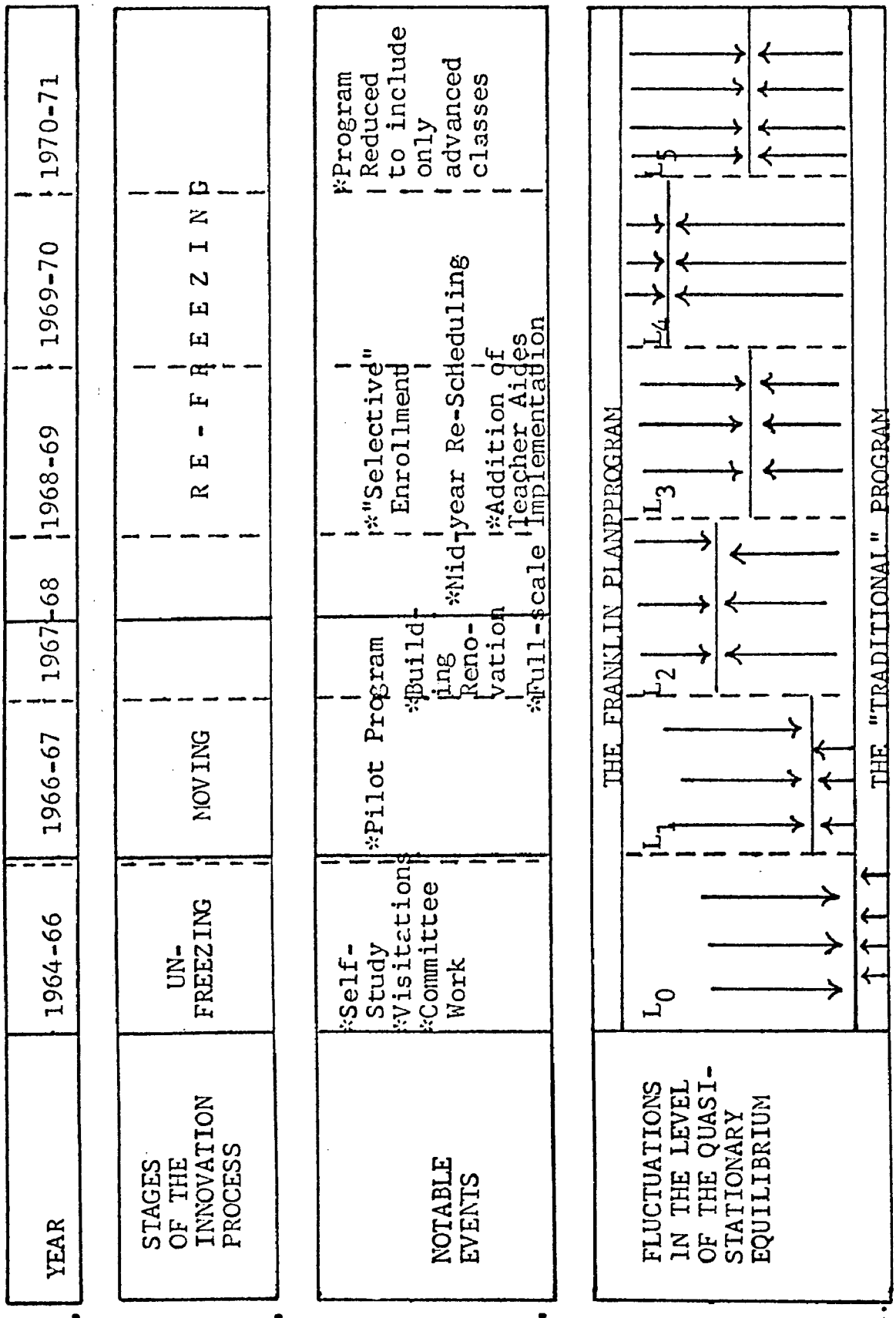


Figure 4.1--Schematic diagram showing the chronology of The Franklin Plan and its relation to theoretical stages of the innovation process.

CHAPTER V

DOCUMENTARY DATA

The Unfreezing Stage

For purposes of analysis we have designated the period from September, 1964, until June, 1966, as the unfreezing stage of the innovation process at Franklin High School. The activities which characterized this period are described in some detail in the initial project proposal and are alluded to in some of the later progress reports. The project proposal began with the statement:

> From the very beginning of its organization as a high school faculty, Franklin teachers and administrators had seen the need to better structure the teaching process in order to reach the individual--to make him an active participant in the teaching/learning process--to help him develop responsibility for his own learning.[1]

The aim of individualization of instruction which became the focus of efforts in The Franklin Plan is presented here as rooted in the basic philosophy of the Franklin staff. An opportunity to study the school program and the extent to which it was meeting this objective was provided by the need to do a self-study as a part of the process by which the school received accreditation by the North Central Association.

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[1] The Franklin Plan, 1966, p. 1.

The program of activities which accompanied this period of self-study included:

1. Presentations at faculty meetings by speakers from the colleges of education at Wayne State University, The University of Michigan, and the University of Illinois.
2. Use of curriculum days for small group meetings to discuss ideas and problems.
3. Visits by staff to exemplary schools in Michigan and Illinois and one in California.
4. Work on special interest committees.
5. Attendance at conferences outside the school district.
6. Individual reading for staff from a specially-prepared collection of materials.[1]

One product of the period of study was the identification of twelve barriers to the individualization of instruction (these have been enumerated in Chapter IV). As has been noted earlier, individualization was defined as including, (1) more personal contact (of teachers) with students, and (2) a learning environment tailored to the student's needs, abilities, and interests. If this is taken as the goal, then the twelve barriers were perceived as preventing the attainment of the goal, or as "forces against," as shown in Figure 5.1.

The "goal" in Figure 5.1 is a "learning environment tailored to the individual's abilities, needs, abilities, and interests." The opposite of the goal is the continuance of a traditional program with its focus on the group

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[1] Franklin Plan, February, 1968, p. I-1.

GOAL: The Franklin Staff seeks to develop a learning environment tailored to the individual's abilities, needs, and interests.

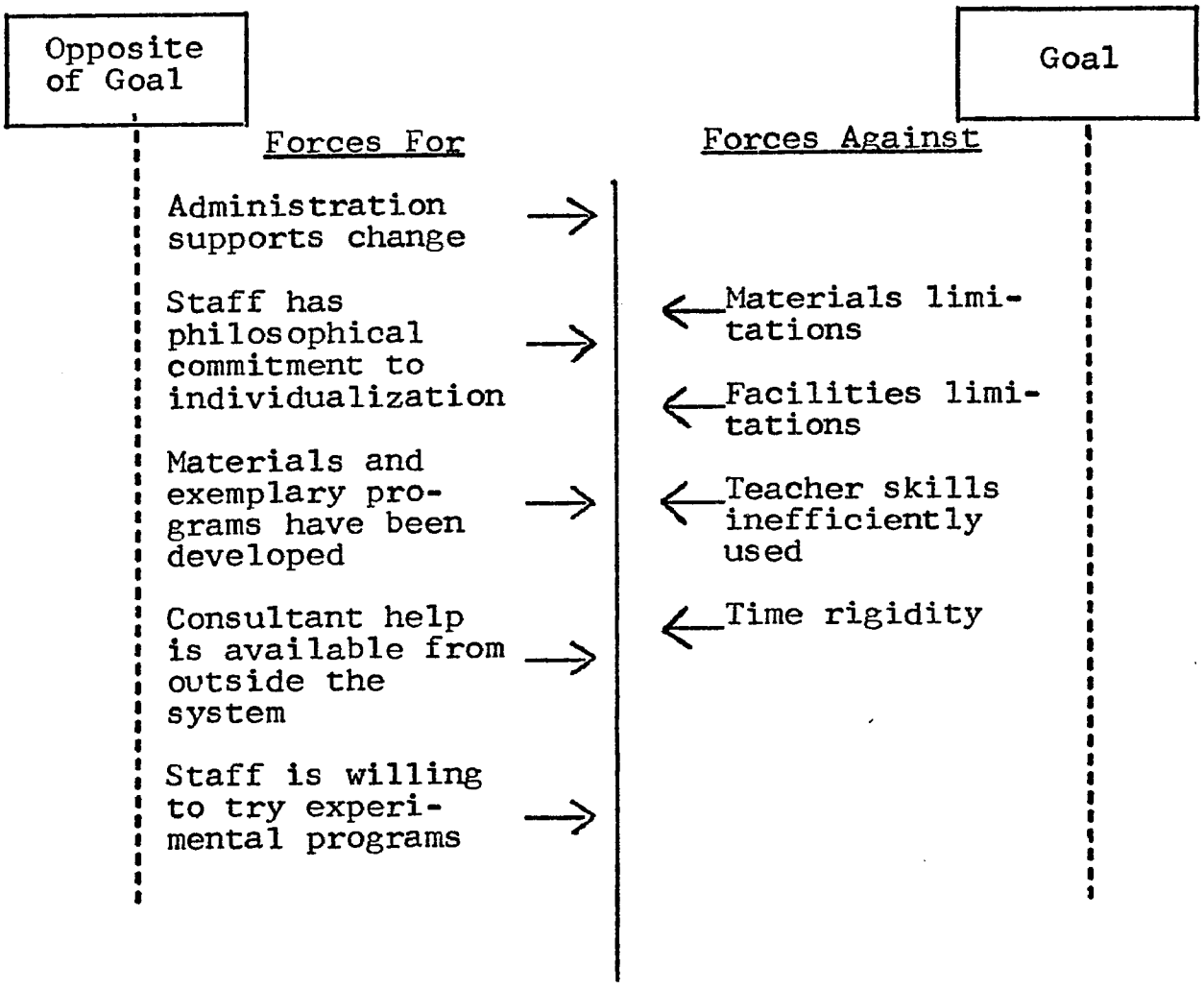


Fig. 5.1--The force field for individualization of instruction prior to The Franklin Plan

rather than the individual. The goal and its opposite occupy complementary positions at the extreme margins of the illustration. The vertical line which divides the diagram in the middle represents the status quo, a situation characterized by a mixture of individualized and group-focused instruction. The status quo is a quasi-stationary equilibrium, maintained by a balance between the opposing forces shown in the illustration. The twelve barriers to individualization

identified by the Franklin staff have been reduced to four categories as shown on the forces against side of the diagram. The forces shown on the forces for side of the diagram have been derived by inference from the description of the unfreezing process given in the several Franklin Plan documents.

Summary of the Unfreezing Stage

According to the documentary data the unfreezing stage of the innovation featured a rather intensive look at instructional objectives at Franklin High School and at the factors in the system which affected their attainment. An attempt was made to widen the horizons of staff members by making reading materials available, by planning visits to innovative schools, and by having consultants in to share different perspectives on the ends and means of the learning process. The outcome of these activities was the identification of a list of twelve barriers to the individualization of instruction. These apparently were identified and agreed upon by the staff in a series of departmental and other meetings. Using the concept of a quasi-stationary equilibrium we would say that prior to the implementation of the unfreezing stage of the innovation process the forces favoring change that may have existed in the situation were balanced by forces tending to support the maintenance of the traditional program. The activities which characterized the unfreezing stage served to strengthen the forces in favor of change, thus moving the system in the direction of innovating.

The Moving Stage

The initial project proposal was put together by a committee known as the "Operational Position Statement Committee," which consisted of four members of the administrative/supervisory staff and three representatives of the Faculty Council.[1] The form the innovation was to take was developed during the 1965-66 school year and was presented to the Board of Education in the spring of 1966 with a request for permission to implement the pilot phase of the project during the 1966-67 school year.[2] We have designated the period from the presentation of this proposal in 1966 until the end of the first semester, 1967-68, as the moving stage of the innovation process.

The Force Field at the Beginning of the Moving Stage

Moving implies that the unfreezing stage has successfully prepared the system for change by creating an awareness of a problem situation and a will to change, and by pointing the way to a resolution of the problem. The Franklin Plan was the vehicle designed to overcome the barriers to individualization of instruction that had been identified. The decision as to what form The Franklin Plan was to take was a major development in the innovation process. With this step the objective of the change effort was transformed from the relatively ambiguous "individualization of

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[1] Franklin Plan, 1966, p. 58.

[2] Ibid., pp. 48-55.

instruction" to the institution of a specific innovation with many implications for the conduct of affairs at Franklin High School. Thus, specifying the form of the innovation brought the risk of bringing into focus forces against the program as well as clarifying the forces in its favor. In Figure 5.1 the forces against are all barriers; they are not driving forces, and they are all internal to the school. Potential forces for and against the innovation as perceived by the authors of The Franklin Plan at the beginning of the moving stage are described in the paragraphs which follow.

Forces Anticipated by the Planners

The planners set forth in the project proposal several items which they labeled "basic assumptions" to be tested. These assumptions related to factors affecting probable success of the effort. There were twelve of these assumptions; those reproduced here have been excerpted from the list because they suggest assumed forces for the innovation.

1. Teachers can change their basic teaching methods and techniques to take advantage of the opportunities offered by small-group organization.

2. We actually can schedule teacher and student time so they can coincide for individual conferences.

3. Traditional and flexible organizations can exist side-by-side; thus an entire school need not be scheduled in a flexible way.

4. The physical structure of Franklin High School can be modified to accommodate a flexible program.

5. We can expect an improvement in student attitude toward responsibility.[1]

The planners also foresaw the need to satisfy several publics inside and outside the school that the innovation was a good and desirable one. These groups were students, teachers, the community, other school administrators and teachers, and the Franklin administration. They raised the following questions in the project proposal--questions which were to be answered as part of the evaluation of the program:

Student Related:

1. Is student scholastic achievement related in a desirable degree to ability?
2. Do students seem to have wholesome attitudes about The Franklin Plan?
3. Is there evidence of increased independent responsibility for learning?
4. Are students as interested, less interested, or more interested in intellectual pursuits?
5. Are individual differences as well, less, or better satisfied?

Faculty Related:

1. Do teachers like this organizational structure and method of operation?
2. Is there as much, less, or more professional satisfaction to be gained from this organization?
3. What is the faculty concept of student benefit from this plan?
4. Is the teaching task personally as, or more, rewarding?

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[1] Franklin Plan, 1966, pp. 44-45.

5. What can be done to improve the task of instruction?

Community Related:

1. Does the "community" like this plan?

2. What is the image of the plan in the community?

Other School Administrators and Teachers:

1. Do they approve of this plan?

2. Are they willing for it to continue?

3. Are there features worth duplicating elsewhere?

Franklin Administration:

1. Is the plan worthwhile?

2. What are its strengths and weaknesses?

3. What can be done to improve the plan?

4. Where do we go from here?[1]

The assumptions listed on page 96 relate to the capability of the system to support the innovation--in other words, the technical capacity to make the design work. The set of questions immediately above refers to the anticipated reaction to the innovation by significant publics. As before, in the case of representing the capability forces, we infer that in this preliminary stage with the reception of the innovation by these publics in doubt, the relative strength of the forces was problematical. The potential forces relating to public reactions both for and against the innovation can similarly be shown as occupying opposite sides of a force field diagram. A force field showing these potential forces follows.

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[1]Franklin Plan, 1966, pp. 45-46.

GOAL: The Franklin High School staff wants to achieve greater individualization of instruction through the implementation of a program in flexible/modular scheduling.

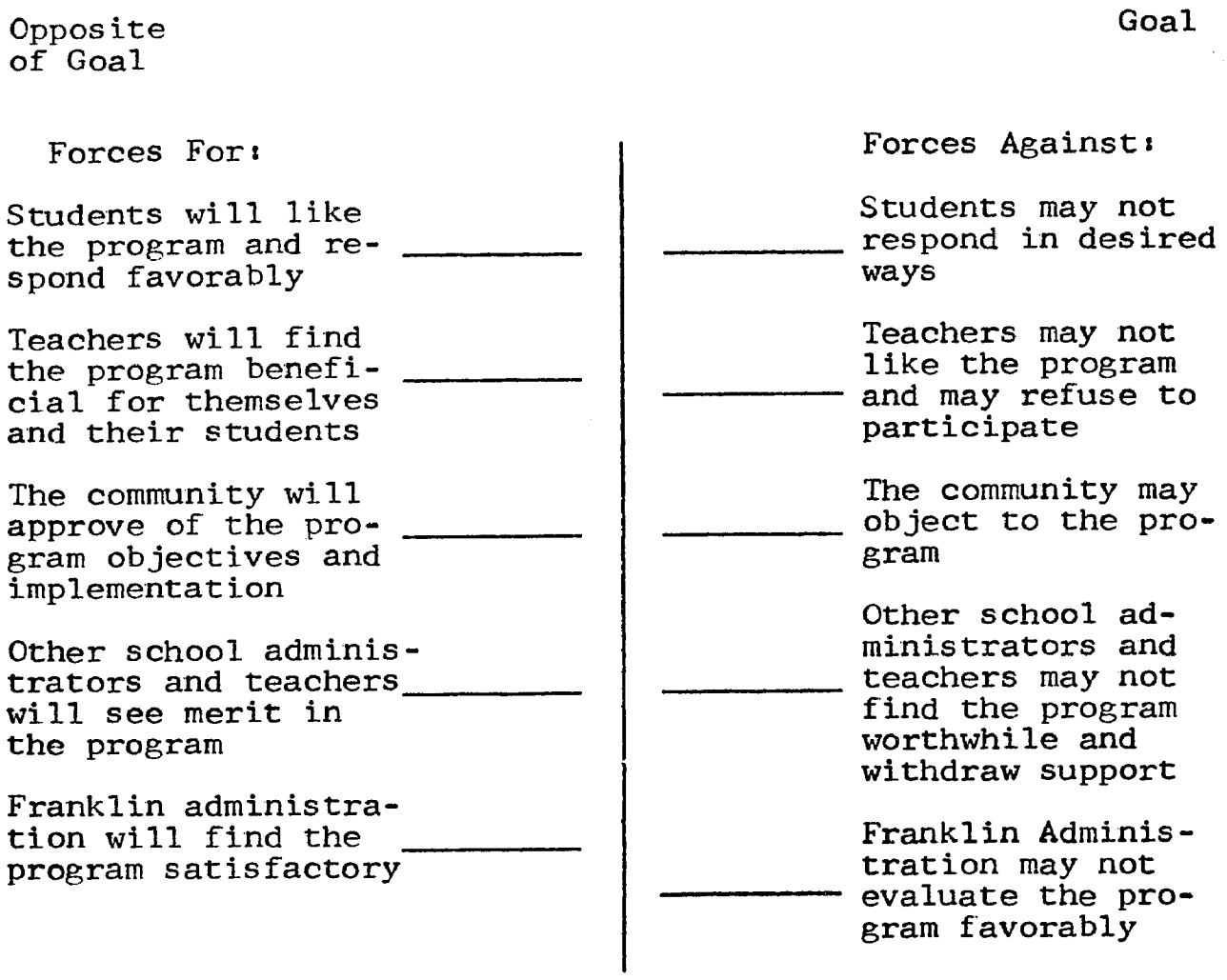


Fig. 5.2--Forces anticipated by the planners.

The planners anticipated two sets of forces as affecting the potential for success of the innovative program. These sets of forces were (1) those related to the technical capability of the system to support the innovation and (2) the reaction which could be expected from the several concerned publics involved. The decision to go ahead implies that they believed they could implement the innovation

Driving Forces For the Innovation

It is possible to discern in the documentary record the existence of driving forces for the innovation in the central administration of Livonia schools, the administration of Franklin High School, and by inference, among the staff of Franklin High School. Evidence for the interest of the central administration is the allusion in the project proposal to the program of instructional improvement affecting all Livonia high schools, of which The Franklin Plan was regarded as a sub-project.[1] The Franklin administration apparently played a leading role in directing and organizing the unfreezing process and in developing the project proposal; of the seven persons on the "Operational Position Statement Committee" which was responsible for drawing up the project proposal, three were members of the local school administration.[2] The evidence for the interest of the members of the teaching staff is less direct but its existence can be inferred from the descriptions of activities in the unfreezing stage and from the statements of the authors of the project proposal. We are told in the project proposal, for example, that "the Franklin faculty has indicated a readiness and willingness to venture forth to try new techniques and methods which a more flexible master schedule would allow and facilitate."[3] In another

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[1] Franklin Plan, 1966, p. 58.

[2] Ibid.

[3] Ibid., p. 2.

passage, defining the scope of the program for the pilot year, it was proposed that:

> The Plan will include the participation of all interested faculty members in an in-service program designed to prepare them to devise and implement new teaching methods and techniques specifically appropriate to the individualization of instruction through flexible/modular scheduling.[1]

The stress on volunteerism in this passage implies that the planners were confident of at least enough support from among the faculty to staff the program for the pilot year.

With the addition of these driving forces to those forces identified earlier, it is possible to conceptualize a more complete force field depicting the situation at the beginning of the moving stage of the innovation process. Such a force field is depicted in Figure (5.3).

Each of the forces depicted in this diagram is in actuality a set of forces consisting of a number of component forces. They have been presented in this condensed form for purposes of simplicity and clarity. It is difficult to draw conclusions about the relative strength of the several forces at this stage in the innovation process, except to note that the respective interests in innovating expressed by central administrators, local administrators, teachers, and the Board of Education constituted a constellation of driving forces in favor of implementing the innovation on a pilot basis. Arrayed against these forces were a number of uncertainties which the planners were interested in

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[1] Ibid., p. 3.

GOAL: Individualization of instruction through the implementation of a pilot program in flexible/modular scheduling.

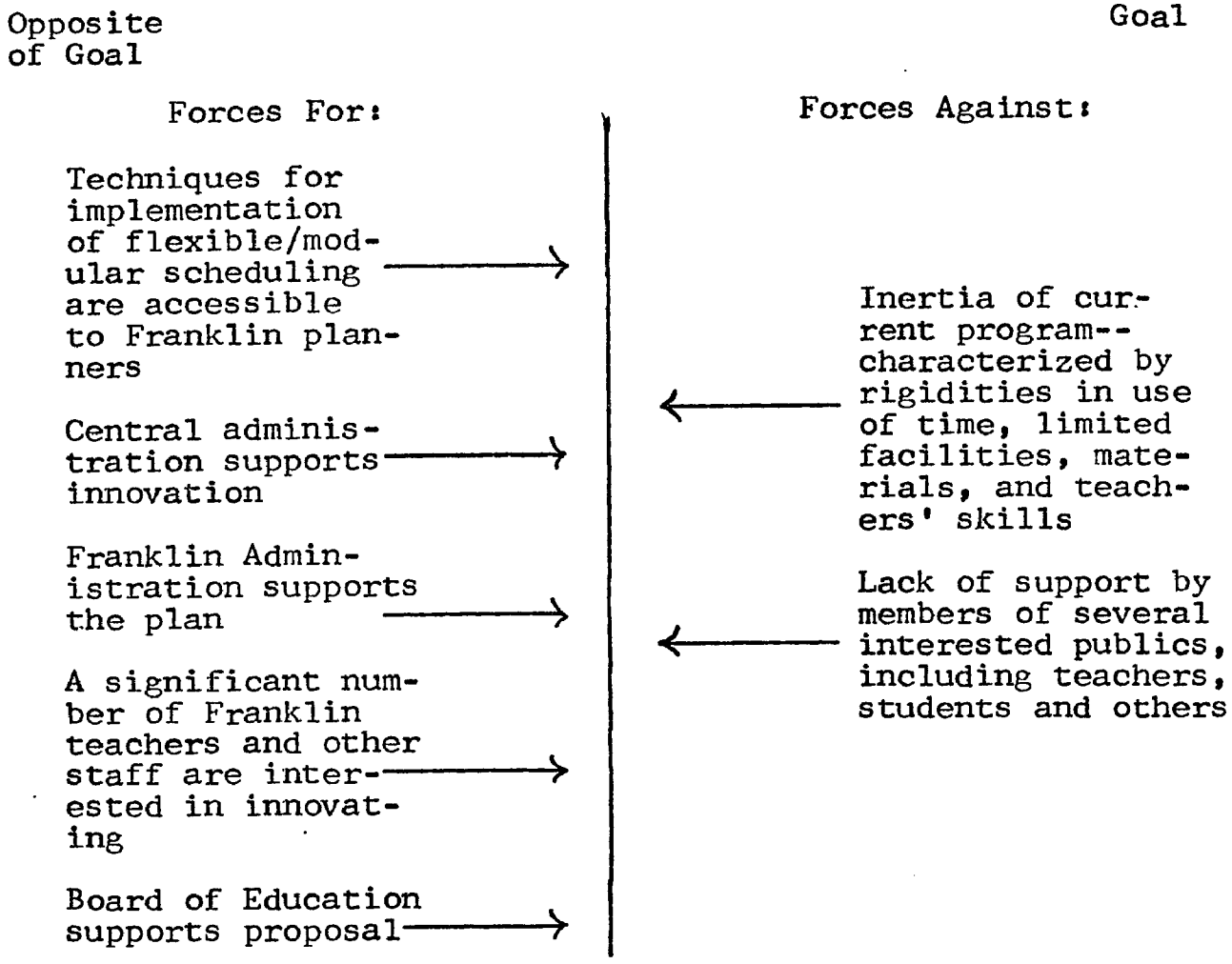


Fig. 5.3--The force field at the beginning of the Moving stage, prior to the institution of the pilot program.

testing. These were the feasibility of making the desired changes in time and facilities use, instructional materials, and teacher behavior, and the kind of reception the innovation would receive from teachers, students, parents, and other interested parties.

Implementation of the Pilot Program

The request for Board of Education approval of the pilot program asked for the following kinds of tangible support:

1. Funds and time for the continuation of the in-service education program, including:
   a. Films and/or speakers for large faculty meetings
   b. Visitation programs for teachers
   c. Workshops for staff, involving the use of outside consultants
   d. Study sessions for staff on problems of common concern.
   e. Attendance by staff at conferences of national professional organizations.[1]
2. Modification of five classrooms to provide small-group meeting spaces.
3. An in-service training program in the summer of 1966, specifically for the participating and interested faculty involved in the pilot project.
4. Permission to deviate somewhat from the standard required number of minutes of in-class instruction for selected courses, by counting unassigned time as instructional time.[2]

The proposal was accepted and the pilot program was instituted in the fall of 1966. No report was issued at the end of the 1966-67 school year, and apparently no formal written evaluation of the pilot program was made. We can only infer from the documentary evidence that the level of success attained was satisfactory and sufficient to encourage

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[1] Ibid., pp. 34-35.

[2] Ibid., pp. 49-54.

the planners to expand the program in the next year.

Expanding the Scope of the Program: 1967-68

The moving phase of the innovation process was completed in the fall of 1967, when The Franklin Plan was installed on a large scale, affecting over seventy-five per cent of the students and staff who had schedules that were at least in part flexible/modular. In preparation for this move an in-service program for staff was conducted in the summer of 1967, and alterations were made in the internal structure of the building. These alterations included the following:

1. Small-group rooms were created from regular-sized classrooms by installing carpeting to dampen sound reflection and vision screens to divide each room into two meeting areas.

2. Several large-group rooms were created by removing walls between adjacent classrooms.

3. Eleven classrooms were combined into resource area space by removing walls between several groups of them.

4. A wall was removed, converting two separate chemistry labs into one large lab, and additional walls were erected to create small-group meeting rooms adjoining the labs.

5. A small-group room was created by partitioning a portion of the physics lab.

6. Thirty-five sets-of-four study carrels were purchased for placement in the instructional materials centers to provide spaces for students to study independently.[1]

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[1] Franklin Plan, April, 1968, p. 58.

The Instructional Materials Center

One of the barriers to individualization which had been identified by the staff was the lack of individualized materials. Materials procurement and organization in The Franklin Plan was the province of the Instructional Materials Center complex. This facility consisted of the following areas as a result of reorganization to accommodate the expanded Franklin Plan:

1. The General Reference and English-Social Studies Resource Center (previously the library)
2. The Math-Science Resource Center
3. The non-book room
4. The communication lab[1]

These facilities were to provide both print and audio-visual materials for individual use by students on independent study or unassigned time.

The Force Field at the End of the Moving Stage

The moving stage of the innovation process ended at the beginning of school in the fall of 1967. The unfreezing stage had prepared the way for the innovation by arousing the interest of members of the system and by providing some direction as to what form the innovation might take. The moving stage had involved the creation of a specific project proposal and had seen its implementation on a pilot basis, culminating in a decision to institute the innovation

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[1] Franklin Plan, February, 1968, p. II-23.

on a large scale in the fall of 1967. The events of the moving stage were accompanied by changes in the force field. These changes are illustrated in Figure (5.4).

The "Goal" at the beginning of the moving stage had been the implementation of the pilot program. In Fig. 5.4. the goal has become "institution of The Franklin Plan as a major component of the Franklin High School program." Driving forces in favor of increasing the scope of the program were the continuing support of the Board of Education and central administration and of the local administration. The evidence for this conclusion is the extensive renovation of the building which was funded and carried out by school system authorities. An additional driving force appears to have been the interest of the teachers in participating in the innovation, inasmuch as over three-quarters of them adopted the innovation at least in part, under conditions that were reportedly voluntary. The forces arrayed against the institution of the innovation at this point in time appear to have been primarily those based on the questions of whether the system would work on a larger scale, and the as yet untested abilities of the majority of staff and students to function in a flexible/modular program. In addition to these uncertainties, it was known that some students in the pilot program had had difficulty adjusting to the need to schedule their own unassigned time, and it was a fact that approximately one-fourth of the staff declined to participate in the innovation. It seems clear, however, that the driving forces for the innovation at this

GOAL: Institution of The Franklin Plan as a major component of the Franklin High School program

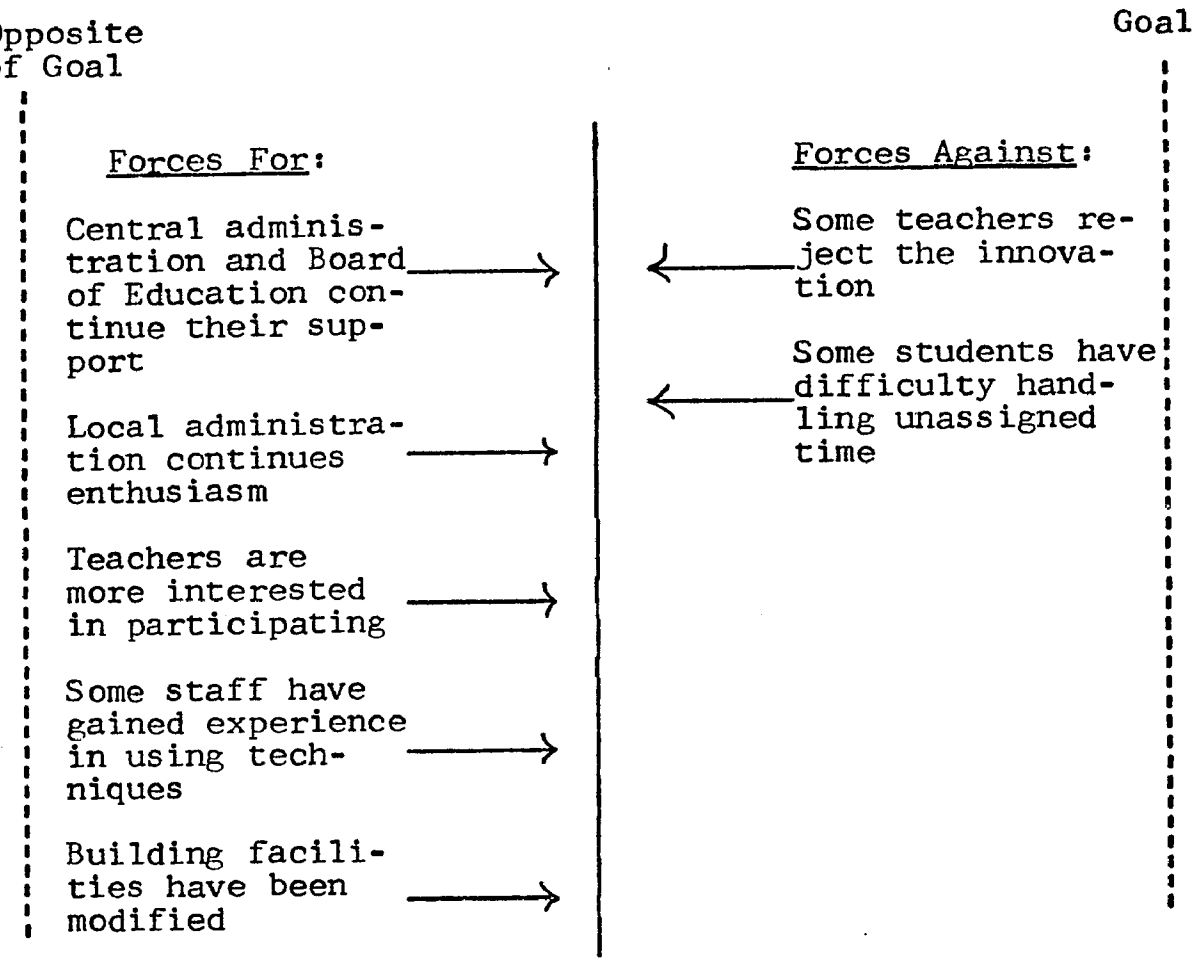


Fig. 5.4--The force field at the end of the moving stage--in the fall of 1967-68, the beginning of second year of the innovation.

point were adequate to overcome the forces against and to move the system in the direction of almost complete adoption of flexible/modular scheduling.

Reviewing the Forces

It appears on the basis of the documentary reports that The Franklin Plan owed its development to a combination of forces located both inside and outside the system (the system in this context is defined as Franklin High School).

Flexible/modular scheduling and its associated methods of instruction had been developed outside the system, and had been instituted in other places. Knowledge of this technology was available to the planners at Franklin through written sources, visits to exemplary schools, and consultants. The central administration of Livonia schools and the Board of Education supported innovation. Evidence for this is their willingness to back the innovative effort at Franklin with resources to conduct the in-service programs and to fund the necessary purchases of materials and the alterations in the building. We would term the technical knowledge which existed in the larger social system and the support for innovation in the Livonia schools hierarchy as forces external to the system.

The forces which were internal to the system were the interests respectively of the Franklin administration and teachers in innovating, the capacity of the building to support the program, the abilities of the staff to perform their respective roles, and the abilities of the students to adjust to the demands of the new program. The interests of the administration and teaching staff were stimulated and directed by the period of unfreezing. In the moving stage of the process efforts were made to develop necessary skills among the staff through the provision of in-service training activities and by enrolling a group of the staff in a pilot version of the program to give them first-hand experience. Minor adjustments in the use of space in the building accompanied the implementation of the pilot project. Prior

to the beginning of the second year rather substantial alterations in the building were made to accommodate the program's expansion.

Forces--Situational, Personal, Interpersonal

Our purpose has been to study The Franklin Plan in terms of the process by which the system sought to maintain the innovation--to examine the problems which arose, the problem-solving efforts which characterized the maintenance process, and the outcomes of those efforts. Consequently, the focus of this report is on internal forces, those factors within the system which affected the level of participation in each of the several years of the innovation's existence. Viewed from the perspective of persons inside the system those factors which we have termed external would be included in situational forces--forces beyond the immediate direct influence of participants in the program. In addition to these forces in the external situation there can be discerned a class of forces within the more immediate environment, i.e., internal forces, which can also be categorized as situational. Examples of internal situational forces would be the adequacy of facilities, the technical efficiency of the scheduling system, and the ability of the students to handle flexible/modular scheduling. We make the assumption that situational forces would have affected the personal or own forces of the teachers. We assume that the latter, the forces acting within the individual teachers who were adopting units would have been responsive to elements

in the situation which seemed to the teachers to have a bearing on the efficacy and desirability of the program. A third category of forces which might have affected the teachers' evaluation of the program can be termed interpersonal forces. This refers to those forces originating in the relationships between individuals--forces which may have influenced persons' perceptions of the worth of the program and their willingness to continue it. The only reference to such forces in the project proposal is found in connection with a description of teaching teams. Although the establishment of teaching teams was not regarded as "an essential ingredient of The Franklin Plan," it was noted that "the establishment of teaching teams will be encouraged."[1] It was observed in connection with this that "The success of teaching teams will require a high degree of development in human relationships . . . . "[2]

The forces categorized as situational, personal, and interpersonal are shown in Figure (5.5). It is apparent that at this point in time the balance of forces was strongly in favor of institution of the innovation. The school system hierarchy had shown its support by approving and implementing the requested alterations in the building, the administration of Franklin High School had provided leadership and coordinated the many efforts needed to prepare the system for the innovation, and teachers had responded by

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[1] Franklin Plan, 1966, p. 24.

[2] Ibid., p. 25.

GOAL: Institution of The Franklin Plan on a large scale

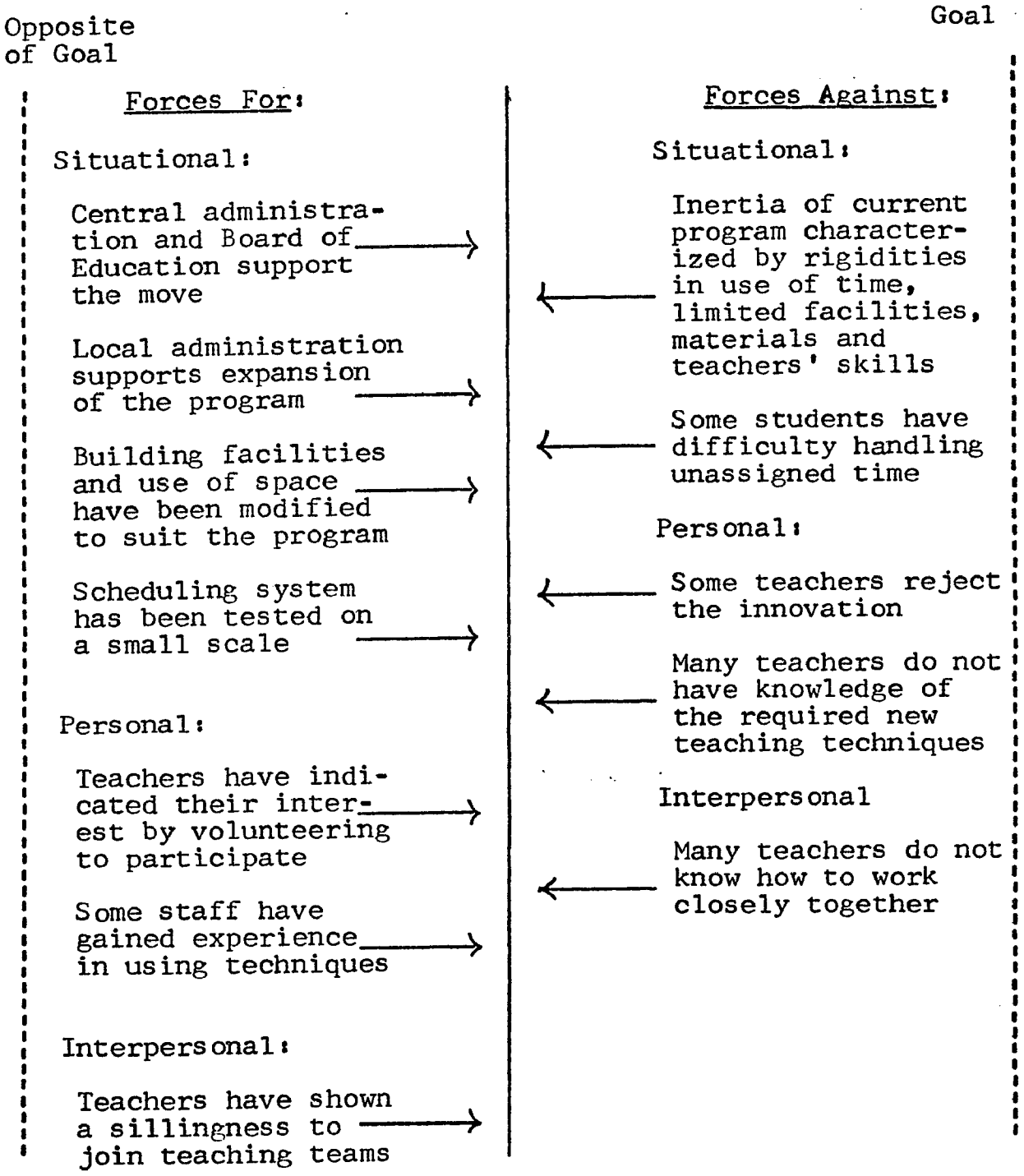


Fig. 5.5--The force field in the fall of 1967, prior to large-scale institution of The Franklin Plan, showing forces categorized as situational, personal, or interpersonal.

volunteering to participate. In this second year of the innovation, which was the first year of large scale implementation, eighty-three teachers participated in flexible/modular scheduling at least in part, and twenty-one teaching teams were formed. The documents are uniform in their assertions that participation in the program was voluntary and this conclusion is supported by responses of teachers to a questionnaire administered to the entire staff in January, 1968, near the end of the first semester of large-scale implementation. Teachers were asked, "Why are you teaching modular classes?" Only 2% attributed their participation to "administrative pressure;" 33% said it was because "I wanted the experience;" 49% said "I believed there were advantages to organize modular." In responses to this questionnaire, 24% of the respondents said they were not teaching modular classes.[1]

The effect of the several forces <u>for</u> the innovation at this point was to create a <u>resultant force</u> in the direction of instituting the program on a large scale. The forces against, at least as nearly as it is possible to tell from the documentary record, were very weak, and consisted mostly of uncertainties about the feasibility of increasing the scope of the program. Roughly one-fourth of the teachers rejected the innovation, but inasmuch as the design was for voluntary participation by the staff, this does not seem to have been a serious impediment. A notable omission from

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[1] <u>Franklin Plan</u>, February, 1968, p. II-23.

the force field depicted in Figure (5.5) is the community. Community response had been anticipated in the original project proposal as a factor to be considered in evaluating the program, but because of the lack of evidence about the opinion of the community on this matter we have chosen not to show community interest as a force either for or against the expansion of the innovation. In the sections which follow we will attempt to document the changes in the force field which accompanied the effort to stabilize the system in a new quasi-stationary equilibrium in which flexible/modular scheduling would find an optimum level of institution.

The Re-freezing Stage

In the re-freezing stage the task facing the innovators was that of maintaining the new program in the face of expected and unexpected diffuculties and the lure of the old and familiar way of doing things. The time span of this stage of the process at Franklin, according to our usage, was from the end of the first semester in 1967-68 until the program's termination in 1971. Counting the pilot program as the first year, our discussion in the following sections will cover the second, third, fourth and fifth years of The Franklin Plan's existence. We will adhere as closely as possible to the categorization of forces as situational, personal, and interpersonal in the presentation of documentary evidence relating to these years.

The Second Year--1967-68

Mid-year Adjustments

Scheduling

Problems of scale were the first the planners had to contend with as a result of the first semester experience in 1967-68. Several component forces are included in this matter of scale; they include such diverse related factors as facility adequacy, scheduling capability, teacher skill, and student adaptability to the demands of the program. An understanding of the nature of some of these problems can be gained by reference to the corrective measures pursued:

> This past December and January we rescheduled the entire Franklin student body into their classes. This was necessary due to reorganization of time patterns in many classes and the failure, this past August, to successfully schedule the school for the year. Reorganization of time patterns was believed necessary by many of our faculty. A critical need was for laboratory time to be assigned. It was also obvious to staff members that the amount of unassigned time in students' schedules had to be reduced. Teachers felt they needed more contact time with students. These goals were obtained by rescheduling.[1]

Teacher contact with students was increased by changing the length of a module from fifteen to twenty minutes and by decreasing the amount of unassigned time in students' schedules. Increasing teacher-student contact was also one of the purposes of assigning lab time, as well as to even out the use of labs, which had been sometimes empty and sometimes overcrowded when students were free to pick their own times. In addition to these measures five teachers

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[1] Franklin Plan, February, 1968, p. III-1.

reverted to a traditional schedule for the second semester. The effect of these adjustments was that more students had completely traditional schedules than in the first semester, and those who had flexible schedules had a greater quantity of assigned time.[1]

The Maple Project

In the second semester of the innovation's first year a team from The University of Michigan and under the direction of Frank Maple had been engaged to evaluate the problem of student misuse of unassigned time and make proposals for correction. This relationship lasted from January, 1967 until April, 1968.[2] Members of the team talked to students and teachers and observed in classes and resource centers. They concluded from their observations and discussions that students were not unmotivated, but that they lacked the skills they needed to succeed in a modular program. About teachers, it was observed that they lacked "skills in goal formation and task analysis at the levels required for a modular program."[3] The team attributed this lack to the fact that training in such skills is not normally a part of teacher education programs.

The team focused its efforts on two problem areas, (1) the form of teacher assignments for students, and

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[1] Ibid., p. III-2.

[2] Franklin Plan, February, 1968, Appendix A, and Franklin Plan, April, 1968, Appendix E.

[3] Franklin Plan, April, 1968, Appendix E, p. 12.

(2) student study skills.[1] With respect to (1) above, it was observed that the small-group model used by most teachers was a discussion model. The team proposed that this practice be altered to make of the small group a laboratory or workshop where the focus would be on instruction, in which teachers would help students with specified tasks, goal-setting, and evaluation of their efforts. Assignments would be made in the small group which would be completed on unassigned time and then checked at succeeding meetings. The effect of this would be to tie the student's use of unassigned time directly to the small group activity. To improve student study skills, the team recommended programmed learning materials which would break assignments into attainable segments. In order to give substance to their recommendations, the team worked with a group of three teachers to develop appropriate small group techniques, and with several groups of four-to-six students on study skills. They taught the students basic study skills like outlining and reading for meaning, and showed them how to anticipate the kinds of questions teachers might ask on exams. They assisted them in the task of planning and organizing their time by getting them to maintain personal progress records showing tasks completed and yet to be done, and by encouraging them to defer gratification by completing certain tasks before taking a break to talk to friends or engage in other

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[1] Franklin Plan, April, 1968, Appendix E, pp. 3-4.

non-educationally-oriented activity.[1]

The team noted also that the success of the program they were suggesting--that of getting teachers to modify their small-group teaching techniques to give more attention to students' academic and skill problems--depended on teachers' time and morale. They observed that both of these were "affected detrimentally by large allotments of non-teaching 'baby-sitting' time."[2]

> . . . if the teacher is to accomplish the recommendations listed in this report, he must have time for consultation with the individual student, planning and constructing devices to assist his teaching (such as programmed-learning manuals), and extensive task analysis. These are new tasks, tasks peculiar to the effective use of modular programs, which often are not accounted for in planning teacher non-class allotments of time.[3]

The team suggested that the use of more semi-professional aides to relieve teachers of non-teaching duties be instituted.

The impact of the Maple Team's efforts on the staff as a whole is difficult to determine from the documentary record. According to the report, they worked directly with a relatively small number of teachers and students, although their recommendations were directed at the functioning of the entire program.

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[1] Ibid., Appendix E, p. 11.

[2] Ibid., Appendix E, P. 13.

[3] Ibid.

The Results of Assessment Measures

The measures described above as mid-year adjustments were taken prior to the results of the various assessments of the program were known. In January and February of 1968 the first formal assessments of The Franklin Plan were carried out. These efforts included the following:

1. Survey questionnaires given to parents, students, and teachers,
2. Interviews with selected groups of teachers,
3. A follow-up study of the 1967 graduating class,
4. A "Student Study Conference" in which 200 Franklin students were selected at random to participate in a one-half day conference to discuss the program,
5. Analysis of various in-house statistics relating to such items as attendance, discipline referrals, grades, and standardized test scores,
6. Reports from each of the several departments in the school, plus the faculty council and the assistant principals,
7. The report of the project team from The University of Michigan, under the direction of Frank Maple.

The results of these assessments are discussed at some length in the February and April, 1968, progress reports.

Situational Forces

The support of the Board of Education and central administration of Livonia schools were presented above as important driving forces in the development and institution of The Franklin Plan. With the program's institution the responsibility for the maintenance process appears to have devolved upon the personnel of the local school. The annual

progress reports from which most of the documentary information is drawn were addressed to the school system hierarchy, and their acquiescence and continued support for the program would be necessary to its survival; however, notwithstanding the importance of their support, the focus of our study is on those factors internal to the system which affected the maintenance of the innovation.

We have mentioned that problems of scale were among those encountered in the second year. The component forces in this category are those relating to such factors as scheduling, which was attempted on a larger scale than in the pilot program, and the facilities, which had been modified to support the expanded program. The most immediate problem encountered appears to have been the scheduling problem; we have discussed this above under "mid-year adjustments." Difficulties with the schedule were attributed by the planners to a number of factors, all of which seem to have been related to lack of experience. These were: (1) lack of lead time in the preparation of the schedule, (2) student requests and other changes in individual schedules, (3) deficiencies in the internal logic of the scheduling "package," and (4) poor coordination between departments in deciding the proportions of flexible/modular and traditional courses to be offered by each.[1] In concluding their remarks on the scheduling process, the planners noted:

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[1] Franklin Plan, February, 1968, pp. III-2--III-3.

> Some staff members feel that this semester's schedule is more sophisticated than those of the past, that its many parts mesh better than our previous attempts. We believe we have reached a level of proficiency that may allow us to produce a schedule that meets the high standards to which we have been accustomed in Livonia.[1]

Although scheduling was found to be a difficult task, it appears that solving problems associated with it had been given a considerable amount of attention and the planners were confident they would be able to eliminate it as a source of difficulty in the future.

Difficulties encountered with the facilities were both quantitative and qualitative in nature. The report of the assistant principals asserted that the building was overcrowded and would be so whether the scheduling system in use was traditional or flexible.[2] Apparently this lack of space was felt most acutely in connection with the students' need for places to go on their unassigned time. Most of them seem to have gone to the IMC, although not always to study. The IMC report noted that average daily attendance had increased from 469 students in 1965 to 3,352 students in the first semester of 1967-68.[3] The IMC staff complained that their facilities were overcrowded and that many of the students there did not wish to study quietly, thereby increasing the supervisory task of "managing a study-hall atmosphere."[4] This

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[1] Ibid., p. III-5.

[2] Franklin Plan, April, 1968, Appendix A, p. 81.

[3] Franklin Plan, February, 1968, Appendix F.

[4] Ibid., p. II-25.

particular problem was also addressed by the student study conference report[1] and the report of the Maple team.[2] The latter two reports suggested the creation of a student commons area where students on unassigned time but not interested in studying could go to socialize.

Other criticisms of the facilities were directed at the small-group and large-group rooms that had been created as a part of the building renovation. It was asserted that the vision screens which had been erected to divide normal-sized classrooms into small-group meeting areas were not doing an adequate job of muffling noise; the result was that the two groups meeting simultaneously in such areas too frequently interfered with one another. Large-group rooms, which had been created from two classrooms, were found to be too long and narrow to provide for the vision by students in the back rows of activities at the front.[3] Additionally, five of the eleven department reports and the faculty council report noted that teacher office space was not sufficient to provide for the increase in teacher-student conferences required by the program.[4]

The students.--Another of the constellations of forces which we have labeled situational was that related

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[1] Franklin Plan, April 1968, Appendix B, pp. 4-5.

[2] Franklin Plan, February, 1968, Appendix A, pp. 9-10.

[3] Franklin Plan, April, 1968, Appendix A, p. 58.

[4] Ibid., Appendix A.

to students. One of the assumptions stated in the project proposal was that students could be expected to develop more responsibility for their own learning. The force field depicted in Figure (5.5), however, makes note of uncertainty about students' responses as a force against the institution of the innovation. Some difficulty had been experienced during the pilot program with unsatisfactory student use of unassigned time, and the majority of the students enrolled in the flexible/modular program in the second year had been untested in this respect. The response of students to the innovation was less than satisfactory as measured by a number of the assessment devices. The evaluation of the Maple team during the pilot year has been mentioned earlier in connection with the discussion of that program. Responses to the teacher questionnaire administered to all staff in January, 1968, indicate that this aspect of the program was still considered a problem. In response to a question which asked them to indicate the level of their agreement with the statement, "Students in modular classes seem more motivated toward learning than students in traditional classes," 31% of the respondents said they "mildly disagreed," and 28% said they "strongly disagreed." Only 1% said they strongly agreed with the statement. When asked on another item which of several elements of the program were of either "great," "mild," or "very little" concern to them, teachers selected the following items as of great concern: "independent study" was selected by 75%; "student responsibility" was selected by 71%; and "building control" was

selected by 84% of the respondents.[1]

A sample of fifteen teachers was interviewed in February, 1968, by a graduate student from Wayne State University. Some excerpts from these interviews can serve to personalize the data in the preceding paragraph.

> I think there's been a breakdown in the ability to enforce rules due to the mass of numbers involved in the program.
>
> The learning experience is positive for only those who wish to take advantage of it . . . . Many of the students do not use their unassigned time effectively.
>
> There are just too many kids wandering in our halls.
>
> More disrespect towards teachers. Students do not seem to accept responsibility for getting the material on their own.
>
> At least 20% of the students I have come in contact with abused the independent study privileges.[2]

Unassigned time is the item of greatest concern in these quotes and in the report of the assistant principals:

> There have been significant difficulties in students' learning how to make effective use of their independent study time. This has resulted in an increase in truancy and behavior problems in areas such as the IMC, corridors, and lavatories. The need for constant change in the implementation of the program has brought about the inevitable problem that significant change always seems to bring with it--insecurity on the part of the participants. It appears as though there are some students who do less well on a flexible/modular schedule than they might have done on a "traditional" schedule. The opportunity that is present to budget one's own time also presents an increased opportunity to misuse this time.[3]

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[1] Franklin Plan, February, 1968, pp. II-3--II-8.

[2] Ibid., Appendix H.

[3] Franklin Plan, April, 1968, p. 78.

Preceding paragraphs have tended to stress the forces against aspect of the situation. It would be misleading to conclude that there were no forces for the innovation in this category. Anecdotes from the teacher interviews show a degree of satisfaction with some aspects of the program.

> I was getting some students to come to my room to work that I never would expect would want to.
>
> The students are talking about subject matter . . . . Now in small groups I think they are really talking the language of the subject.[1]
>
> At first it was difficult to convince the students that they should come to see me for conferences on their unassigned time. Now it seems that not many of them are that reluctant to come in.
>
> I think that for the good student, who knows what he wants to do, modular scheduling has real positive effects.[2]

Similarly, on the questionnaire administered in January, 1968, 46% agreed either mildly or strongly that "capable students are using their independent study time wisely," and 24% agreed either mildly or strongly that modular students assumed a more responsible role in the learning process than did those in traditional classes.[3]

The data discussed immediately above reflect the reported perceptions of persons in the system. The progress reports for the second year of the innovation also contain the results of other, more easily quantifiable measurements of student response to the innovation. These are discussed below.

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[1] Franklin Plan, February, 1968, Appendix H, pp. 3-7.

[2] Franklin Plan, April, 1968, pp. 3-6.

[3] Franklin Plan, February, 1968, pp. III-3--III-8.

1. Grades earned by students over a period of years were compared with the grades during The Franklin Plan's first year and a half. It was found that during the first year, 1966-67, the grades of students in modular classes showed greater proportions at the A and E extremes of the scale than those in traditional classes. Similarly, in the first semester of 1967-68 the proportion of E grades increased, but at the expense in this period of the C and D areas. It was noted in this section of the report, however, that in the second semester of 1967-68, after the mid-year scheduling changes the grades seemed to be returning to what had been a normal distribution for Franklin.[1]

2. The nature of discipline referrals during 1967-68 changed from what it had been under a fully traditional or partially modular schedule as in 1966-67. The locus of discipline problems appears to have shifted from the classroom to areas outside the classroom, e.g., halls, lavatories, and grounds. Smoking, misconduct, and truancy accounted for 82% of discipline referrals in 1967-68.[2]

3. An analysis of attendance data for the second marking period in 1966-67 compared with the same period in 1967-68 showed no difference of an appreciable magnitude when daily attendance at school or class attendance were considered. However, it was noted that:

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[1] Franklin Plan, April, 1968, pp. 21-22.

[2] Franklin Plan, February, 1968, p. II-16.

> Claims persist that many students are leaving the building. Forty-eight percent of the student body admitted to "skipping" on the student questionnaire administered in January, 1968. In informal discussion held with students and different classes in the building shed some light on student attitude toward the attendance problem. Some students are not staying in school during their unassigned time. They find it difficult to understand the importance of independent study. They claim that some unassigned time blocks are too long (example: three hours or more), it is impossible to study in the IMC, they do not have enough work to do, and there is no place to work in small groups. A norm has been created that it is not wrong to leave the building when "there is nothing to do."[1]

4. A follow-up study of the graduating class of 1967 found that of 340 questionnaires returned, representing slightly more than a 50% response, almost half reported having had some modular classes during the pilot year. The planners concluded from these responses that, "1967 graduates by a ratio of 4.1 felt modular classes prepared them at least as well as, or better than, traditionally scheduled classes."[2]

5. The planners' analysis of responses to a questionnaire administered to the student body in January, 1968 led them to conclude that "about two-thirds of the student population supports modular scheduling."[3] They found, however, that 60% of the students felt that modular students wasted more time in school than traditional students.[4] Also, "twenty-two percent of the students indicate that they

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[1] Franklin Plan, April, 1968, p. 37.

[2] Ibid., p. 16.

[3] Ibid., p. 32.

[4] Franklin Plan, April, 1968, p. 35.

skip more with modular classes."[1]

Summary of Situational Forces.--We have dealt in the paragraphs above with the situational forces mentioned most prominently in the documentary record for the second year of the innovation. In the absence of contrary information, we assume continuing support for the innovation from the Board of Education and the central administration during this period. The forces which concerned the planners during this time were those more immediate to the situation at Franklin. These appear to have been the forces relating to the scale of the program and the responses of students to the program's demands. The situational forces can be regarded as composed of component forces as shown in the diagram below:

Forces For:	Forces Against:
New scheduling package has been developed, based on experience	Crowding of facilities is more of a problem than had been anticipated
Student attitude toward program is one of support	Building alterations have proven less than satisfactory
Some students are performing well in the program	Scheduling has proven to be a time-consuming and frustrating task
Teachers report fewer in-class disciplinary problems	Students' grades have fallen since the program's inception
	Misuse of unassigned time has increased disciplinary referrals

Fig. 5.6--Components of situational forces in the second year.

[1] Ibid., p. 36.

These are forces as they had materialized in the second year of the innovation. One gets the impression that as these forces materialized, they did not present an encouraging prospect. Three of the assumptions upon which the institution of the program had been based were drawn into question. These were that two schedules could exist simultaneously, that the physical structure of Franklin High School could be altered, and that students could be expected to improve their attitudes toward responsibility.

Personal Forces

Figure (5.5) indicates two sets of personal forces affecting teachers' willingness and ability to participate in the innovative program. These were the teachers' interest, indicated by their having volunteered, and their adaptability, reflected in the experience they had gained using the techniques appropriate to teaching in a flexible/modular program--gained either through first-hand experience in the pilot program or in one of the in-service programs. On the other hand, some teachers rejected participation in the program from the start, and others were untested in terms of their ability to perform in the new ways anticipated by the flexible/modular schedule. It has been noted above that teachers reported on the January questionnaire that their primary reasons for electing a modular schedule were either because they wanted the experience or believed there were advantages to modular scheduling. Although it is unclear what potential advantages teachers may have perceived, the

planners foresaw the following benefits for them:

> While most of the potential benefits accrue to the student it is also true that other concomitant benefits for teachers will develop such as: (1) more efficient use of their time, (2) the development of new roles for teachers such as diagnostician, prescriber, and counselor, (3) releasing teachers from some non-professional tasks so that the time may be more profitably invested in the education of their students through the employment of instructional aides.[1]

In looking ahead to the task of evaluation, the planners posed these questions as measures of faculty satisfaction with the program: (1) do teachers like this organizational structure and method of operation? (2) is there as much, less, or more professional satisfaction to be gained from this organization? (3) what is the faculty concept of student benefit from this plan? (4) is the teaching task personally as, or more, rewarding? For purposes of data presentation and analysis, we will condense these questions into three categories: (1) the extent of professional satisfaction perceived by the staff, (2) the extent of personal satisfaction, and (3) teacher perceptions of student benefits from the plan.

Professional satisfaction.--We make the assumption that teachers' sense of professional satisfaction is enhanced when they feel competent in the exercise of their tasks, i.e., when they feel their talents are being effectively used and the tasks they set for themselves are being met. The various assessments which were conducted at the end of

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[1] Franklin Plan, February, 1968, p. I-1.

the first semester and midway through the second semester of 1967-68 imply that teachers were experiencing some difficulty in adjusting their teaching methods to the demands of the new program. This is reflected in teachers' responses to several items on the questionnaire administered to the staff in January, 1968. In response to the statement, "Teachers must learn new teaching techniques to be successful in small groups," 50% said they strongly agreed and 33% said they mildly agreed. When asked the same question about large-group instruction, 82% indicated either strong or mild agreement. A similar concern was reflected in the administrative recommendations for 1968-69 where it was noted that:

> There is some confusion among the staff as to the purposes of the large group. Intensive work must be done staff-wide to reach agreements upon the objectives of the large group and suitable activities to be carried on. It would seem that some of our unassigned-time problems are related to the fact that course content is given through the large group and students are left with little to do independently.[1]

Responses by teachers to the interviews conducted in February and March illustrate some of the problems teachers encountered. Excerpts from two such responses are reported here:

> Something that is really important is how you structure your course. I know I've made some mistakes with my choices of times. It takes careful thought on how to divide the time structure. I made some poor choices first semester but was able to revise for second semester. I'm still not satisfied and I would revise next year. That could be a strength --in that you have chances to make choices and revise--it can also be a weakness, when you make your

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[1] Franklin Plan, April, 1968, pp. 64-65.

> mistakes. It may take several years to decide what is going to be the best blocking for a certain course.[1]
>
> I was puzzled at first about small groups. We were told that they were to be almost totally unstructured. I just couldn't sit still for that because there is only one or two 36 minute small group meetings per week, per student, and it must be used to the fullest extent. I started structuring mine almost from the beginning. If they didn't start asking questions, I began probing.[2]

The IMC staff in its report remarked that there was a lack of teacher follow-through with assignments, assignments were not pre-researched adequately by them, and both teachers and students did not seem to understand and properly plan for independent study.[3] The report of the Maple team noted that part of the problem of abuse of unassigned time could be traced to the small group techniques of teachers.

> At present, small classes seem to be predominantly discussion groups, which are loosely structured and characterized by free and open exchange of ideas, student responsibility for leadership, student choice of discussion topic, etc. Often discussion topics are not related to the subject matter of the course.
>
> While discussion groups might be appropriate for some teachers in terms of their course objectives (e.g., learning to discuss), we think that too much emphasis has been put on the utilization of discussion as a methodology.[4]

One solution to this problem suggested by the Maple team was

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[1] Ibid., p. 12.

[2] Franklin Plan, February, 1968, Appendix H, p. 6.

[3] Franklin Plan, April, 1968, Appendix A, pp. 37-38.

[4] Ibid., Appendix A, p. 5.

that small-group meetings be used for making assignments for students to complete on their unassigned time and to monitor their completion of those assignments.[1]

In the administrative recommendations for 1968-69, it was stated that "Perhaps the greatest hurdle in the implementation of the program has been, and will continue to be, the task of changing the behavior of teachers." The implication of these data from several sources is that one of the severest problems encountered in the second year of the program was that of adjusting teaching styles to the flexible/modular format.

Another element in the teacher's sense of professionalism is their feeling that they are able to concentrate on instruction in their classes without what they regard as an undue burden of noninstructional responsibilities. The data seems to reflect an impression on the part of the teaching staff that the flexible/modular schedule imposed such undue burdens upon them. The teacher questionnaire which has been alluded to previously contained a number of items bearing on this question. One of these items asked if respondents thought that modular organization had changed the teacher role. "Greatly changed" was the choice of 37% of the respondents, while 40% said teacher role had "moderately changed," and only 7% thought it had not changed. When asked if the change had been in a positive direction, 42% said "no."[2]

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[1] Ibid., Appendix A, pp. 6-7.

[2] Franklin Plan, February, 1968, pp. II-3--II-8.

There is no clue in this set of items as to what the respondents might have meant by these replies. However, we might draw some inferences from other sources. It has been noted earlier that student behavior on unassigned time created certain control problems around the building. Some teachers seem to have felt that the needs of this situation interfered with more important teaching activities. In the departmental reports submitted in the spring of 1968 we find this comment from the English department:

> In large part, the success of The Franklin Plan, in relation both to student achievement and building control, depends on the individual relationship a teacher can build between himself and his student. Since these contacts are not formally provided for, they are among the first to be sacrificed to the demands of building control. This can continue only to the serious detriment of The Franklin Plan. Other means of obtaining student supervision and building control must be found.[1]

A similar sentiment was recorded in the report of the foreign language department, where it was noted under the heading of "weaknesses" of the program that time spent supervising students in various areas of the building cut down on in-school time for necessary instruction--related paper work, and that time available for conferences with students was also reduced.[2] Similar remarks were contained in the reports of the industrial education, science, and social studies departments.

On the other hand, some teachers seemed to feel that the system contributed to professional growth. Following are some comments from the interviews reported which support

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[1] The Franklin Plan, April, 1968, Appendix A, p. 18.

[2] Ibid., Appendix A, p. 21.

this conclusion:

> Modular has had an effect on me as a teacher. I feel I am doing a better job. I see more kids now. In the first three weeks of last semester I saw a third of my kids in an individual conference. The quantity of contacts with students has gone down but I believe the quality has gone up.
>
> The individual conferences are very time consuming, but they undoubtedly are the most rewarding, to sit down and plan with the student from his points of interest.
>
> As a teacher I am more comfortable with the modular system. I like the relationship in a small group. More are coming into the office to get help than ever have before; developing a more personal or closer relationship with students.
>
> The teacher's role has changed in that it seems we share a set of common problems. We both laugh about the green lights, or comments made on the other side of the partition in the other small group. We seem to react more the same. The role has changed in that I feel that I'm involved more with the whole student, more than just the academic area.[1]

These are individual comments and cannot be construed as representative; nonetheless, they do provide a different perspective to balance the negative effect of the paragraphs which preceded them.

Personal Satisfaction.--It is difficult to separate personal satisfaction from professional satisfaction, conceptually. We have postulated that professional satisfaction is related to task performance inasmuch as teachers feel professional satisfaction when they feel that their working conditions are conducive to effective teaching and they can see positive results from instruction. To separate

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[1] Franklin Plan, February, 1968, Appendix H, pp. 4-7.

the personal self from the professional self is to answer the question, what conditions can be said to affect one's appraisal of the situation irrespective of the perceived effectiveness of instruction? Most of the questions asked teachers which are reported in the documents relate to those elements we have ascribed to professional satisfaction. There are some, however, which seem separable from purely professional concerns. One of these is work load. It seems reasonable to suppose that regardless of the instructional effectiveness of the program, there would be limits to the extent to which teachers would be able to endure what they may have regarded an excessive work load. Another element that would seem to be separable from purely professional concerns is related to role. Although teacher's role is a construct that ordinarily implies professional concerns, it can be conceived as having also a personal dimension. For example, the role of teacher as it relates to the student role allows for a range of alternatives with respect to the amount of deference the student is expected to show to the teacher. The evaluation placed on student-teacher interactions is thus subject to a degree of <u>personal</u> preference.

Only one question on the teacher questionnaire of January, 1968 related to the matter of work load. Teachers were asked to respond to the statement, "I feel, that as a result of modular scheduling in our building, my teaching load has: . . . " In their responses, 16% said their load had "greatly increased," 34% said it had "increased," and 39% said it had "not been affected." Only 10% said it had

decreased in some measure.[1] Earlier in the paper it was noted that teachers had indicated that part of the increased work load was due to increased paper work and supervisory duties. The February and April, 1968, progress reports contain excerpts from interviews with seventeen teachers. Six of the seventeen in these open-ended interviews mentioned some element of the increased work load. One stated, "I've never worked so hard in all my years of teaching."[2] Another said, "There is not enough time to prepare . . . . Things like grading tests have to be done at home."[3] Another noted that large groups took a great deal of preparation time,[4] another remarked, "Comments made by teachers last year that a lecture preparation took two or three hours, I now realize, were not an overstatement."[5] Based on these replies, it appears that many of the staff, although not all, found that the combination of clerical and supervisory responsibilities and the need for preparation time were increased burdens attributable to the flexible/modular program.

Data on the role relationships between teachers and students is limited and the direction is unclear. On the teacher questionnaire 63% agreed either mildly or strongly that discipline problems were infrequent in their small

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[1] Franklin Plan, February, 1968, p. II-4.

[2] Ibid., Appendix H, p. 3.

[3] Ibid., Appendix H, p. 5.

[4] Ibid., Appendix H, p. 4.

[5] Franklin Plan, April, 1968, p. 12.

groups. On the other hand, four of the seventeen persons for whom personal interview responses are recorded in the February and April documents mentioned what they regarded as a deterioration in students' attitudes toward teachers. A greater number of these respondents mentioned the benefits of the program that permitted them to have more intimate contacts with their students, but it appears that for a small number of the staff the increased freedom afforded students had contributed to a breakdown in students' respect for authority figures. One teacher stated that the program had produced "more disrespect toward teachers."[1] Another noted that it was more difficult to develop rapport because of the loss of contact time, and another said there was a "more casual relationship with students, and a little loss of authority," but remarked that he liked it better.[2] It appears that this aspect of the program's effect did not trouble very many teachers, but that it may have been significant to some.

Teachers' perceptions of benefits for students.--Several items in the teacher questionnaire related to this aspect of the program. In response to a statement that suggested that students in modular classes seemed more motivated toward learning than those in traditional classes, only 14% agreed either mildly or strongly, whereas 59% either mildly

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[1] Franklin Plan, February, 1968, Appendix H, p. 6.

[2] Franklin Plan, April, 1968, p. 12.

or strongly disagreed.[1] Teachers were more evenly split on whether capable students were using independent study time wisely; 46% agreed in some measure that this was true, while 37% said they disagreed either strongly or mildly.[2] On the question of whether less capable students were using their time wisely, 2% said they agreed mildly, while 19% disagreed mildly and 64% disagreed strongly.[3] Only 12% said they thought student achievement was greater with modular scheduling than with traditional scheduling; none said "much greater," while 34% said it was "less," and 25% said it was "much less."[4] There seems to have been a perception on the part of the teachers that in terms of motivation, performance, and achievement, many students were not faring as well in the modular system as they had or might have in the traditional system.

Summary of personal forces.--We have made the assumption that teachers' personal assessments of the suitability of the innovation would be based upon a combination of their sense of professional satisfaction, personal satisfaction, and perceptions of benefits in the program for students. Responses in each of these areas were mixed between support for the program and dissatisfaction with it, as reported in the several assessments. One implication

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[1] Franklin Plan, February, 1968, p. II-3.

[2] Ibid., p. II-4.

[3] Ibid., p. II-6.

[4] Ibid.

which appears in the data is that there was more hope for the potential of the program than there was satisfaction with it as it was operating at the time. More teachers agreed than disagreed (49% to 40%) with the statement that "modular scheduling provides more opportunity to work towards individualizing instruction than traditional scheduling."[1] By a 43% to 30% margin, teachers said they thought the long-range effect of modular scheduling would be to increase individualization rather than decrease it.[2] In response to a question which asked teachers which areas of The Franklin Plan were of greatest concern to them, 50% indicated great or mild concern about the objectives, 56% expressed great or mild concern about the philosophical tenets, but 85% said they were greatly or mildly concerned about the implementation.[3] So it seems that many more were concerned about the program's implementation than about the basic ideas which underlay it, although it appears that about one-half of them were expressing doubts about the latter as well.

In summary, the personal forces affecting the continuance of the innovation in the second year appear to have had the following character:

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[1] Franklin Plan, February, 1968, p. II-6.

[2] Ibid., p. II-3.

[3] Ibid., p. II-8.

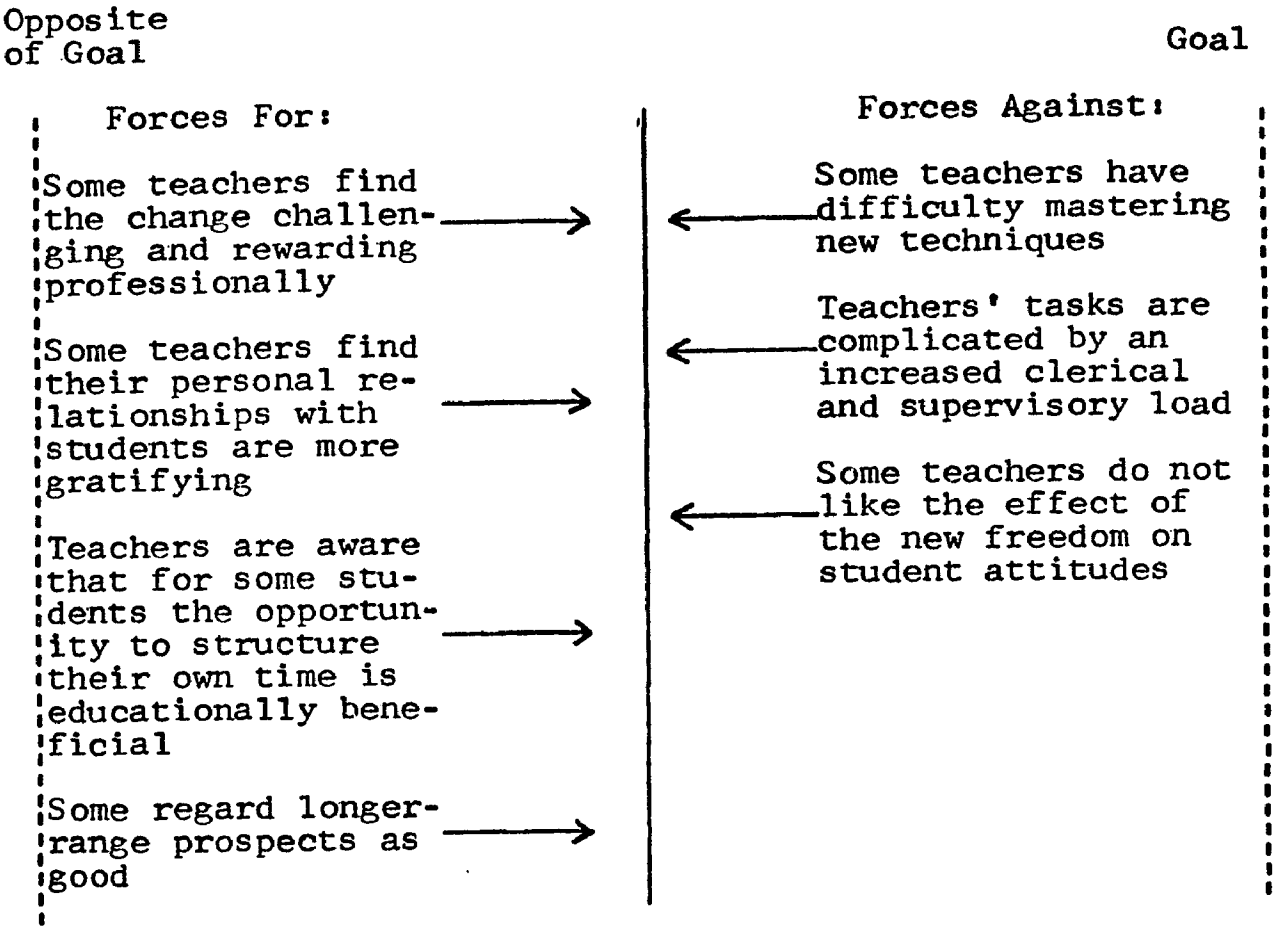


Fig. 5.7--Components of personal forces in the second year.

An impression drawn from this representation of the forces for and against the innovation is that the balance was with the forces against at this time. The conclusion that the personal forces of teachers did have this direction is supported by teachers' responses to several additional items on the January, 1968, questionnaire. Teachers were asked:

> If you should seek a change of employment next year and are offered two positions, one in a school which is traditional and one in a school which is all modular, and the salaries are similar, which would you choose?

A traditional school was the choice of 49% of the respondents, while 39% chose a modular school.[1] On an item which asked the respondent's perception of whether the Franklin staff liked the modular program and would like to continue it another year, 2% agreed strongly that the staff would like the program to continue, 15% agreed mildly, while 31% disagreed mildly and 29% disagreed strongly.[2] In response to the statement, "Franklin should abandon modular scheduling at the end of this semester," 38% agreed either mildly or strongly, but 43% disagreed either mildly or strongly.[3] Apparently some of those who disagreed with the proposition that the plan ought to be abandoned favored its continuance without wishing themselves to participate in it, because only 38% responded "yes" to an item which asked whether they would elect a modular schedule for the next semester, while 46% said "no," and 15% said they couldn't say.[4] We would infer from these data that slightly more than one-third of the teaching staff supported the continuance of The Franklin Plan at this time to the extent that they would choose participation in it for themselves, although slightly

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[1] Franklin Plan, February, 1968, p. II-4.

[2] Ibid.

[3] Ibid., p. II-5.

[4] Ibid.

more than one-third of the teaching staff supported the continuance without their participation.

Interpersonal Forces

To inquire about interpersonal forces is to ask whether, in addition to those factors discussed above which related to the way in which individuals formed judgments about the program, there may have been forces in the situation which stemmed from the relationships between people. In other words, did persons make decisions on their own, or were there group influences present as well? Did friendship, clique membership, or work groups have a bearing on individuals' decisions to participate or not participate and on their evaluations of the program? There is little direct reference in the documentary evidence on the presence of such forces. One type of functional grouping encouraged in the program was the formation of teaching teams. There was one item on the February, 1968 questionnaire which related to teaching teams. It asked if respondents who were members of teaching teams thought team teaching had been a more efficient use of their time and skills. This item did not apply to all teachers; 41% did not respond; 43% agreed that team teaching was more efficient, and only 5% disagreed.[1] Some of the staff responding in the personal interviews shared their feelings about this aspect of the program:

> I think team teaching is a marvelous idea. It has broadened my experience as a teacher, made

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[1] Franklin Plan, February, 1968, p. II-5.

me a better teacher.[1]

> Modular scheduling is well suited for the use of team teaching. It can pool strengths, divide activities, and share ideas.[2]

Favorable remarks about the usefulness and efficacy of team teaching were contained in the reports of the English, home economics, and mathematics departments.[3]

Contrasted to these favorable comments were concerns expressed by some about the strains inherent in team membership.

> Concerning team teaching the team has to be able to work very closely together or the team is just not going to operate. If you are on a team, there is not much room for deviation. You can't do things independently, you must always do them in regards to the rest of your team.[4]

> A shortcoming in the team approach is that when team members have a difference of opinion you often end up compromising which is probably less desirable than choosing one extreme or the other.[5]

It is difficult to draw conclusions from these comments other than to observe that they indicate some problems of adjustment within teaching teams. There is not sufficient information to indicate whether, on balance, teaching teams were a force <u>for</u> or <u>against</u> the innovation.

There is some passing reference in the comments of some teachers to a quality which may be termed "general staff

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[1] <u>Ibid.</u>, Appendix H, p. 3.

[2] <u>Franklin Plan</u>, April, 1968, p. 11.

[3] <u>Franklin Plan</u>, April, 1968, Appendix A.

[4] <u>Franklin Plan</u>, February, 1968, Appendix H, p. 3.

[5] <u>Franklin Plan</u>, April, 1968, p. 11.

relationships." One gets the impression that the situation during the second year of the innovation was very fluid. It was characterized as "organized confusion" by one teacher.[1] Some other comments:

> I don't believe modular scheduling has had a good effect on staff morale. Those who are opposed to the program are more vocal than those who are happy with it.[2]

> It has made a lot of the teachers bitter towards each other instead of worrying about what to do in their own room, they are worrying about whether another has a lighter load.[3]

On the other hand, the social studies department in their departmental report noted that "it has brought the department closer together since we are housed together."[4] It appears that what we have in these comments is merely a suggestion of the full nature of interpersonal relationships that may have been involved, but not enough to draw a conclusion about the direction of the forces they produced.

The Force Field in the Second Year--Summary

A reading of the documents covering the second year of the innovation produces the implication that the program was experiencing difficulty on a broad front. The extensive alterations in the building did not seem to have resulted in a facility that was fully suitable for the program.

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[1] Franklin Plan, February, 1968, Appendix H, p. 4.

[2] Ibid., Appendix H, pp. 3-4.

[3] Franklin Plan, February, 1968, Appendix H, p. 3.

[4] Franklin Plan, April, 1968, Appendix A, p. 58.

Scheduling, although seemingly improved from the first semester's experience, was still undergoing experiment. Although students generally supported the program in word, their deeds were upsetting to school personnel. Reactions of teachers were mixed, many of them having had difficulty adjusting their teaching methods to the new system, and having found that making the necessary changes was a considerable drain on their time. Still, slightly more than a third of the faculty expressed an interest in continuing to participate in flexible/modular scheduling. There had been, moreover, a considerable investment in time, effort, and materials up to this time, and the planners seem to have been determined to press ahead with the program. In the administrative recommendations for 1968-69 it was noted:

> We are making progress in our efforts to provide a school situation for each student which more nearly meets his needs. The final objective is still far from attainment. As a staff, we have been in the throes of self-evaluation, self-criticism, and frustration, as well as success.
> . . . . . .
> We must be clever enough to resolve the problems and clear away the irritants which are impeding our progress.[1]

Following these words the recommendation was made that flexible/modular scheduling be continued at Franklin High School during the 1968-69 school year.

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[1] Franklin Plan, April, 1968, pp. 74-75.

The Third Year--1968-69

Maintenance Efforts

Based on the results of the several assessment measures and an administrative analysis of the situation, the Franklin administration proposed a comprehensive set of recommendations for the third year of the innovation.[1] These were directed at correcting some of the difficulties which had arisen. The changes in the program which were implemented in the third year are described in the paragraphs which follow.

Efforts Related to Situational Forces

Scope of the Program.--The scope of the program was reduced by eliminating most of the in-coming tenth graders from flexible/modular scheduling, and by prescribing traditional schedules for students who had had particular difficulty of a disciplinary or attendance nature or who had had low grades during the second year. Additionally, parents were notified that they or their children could request a traditional schedule for the third year if they desired. As a result of this, 10% of the parents or students made such a request.[2] An additional complicating factor which further reduced the scope of the program in the third year was the addition to Franklin High School's enrollment of a complement of students destined for the

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[1] Ibid., p. 75.

[2] Franklin Plan, March, 1969, p. 82.

then-not-completed Churchill High School. This move accounted for the decision to temporarily eliminate the physical education, art, and industrial arts departments from participation in the flexible/modular program.[1]

Student Adjustment.--The experiences of the second year had produced what appears to have been unexpected difficulties with the adjustment of students to the demands of the program. One of these difficulties was attendance. Accordingly, one of the changes projected for the third year was a general tightening up of the attendance monitoring procedures.[2] In addition, two efforts were proposed to gather additional data on students. These were the "Way of Learning Inventory" and the "Responsibility Scale."[3] The former was intended to create a profile of each incoming tenth grader which would show the preferred mix of learning activities for each student, and which would aid in the prescription of appropriate learning experiences for them. The Responsibility Scale was developed with consultant assistance from Mr. Donald Barr, from the Institute for Social Research in Ann Arbor. This instrument was to be applied to a random sample of tenth graders as a pretest; the same students were to be evaluated again in the spring of 1969 in order to determine whether measurable

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[1] Ibid.

[2] Franklin Plan, April, 1968, pp. 51-52.

[3] Ibid., pp. 67-68.

growth in "responsibility" had occurred. Another device to promote student orientation and adjustment was the creation of "advisement teams," in which each staff member would become the advisor for 18-19 students. It was anticipated that in addition to being available to the students assigned to him, each advisor would periodically meet with the group to assist students in whatever problems they were having.[1]

Facilities and materials.--The assessments had disclosed a number of limitations on the program imposed by inadequacies in the facilities. There was observed to be a lack of sufficient space in the building for the number of students enrolled, and the special areas for small groups, large groups, and laboratories had proven to be unsatisfactory in many ways which have been described above. In addition, the IMC report and the administrative assessments noted the need for more instructional materials--both hardware and software--which could be used for individualized instruction.

Folding curtains were installed in the cafeteria areas in order to create separate spaces for a student commons area, an assigned study hall, and an unassigned study area. Without creating additional space, some changes were made in room use to provide additional office space for teachers in the English, social studies, and mathematics

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[1] Franklin Plan, April, 1968, p. 68.

departments.[1] Materials were shifted between the several parts of the IMC to facilitate student access to the materials.[2]

Efforts Related to Personal Forces

Teacher skill.--In-service programs were offered in the summer and fall of 1968. The summer sessions involved 1,965 teacher-hours of activity, and the fall sessions an additional 288 hours. Sixty-five teachers took part in 113 individual in-service experiences. The emphasis in these several workshops was primarily on the production of individualized learning materials in the several subject areas, although parts of them were also devoted to training people to write behavioral objectives and to developing a corps of teachers who could teach other teachers how to write UNIPACs.[3]

Teacher load.--One of the most frequent complaints of teachers in the second year of the innovation had been that supervisory and clerical duties combined with the heavier preparation load of flexible/modular scheduling had interfered with their ability to give attention to their instructional tasks, particularly those which the program was specifically designed to promote, namely, time to confer with students. The administrative solution to this problem was to create teacher-aide positions sufficient to remove the

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[1] Franklin Plan, March, 1969, p. 81.

[2] Ibid., p. 78.

[3] Ibid., pp. 57-58.

aforementioned burdens from teachers. This was accomplished by decreasing the professional staff of Franklin High School by four teachers, not using the two additional professional staff positions to which Franklin was entitled due to enrollment growth, and by converting the equivalent of one and one-half teacher positions which had previously been allocated to building control. These measures made possible the creation of fifteen teachers' aide positions. When added to the five which already had been allocated, this gave Franklin a total of twenty teacher aides. These aides were assigned to supervision of students in the halls and on the grounds, as clerical help in the several resource centers, and as aides to different instructional departments.[1]

Summary of Maintenance Efforts

Maintenance efforts at the end of the second year and in preparation for the third year of the innovation were directed at reducing the scope of the program, making moderate improvements in the facilities, trying some new devices to improve students' adjustment, and helping teachers by providing training to upgrade teacher skills and by increasing the number of teachers' aides. Most of these measures were capable of being carried out with the resources within Franklin High School. School system resources were necessary to install the curtains dividing the cafeteria areas and to fund the in-service programs, but the remainder of

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[1] Franklin Plan, April, 1968, pp. 52-53.

the maintenance efforts involved adjustments in use of space and assignment of personnel which were internal to the school. The maintenance efforts appear to have been based in large part on the problems which were disclosed by the various assessment efforts and the recommendations of consultants. We would say that in the main the purpose of these various measures was to alter the forces influencing the success and acceptance of the innovation.

The Force Field at the Beginning of the Third Year

In Figure (5.5) we presented a reconstruction of the forces as they appeared to be prior to the second year of the innovation, based upon the evidence in the documentary record. It is possible after reviewing the record for the second year to suggest some alterations in the force field as a result of the events of that year. Support from the central administration, which appears to have been an important driving force in the direction of the innovation's adoption seems to have receded in importance during the second year as the responsibility for maintaining the program devolved upon the local staff. The importance of the local administration seems well established on the basis of the efforts made by that group to adjust to the several problems and to find solutions to them. The extensive alterations in the building which characterized the period preceding the second year were supplemented by additional modifications, albeit on a smaller scale, in preparation for the third year. In contrast to these <u>forces for</u> the innovation

were the facts that several elements in the building facilities which had been found less than satisfactory were substantially unchanged, and although most students indicated that they liked the program, many had not seemed able to adjust their behavior to accord with its requirements. The strongest of the situational forces, therefore, and the most important, appears to have been the commitment of the local administration to the program and its determination to continue the maintenance efforts.

A weakening of teachers' personal forces for the innovation is suggested by the fact that although over three-quarters of the staff volunteered for at least partial modular schedules in the second year, only slightly more than a third had indicated they would elect a modular schedule for the third year. On the other hand, sixty-five different persons had participated in the several in-service programs designed to sharpen teachers' skills, indicating perhaps a greater interest among the staff in continuing the innovation than the former figure might imply. We would conclude that the fact that this number of persons received such training would be an additional force in favor of the innovation. The addition of fifteen teacher aides to the staff was a measure that gave promise of relieving teachers of some of the less desirable tasks and thereby improving their attitudes toward the program. There is little evidence in the documentary record relating to interpersonal forces. What evidence there is is mixed, indicating that some teachers found team teaching rewarding and stimulating, while others had

some reservations about it. Only a few respondents made specific reference to interpersonal antagonisms. There do not appear to have been maintenance efforts directed at this category of forces.

In summary, the force field prior to the beginning of the third year appears to have had the character described in Figure (5.8). It appears that the most significant of the maintenance efforts--at least potentially--were the reduction in the scope of the program and the provision of teachers' aides to handle some of the supervision of students and handling of materials. The first of these promised to extract from the program some of the students and teachers who were least committed to its success, and the second seemed suited to the relief of teachers from some of those duties connected with the program which they had found most burdensome. Another important maintenance effort on which the planners appear to have been banking was the up-grading of teachers' skills through in-service training.

The Results of Assessment Measures

During the third year of the innovation's institution an effort was made once again to gather a quantity of data on the status and progress of the program. Those assessments which were directed to measuring student achievement and behavior included standardized test data, an analysis of marks, attendance data, a study of individualized use of unassigned time, a graduate follow-up study, and a student conference similar to the one held a year earlier. Once

again, also, there was a questionnaire administered to teachers and interviews with a sample of the staff. These were supplemented by administrative assessments of the teacher-aide program, the in-service education program, and scheduling. The results of these various efforts were summed up in a section entitled "Conclusions and Recommendations" in the March, 1969, report. In the sections which follow we will relate the findings of these assessments to the categories we have labelled situational, personal, or interpersonal.

Situational Forces

The Students.--Among the factors in the situation which affected participants' evaluation of The Franklin Plan, various aspects of students' responses had been frequently mentioned in the previous reports. Disappointment with the manner in which students made use of the opportunities to structure their own study time was a characteristic of many of the teachers' responses to questionnaire and interview items. In contrast, the evaluative data collected for the March, 1969, progress report were more favorable, at least insofar as objective measures were concerned. The scores on the Iowa Tests of Educational Development for the graduating class of June, 1969, given in the fall of 1968 showed no significant difference when compared with the grouped scores of the 1965, 1966, 1967, and 1968 classes.[1] With

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[1] Franklin Plan, March, 1969, pp. 17-22.

GOAL: Maintenance of The Franklin Plan as an innovation at Franklin High School

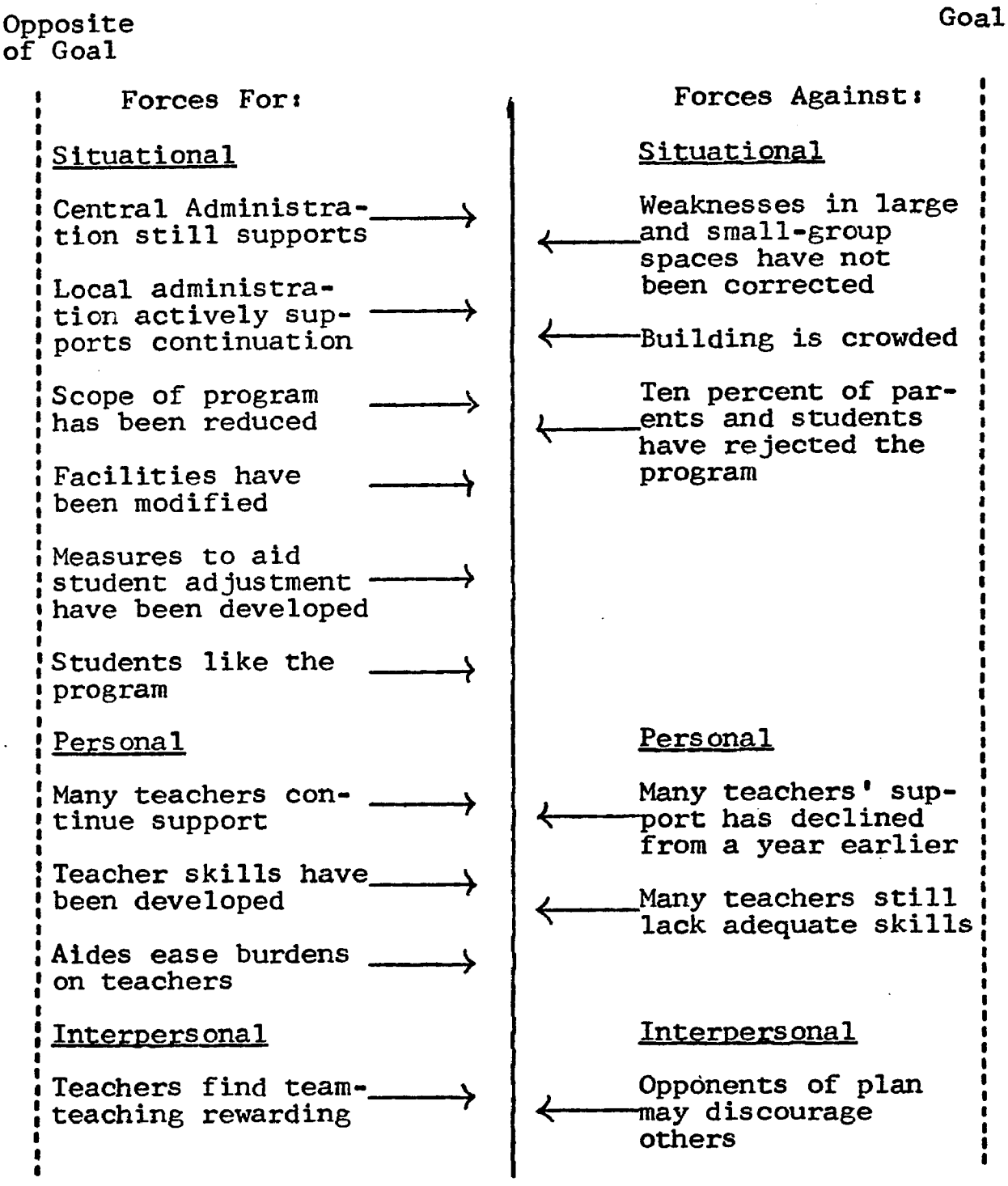


Fig. 5.8--The force field at the beginning of the third year, 1968-69.

respect to the marks earned by students in their classes, it was reported that "the distribution of marks for the first semester of 1968-69 is the most favorable in Franklin's short history."[1] It was noted also that the percentage of "E" marks was consistent with past records and the percentage of "A" marks was above previous levels. The all-school average of marks in the first semester of 1968 was the highest in Franklin history, whereas those for the first semester a year earlier had been the lowest.[1] On the basis of these data, one would conclude that with the exception of a short period in the second year of the innovation, the experience with The Franklin Plan had not been detrimental to student achievement.

Two other areas in which data was collected were those of student attendance and use of unassigned time. It was noted, as it had been a year earlier, that average attendance at school was consistent with previous experience, but that truancy from class was still a problem. It was noted, however, that the situation had improved from the beginning of the first semester in 1968 until the end. This was attributed in the administrative report to the new attendance procedures and the presence of teacher aides in critical areas of the school.[2] A sample of tenth, eleventh, and twelfth grade students was selected and asked to keep track of their use of unassigned time for one week during the

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[1] Ibid.

[2] Ibid., p. 33.

first semester. It was found that there was an average of seven hours of unassigned time per student in this group; 57.7% of such time, they reported, was spent in the Instructional Materials Center, with the student commons area and study area accounting for 24.1% of their use of unassigned time. Increments of less than 6% were scattered among a number of other legitimate places in the school, with only 3% of the aggregate time reportedly spent in the halls.[1]

Responses to the teacher questionnaire and interviews seem to indicate a higher level of satisfaction with students' behavior than had been true a year earlier. In response to an item on the questionnaire which inquired about teachers' perceptions of students' behavior and attitude, 1% characterized them as "excellent," 67% said they were "good," and only 24% said they were "unsatisfactory," while 7% said "very poor."[2] In the personal interview response, each of the teachers who were interviewed mentioned students in some manner. Nine teachers made twelve discrete references to some element of students' behavior. Of these, seven of the comments were negative in tone, and five were positive. Comments about attendance were mostly negative by a four to one margin; this accounts for the balance of negative comments over positive.[3] Other than the comments about attendance, impressions indicate a sense of improvement,

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[1] Ibid., p. 34.

[2] Ibid., p. 47.

[3] Ibid., pp. 48-56.

as illustrated by the following examples:

> I think the kids have adjusted better this year. They are more used to the program. It's not so new to them; consequently they are more at home with it and know what to do.[1]

> I've noticed that my groups are getting started faster. By that, I mean that they develop a cohesiveness or rapport quicker. Students are less anxious about speaking before a group. When I taught this class traditionally, this was a problem.[2]

The impressions of improvement noted above were tempered somewhat, however, by a feeling expressed by some of the respondents that the program was not appropriate for all the students who were involved in it.

> I believe that many more students this year are using the flexibility of modular scheduling to their full advantage, an advantage that is not necessarily oriented towards formal learning.[3]

> Attendance is a problem. I see kids that miss classes or are able to miss classes. They don't check into homerooms. Somehow we have to correct this.[4]

A graduate follow-up study was conducted with the class that had graduated in June, 1968. Questionnaires were returned by 75% of the graduates. As had been true a year earlier with the class of 1967, these graduates indicated support for the flexible/modular program. In response to the question, "What type of schedule would you prefer," 68.2% said "modular," 21.0% said "traditional," and the remainder

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[1] Ibid., p. 52.

[2] Ibid., p. 53.

[3] Ibid., p. 50.

[4] Ibid., p. 54.

said they would make no choice. When asked whether they thought modular classes had prepared them better than traditional classes, 52.2% agreed that they had; 28.4% said they were about the same; 19.3% said modular classes had prepared them less well than traditional classes.[1] These were responses from students who were not in the school during the third year of the program, but to the extent that the attitudes of departed seniors can be regarded as reflective of student opinion, they imply a fairly substantial degree of support for the program among students. A student study conference was held in February, 1969, similar in format to the one which had been conducted a year earlier. Comparison of the results of the two conferences is difficult, however, because in the 1969 conference students were not specifically asked to comment on The Franklin Plan. They were asked instead to comment on general school problems, policies, and suggestions for improvement. It is perhaps significant that given this charge, students did not mention The Franklin Plan prominently. Instead they spoke of such matters as the food in the cafeteria, discipline procedures, and the inadequacy of student parking facilities. The sole item reported which related to The Franklin Plan was the observation that teachers ought to have more special training related to teaching in the flexible/modular program.[2]

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[1] Ibid., p. 35.

[2] Ibid., Appendix C.

In summary, the various assessments present a mixed picture of student behavior and attitudes. Remarks of teachers imply a perception of improvement in student ability to handle flexible/modular scheduling. This conclusion is supported by the results obtained from standardized tests and the record of grades earned. Results of the graduate follow-up study imply that students liked the program. Opposed to these findings were the admission that truancy from class remained a problem to be solved and that some students were still taking advantage of the flexible schedule to avoid educational tasks. On balance, it appears that the responses of students had become less of a barrier to the maintenance of the innovation than had been true a year earlier, and in the perceptions of improvement they may even have become a tentative force for its continuance.

Facilities.--At the close of the previous year the planners had made extensive recommendations for improvements in the facilities; among these had been a request for an increase in space. These requests had been directed to the central administration and Board of Education. Most of the recommendations had gone unrealized, although some readjustment of existing space had been made, most notably in the creation of specialized areas in the cafeteria. It appears that facilities inadequacy was regarded as a serious impediment to the program. A renewed request for help in this area was contained in the March, 1969, recommendations.

> We have reached the point at which teaching and learning are being restricted because of inadequate

> large-group rooms, instructional materials space, assigned and unassigned study areas, and just plain "elbow-room."[1]

It was noted here that The Franklin Plan had been "conceived and implemented with a minimum of additional expense to the school system."[2]

The results of teacher interviews are less emphatic on this question of facility adequacy. There were no items on the self-response questionnaire which related to this problem, but three of the nine teachers whose interview responses are reproduced commented on the facilities. One of these teachers commented favorably about the changes which had been made in reorganization of space, particularly in the provision of a students' commons area, but this same person remarked on the general inadequacy of the facilities for the program, especially in the sense of their being overcrowded. The others criticized small-group and large-group areas, respectively. It was asserted that the flimsiness of the barriers dividing small-group areas made it difficult to conduct classes without distraction. Large-group areas were scored for being too long and narrow, providing for poor vision in large-group meetings.[3]

We conclude from these assessments that both the administration and some of the teachers regarded the building facilities as an impediment to the successful functioning of

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[1] Ibid., p. 83.

[2] Ibid.

[3] Ibid., pp. 48-54.

the program. Administrative comments covered a wider range of faults than did those of the teachers. It appears that in the third year of the program, facility inadequacy continued to be a barrier to the maintenance of the innovation.

Measures to aid student adjustment.--Two programs had been projected in the April, 1968, report which were intended to assist in adjustment of students to the program. These were the formation of advisement teams and the administering of the "Responsibility Scale," which were described earlier. At the time the March, 1969, report was compiled, the post-test of the Responsibility Scale had not been administered, although the pre-test was given to all in-coming tenth graders. The advisement team program was tried only on a pilot basis, involving ten staff members, with ten to fifteen students each. The report noted that the success of the teams was limited and additional study of the procedures would be necessary in order to make the concept functional.[1]

Scheduling.--One of the difficulties experienced in the second year of the program had been that of producing a relatively conflict-free schedule that would get students and teachers assigned to the right places at the right times. The February and April, 1968, reports indicated that this was a task to which the administrative staff devoted a considerable amount of attention. The questionnaire

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[1] Ibid., p. 79.

administered to teachers in the spring of 1969 did not contain items related to this problem, so the only references from teachers on this matter are found in the teacher interview reports. Of the nine interviews reported in the March, 1969, document, only two contain references to teacher evaluations of scheduling. One person complained of having too-large small group enrollments, and that class lists were not complete until into the third week of the second semester. Another did not feel that the schedule was responsive enough to the expressed requirements of teachers.[1] These are skimpy data, but one might conclude from the paucity of teachers' comments about the scheduling system that those interviewed did not regard shortcomings in the schedule as a serious problem.

The administrative assessment of the scheduling procedures indicated a degree of dissatisfaction with the performance, describing results as "mixed."[2] It was reported that the number of students successfully scheduled into full-year programs was greater than it had been in four years, and that classes had been balanced at the beginning of the semesters earlier than usual, but that problems had arisen in the effort to provide fully traditional schedules for all of the students who required them. It seems certain that the problems inherent in operating a dual scheduling program were very difficult to solve, and that this task complicated

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[1] Ibid., pp. 48-54.

[2] Ibid., p. 60.

schedule-making considerably, although it is not clear how much of an impediment this was to the success of the program as a whole.

Support from the school hierarchy and community.--The tone of the report implies strong continuing local administrative support for the innovation. The emphasis in the March, 1969, document is on presenting the successful aspects of the program and on continuation of problem-solving efforts.

> It is our belief that the changes in organizational structure and the re-definition of the teacher's role are developments of importance and have become permanent aspects of the Franklin High School program. Most of the indicators are positive; some refinement of program needs to continually take place.[1]

On the other hand, the planners raised a question about the status of central administration and community support:

> Whether or not we can continue to make progress in meeting the individual needs of students and tailoring their educational programs accordingly will be determined by the degree of commitment to our program on the part of the Board of Education and the community. As you will find in the section on recommendations, further refinement and improvement will require resources--both material and human. The Franklin staff is asking, "Are you with us? Shall we go on?"[2]

It is possible to read in this statement an implication that some question had arisen in the minds of the planners as to the extent of the willingness and ability of the school hierarchy to continue the level of support that The Franklin

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[1] Ibid., p. 73.

[2] Ibid., p. 73.

Plan required. It appears that this concern was engendered by the failure of the hierarchy to respond to requests for additional space to relieve the crowding at the school and to correct the deficiencies in large-group and small-group meeting areas.

Summary of situational forces.--The overall impression one gets from a review of the situational forces is one of improvement. There seems to have been a higher level of satisfaction with the performance of students, implying perhaps that the reduction in scope of the program had been effective in excluding some of the students who were less able to cope with flexible/modular scheduling. Standardized test data and the summaries of grades indicated that The Franklin Plan had not harmed the educational progress of the students, at least within the parameters measured by those devices. On the other hand, there are indications that student truancy and time-wasting were still considered to be problems, and the measures that had been designed specifically to assist in student adjustment appear to have had limited success. In spite of the reduction in the numbers of teachers and students in the program inadequacy of facilities continued to be a problem in both a quantitative and qualitative sense. The statements of the local school administration imply strong support for the program, but there is a suggestion of concern in these statements that the support of the rest of the school hierarchy may have been in doubt. The situational forces at this time appear

to have had the following character:

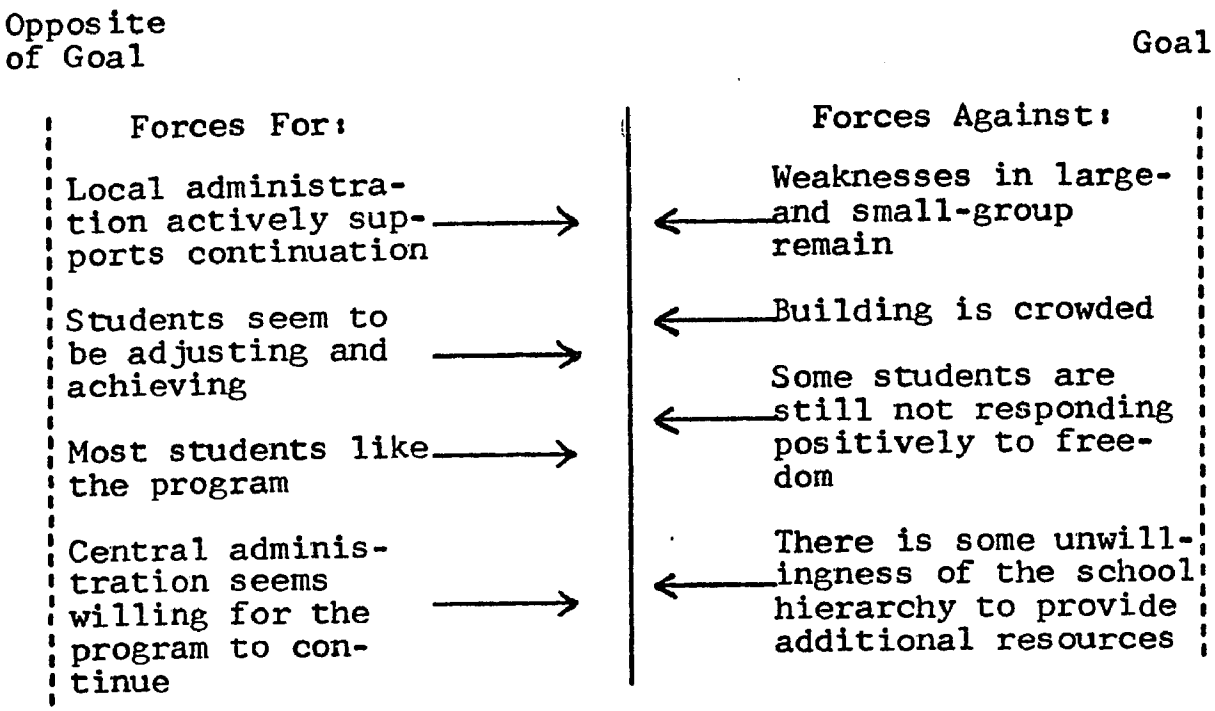


Fig. 5.9--Situational forces in the third year.

Missing from this representation of forces is any reference to the attitudes of the community. Although there are references in the documentary reports to the need to keep the community informed, there is no data which indicates the extent of community approval or disapproval of the program.

Personal Forces

Two maintenance efforts were directed at the area of bolstering personal forces for the innovation. These were the in-service training programs during the summer and fall of 1968 and the creation of fifteen additional teachers' aide positions to relieve teachers of non-instructional tasks. Comparing the status of personal forces for the third year with those of the second year is difficult because the teacher

questionnaires which are the prime source of data about teachers' attitudes did not contain the same questions in the two years. The teacher questionnaire administered in the second year contaied items which were devoted almost entirely to teachers' attitudes toward The Franklin Plan; the one which was administered in the third year did not mention The Franklin Plan by name, contained only one-third as many items, and sought answers to questions which related in more general terms to the entire school program. We would assume that teachers' personal attitudes toward the program were affected by elements in the situation as well as by those efforts described above which were instituted to affect them.

There were no items on the questionnaire administered to teachers which elicited any direct comments on the level of teacher skills or the effectiveness of the in-service programs. There was one item, however, which asked teachers to rate the "opportunities for professional inservice growth" at Franklin. Teacher-respondents rated these as favorable, with 31% describing them as "excellent," and 53% describing them as "good;" only 16% labelled them "unsatisfactory."[1] The administrative position on in-service programs was that they were "a mainstay of our attempts to bring about significant changes in teachers' roles."[2] Whatever the status of teacher skills as a force either <u>for</u> or <u>against</u> the

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[1] <u>Ibid</u>., p. 47.

[2] <u>Ibid</u>., p. 3.

innovation in the third year, there is very little documentary evidence which relates to them. One might conclude that the paucity of references to teacher skills is an indication that this problem had lost some saliency.

Teacher attitudes toward such matters as the behavior of students, general working conditions, morale, and their own participation in decision-making were some other areas which were probed in the teacher questionnaire of January, 1969. Most of their responses imply a generally favorable attitude toward conditions at Franklin. Teachers reported that they thought students' behavior and attitudes were either "good" (1%) or "excellent" (67%), rather than "unsatisfactory" (24%) or "poor" (7%). Working conditions such as teacher loads, preparation time, and clerical assistance were rated as either excellent or good by 63% of the respondents, and general teacher morale was rated excellent or good by 78%. Teachers also reported favorable attitudes toward innovations and the innovation process at Franklin. When asked whether teachers supported the innovative practices in the school, 60% said they did so often, and 11% said they did so very frequently; 29% said they did so sometimes, and 0% said rarely. The figures were very similar on an item which asked whether teachers participated in policy and decision making regarding curriculum; 67% said they did so either often or very frequently. The only item on this questionnaire which produced a balance of negative responses was one which asked whether routine duties interfered with the job of teaching. In response to this question, 57% said

they did so either often or very frequently, while 37% said this happened sometimes.[1] Although the questions on this questionnaire are not directly comparable to those of a year earlier, the overall impression conveyed by the responses is one of greater satisfaction by members of the staff with the situation.

The tone of the personal interview responses reported in the March, 1969, document also implies a feeling that the situation had improved from a year earlier. Responses of nine teachers are reported in the document. Two of the nine mentioned specifically the decline in the burden of supervisory responsibilities, and attributed this to the addition of the teacher aides. As one of these teachers said:

> The instructional aides are another good result of our program. They have indeed taken over many of the more menial tasks heretofore assigned to classroom teachers and have, theoretically at least, released the teacher for more "professional" duties.[2]

The result of this, according to the second respondent, was that he was not as tired as he had been last year. On the other hand, another teacher noted that the program was currently demanding more than ever before, and three persons mentioned that there was insufficient time in the schedule to allow for the planning and individual conference time that was required. Areas that were mentioned by several as having improved were the abilities of some students to handle the program, and their own abilities to design

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[1] Ibid., pp. 46-47.

[2] Ibid., pp. 51-52.

learning activities to suit the flexible/modular format. Three persons mentioned excessive absence on the part of students as a continuing problem; two said students had too much freedom under the program, and one said that some students could not cope with the program and it was not appropriate for everyone. Three persons mentioned shortcomings in the facilities, such as lack of sound barriers in small-group rooms, inadequate large-group facilities, and general overcrowding.[1]

The responses of teachers to these questions are mixed in direction. The teacher questionnaire responses give the impression that the mood of the faculty was generally positive; the responses to the interview questions are so balanced between positive and negative comments that it is difficult to assess whether there was a balance of personal forces <u>for</u> or <u>against</u> the innovation. What they do seem to imply, however, is that some teachers were beginning to feel more comfortable with the program, and some saw improvement in the students' abilities to cope with its demands. On the other hand, some perceived teaching in the program as time consuming and hard work. It also appears that certain of the problems which had been discerned in the second year, i.e., the problems of attendance, the inappropriateness of the program for some students, and shortcomings in the physical plant, had not been resolved in the perceptions of some staff. These factors, which we have

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[1] <u>Ibid.</u>, pp. 48-55.

categorized earlier as situational forces, appear to have had a negative influence on some teachers' personal evaluations of the program.

Interpersonal Forces

References to interpersonal forces in the documentary record are not sufficient to draw any conclusions. There were no items relating to this matter on the teacher questionnaire, but three of the nine respondents to the personal interviews mentioned factors which could be construed as relating to interpersonal forces. One person noted that the administration had begun to make better use of the expertise that existed among members of the staff who had had good experience with the program; he noted that these people were available to help their colleagues, and that their assistance was more valuable than many of the "so-called" experts from outside the system. There is no evidence, however, of how extensive this assistance was. One individual stated without elaborating that some of the staff were "dissatisfied." Another described the attitudes of some teachers as "negligent," elaborating:

> I understand there are those members of the faculty who do not feel at all compelled to keep a scheduled class for the full scheduled amount of time or, for that matter, to meet the classes at all. It is not unusual for some teachers to regularly send small groups to the Instructional Materials Center in order to avoid meeting the group. Many of the students and some of the faculty, it seems to me, regularly exhibit through their actions an attitude of irresponsibility that I did not until this year associate with Franklin High School.[1]

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[1] Ibid., p. 50.

These comments are limited in scope, and the evidence is not overwhelming enough to permit us to conclude that even a large number of teachers felt this way. The category of interpersonal forces remains one on which we have little information.

The Force Field in the Third Year--Summary

In the third year of the innovation it is possible to discern a crystallization of certain forces. Among those forces we have designated situational, the support of the local school administration appears to have continued as a strong force for the continuance of the program, whereas there is a hint that the support of the school system hierarchy was waning, at least insofar as they were willing to provide substantial additional resources. The resources specifically requested were those which would have been required to enlarge the facilities and relieve overcrowding at Franklin High School and to correct the faults in small-group and large-group areas. Although student achievement as measured by standardized tests and grades does not seem to have suffered, attendance and deportment on unassigned time continued to be matters of concern, with some teachers reiterating the comments of a year earlier that the program was not an appropriate one for all students. With respect to personal forces teachers responding to the teacher interviews indicated that they felt the addition of the teacher aides had relieved many of the supervisory and clerical burdens that had made their jobs so difficult a year earlier.

Notwithstanding this improvement in working conditions some of the teachers mentioned that there was insufficient time to accomplish all they had to do. Skill difficulties were not prominently mentioned by teachers. There is little evidence reflecting on interpersonal forces, although there appears to have been some disapproval on the part of some teachers of what was perceived as advantage-taking by colleagues. The extent to which this factor may have contributed to dissatisfaction with the program as a whole is uncertain. The overall picture of the third year which emerges is one of modest improvement, with teachers indicating their perceptions of an improvement in morale and a generally less hectic atmosphere. Facilities limitations and a continuing concern about the responses of some students appear to have been unresolved problems.

Administrative Assessment and Recommendations

The administrative assessment divided elements of The Franklin Plan into two categories: stabilized programs were defined as "established and functioning adequately"; developing programs were those that were functioning, but "not at the level of stability which would enable them to continue without considerable attention from the staff." In this breakdown, those elements which might be described as technical aspects of the program were listed among the stabilized programs. Included among these were: large-group and small-group instruction; team teaching; expertise

in developing course structures. The designation of these program elements as stabilized implies satisfaction with those aspects that were related to teacher skills. Other program elements reflecting more upon the performance of support personnel that were labeled as stabilized were attendance accounting, scheduling, the IMC, and teacher aides.[1]

Under the category of developing programs the planners listed individualized learning materials. It was noted that considerable effort had already been put into this enterprise but that many more materials were needed. This was approblem that, at least in the view of the planners, had not been resolved even though it had been identified in the first year of the project. Another carry-over problem was student adjustment; three programs that had been designed to cope with this problem were the Responsibility Scale, Way of Learning Inventory, and advisement teams. Each of these was regarded as still in the development stage. Another group of developing programs could be described as refinements or extensions of The Franklin Plan. These were aspects that had not been mentioned before in the documents. Included here were independent study, continuous-progress programs, improved evaluation programs, and a research and development team to make recommendations for new program development.[2]

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[1] Ibid., pp. 69-71.

[2] Ibid., pp. 71-72.

Recommendations

There is an implication in the division of the program into its stabilized and developing aspects that the planners thought The Franklin Plan had turned the corner--that the basic technical problems had been mastered and the time was appropriate for extending and refining the program. Administrative recommendations for the next year covered the following topics: scope, curriculum, facilities, staffing, processes, and independent study.

Scope.--The departure of the Churchill High School students would enable the art, physical education, and industrial arts departments to return to the program. As for the remainder of the staff:

> We shall continue to allow teachers to participate in variable scheduling by choice. However, new staff members as well as current staff members will be encouraged to carefully consider the variable organization of their teaching for 1969-70.[1]

It was noted further that the scope of the program would continue to depend in part on student and parent wishes and on administrative decisions with respect to programs for particular students. With these qualifications in mind, the direction of the program for 1969-70 was to be expansion.

Curriculum.--The major new departure in the area of curriculum was to be the development of continuous-progress instructional programs in several subject areas on a trial

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[1] Ibid., p. 82.

basis. This kind of program would be one in which students could complete defined instructional objectives in credit courses in time periods longer or shorter than the conventional term.

Facilities.--The strongest words in the recommendations were directed at the need to improve facilities. One of the problems identified was crowding; it was suggested in this regard that a decrease in enrollment might be one course to follow. In addition, however, there was a reiteration of the requests made a year earlier for more space for the instructional materials center, improvements in small-group and large-group areas, more conferences spaces for teachers to meet with students, and individual study spaces in the science labs and gymnasium. It was noted here that if the facilities at Franklin were brought up to the standards of the new Churchill High School The Franklin Plan could be housed adequately.[1]

Staffing.--A request was made for additional teacher-aide positions, another librarian, and an additional assistant principal. It was noted that the limit had been reached in converting teaching positions to teacher-aide positions. In these recommendations there is a reflection

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[1]Ibid., p. 83.

of the concern with increased enrollment, similar to that expressed with reference to the facilities.

Processes.--To head off a feared tendency to "plateau" at the current stage of development of The Franklin Plan, a new volunteer development committee was to be organized to plan goals for the next three to five years.

Independent study.--Independent study was a refinement of the flexible/modular program, in that until this time the unassigned-time portion of a student's schedule was supposed to be for academic work in connection with a regularly-scheduled class in which the student was enrolled. The independent study option would permit students to work for credit in a subject area without enrolling in a regularly scheduled class. It was proposed that in 1969-70 a selected number of students would be allowed to sign up for independent study credit under the supervision of a classroom teacher.

The Fourth Year--1969-70

The fourth year witnessed an increase in the scope of the program to its highest level in the five years of its existence. The report issued at the end of the year differs considerably in contents from those of the prior years. The absence in this report of a survey of teacher or student attitudes about the program in general makes it difficult to make comparisons with previous years.

Additionally, the May, 1970 report is briefer than its predecessors.

Assessment Measures

The report contains reports on the results of the following assessments: (1) a review of the results of a study done in 1966 and again in 1969 on attitudes of Livonia teachers toward innovations and other matters (the COPED study); (2) a summary of standardized test results; (3) a review of the marks earned by students; (4) an evaluation of the independent study and continuous progress programs; (5) a graduate follow-up study on the class of 1969; (6) a report from the accreditation team from The University of Michigan.

The COPED Study

A survey form prepared by the Cooperative Project in Educational Development (COPED)--an agency designed to study innovative processes in public schools--was administered to the Franklin staff in 1966 and again in 1969. The areas covered by the survey included teachers' perceptions of the influence of various groups in decision making, the kinds of innovative practices currently in use, and teachers' perceptions of their own influence on innovative decision-making. Comparison of responses for the two administrations of the survey is difficult because in 1966 it was given to Franklin High School teachers alone,

and in 1969 it was given to teachers in all four of Livonia's high schools; in the latter testing the responses of Franklin teachers were not separated from the others. Therefore, although the responses provide some evidence of the thinking of Franklin teachers in 1966, their attitudes in 1969 are lost among those of the larger group. The chief value of the data in these surveys for this study is that they provide a picture of the innovative climate in Livonia high schools. The picture that emerges is one of quite active innovation. They indicate that fourteen educational practices that were considered innovative nationally during the 1960's were in use in Livonia schools.[1]

Standardized Tests and Students' Marks

The results of the Iowa Tests of Educational Development for the class of 1970 (current twelfth grade) were presented and analyzed. The analysis reported that the scores attained by the class of 1970 were much improved from their tenth grade levels, and in accordance with the records of previous classes and with anticipated growth.[2] Students' achievement as measured by marks earned was similarly in accordance with expectations, closely matching

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[1]Robert G. Schult, "Responses of Livonia High School Teachers to the COPED Survey: 1966 and 1969" (unpublished document).

[2]Franklin Plan, May, 1970, pp. 27-28.

that of a year earlier, which had been the highest in Franklin High School history.[1]

Independent Study and Continuous Progress

Two new programs were implemented on a trial basis in 1969-70. These were independent study and continuous progress programs. The independent study program was intended to provide students with an opportunity to design studies in an area of interest to them and to earn credit by carrying on a program of study under the guidance of a teacher, but without enrolling for a regular class. It was reported that ninety students enrolled in the program during 1969-70 and "overwhelmingly endorsed its operation."[2] Continuous progress was tried in German and Electricity/Electronics. This program enabled students to pace their own learning in course work designed by teachers in such a way that whereas some might complete the course requirements in less than a conventional semester, others might take longer. For those who were unable to complete course requirements partial credit could be awarded. It was this latter factor that some students disliked about the program. Those who failed to complete the requirements reported that they felt cheated; others indicated that their progress had not been what they had expected, in part because the programmed

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[1] Ibid., p. 34.

[2] Ibid., p. 13.

nature of the course work had deprived them of the contact with the teacher that they needed.[1]

Graduate Follow-up Study

As in previous years the results of the graduate follow-up study were supportive of the program. Members of the class of 1969 who responded said by an almost three to one ratio that they thought modular classes prepared them better than traditional classes had; the number of respondents on this question was 165. When asked what type of schedule they would prefer, the graduates selected modular scheduling over traditional by a large margin (82.2% to 13.1%).[2]

The U of M Accreditation Team

The visitors from The University of Michigan wrote a favorable report on what they had observed at Franklin. Specific aspects of the school which they singled out for comment included the quality of the professional staff, the behavior of students in classes and in the halls, and the operation of the Media Center (IMC). They said The Franklin Plan deserved to be better known "as a model of how educational innovation can best be introduced into a large comprehensive high school."[3] They made special note of the fact

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[1] Ibid., pp. 40-41.

[2] Ibid., p. 47.

[3] Ibid., p. 53.

that not all students and teachers were required to participate in the flexible/modular program, and observed that this had contributed to good staff morale and acceptance of the program in the community.[1] Critical remarks were directed at two areas: they noted that the overcrowding of the school had to be corrected if a quality program was to be maintained, and with respect to program development they called for an expansion of the continuous-progress course offerings in order to reach the stated objectives of The Franklin Plan.[2]

Administrative Summary of Assessments

The administrative summary reflects continued advocacy of the continuance of the innovation. Calling attention to the results of standardized tests, the review of student marks, and the graduate follow-up study, they noted that "the indicators of quality education seem to be positive."[3] Two observations were made however, with respect to continuing problems. The first of these was that the building was seriously overcrowded and that either a reduction in the number of students by 500-600 or the addition to the building of 75,000 to 100,000 square feet was required to correct this problem. The second was that the problems

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[1] Ibid.

[2] Ibid., p. 54.

[3] Ibid., p. 2.

students were having in adjusting to the responsibilities of flexible/modular scheduling were in large part attributable to the fact that they had had no such comparable experiences in their junior high school programs.

> Until the elementary and junior high schools which send students to Franklin, institute programs which teach students to be responsible for their learning and to become independent learners, Franklin will, of necessity, enroll them in basically traditional programs with gradual introduction of flexibility and opportunity for decision making.[1]

Summary of the Fourth Year

As noted earlier, the documentary record for the fourth year does not provide us with data of the same quality nor in the quantities of the prior two years. Expecially noteworthy is the lack of detailed proposals for the improvement of the program in the next year. In each of the two preceding years the annual reports had featured an extensive list of such plans and proposals. In addition to requesting certain kinds of support from the school hierarchy, earlier reports had presented plans which were to be put into effect internally at Franklin High School. At the end of the fourth year however, no specific plans were disclosed. The only factors mentioned as important to the continued success of the program were matters which

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[1] Ibid., pp. 2-3.

depended on the action of agencies outside Franklin High School. The requested relief from overcrowding required action from the school hierarchy; providing comparable programs at the elementary and junior high school levels required action by the staffs of those buildings. The message here appears to be, "We have done what we can; now what will others be willing to do?" The relative brevity of the report issued at the end of the fourth year might reflect satisfaction that the essential problems with the program had been overcome--internally at least--or it might reflect resignation to the fact that the innovation's ultimate fate would be decided by forces outside the immediate school environment, or it may reflect exhaustion with the continuing process of assessing and prescribing solutions to problems.

The Fifth Year--1970-71

There was no report issued at the end of the fifth year. Administrative records show that in the fifth year the level of participation in the program was sharply cut back. The fourth year had witnessed the highest level of participation in the innovative program. There was no clue in the report issued at the end of the fourth year which shed light upon the reason for this reduction. The only negative comments contained in the report for the fourth year had been those relating to the need for more space and the fact that students coming into Franklin at the tenth grade level had not had appropriate experiences to prepare

them for the demands of the program. No projections were made at this time as to the scope of the program for 1970-71. It is apparent that something not mentioned in the documentary record accounted for the reduction in the program's scope in what was to be its final year.

Summary of Findings from the Documentary Record

The institution of The Franklin Plan as an innovation at Franklin High School appears from the documentary record to have been the result of forces in the situation both inside and outside of Livonia Public Schools. The innovative efforts at Franklin were undertaken as part of a larger program involving each of the high schools in Livonia. This larger program appears to have had its source with and to have enjoyed the support of the Livonia Schools hierarchy. The support of the school hierarchy for innovation generally is evidenced by their sponsorship of this program as well as by the data in the COPED study which showed the variety of programs labeled as innovations which were extent in Livonia schools at the time. Given this climate of support, the character of The Franklin Plan seems to have been more attributable to interests which were internal to Franklin High School. Franklin's selection of flexible/modular scheduling does not appear to have been mandated by the central administration but seems rather to have been a result of the unfreezing activities conducted at the local school level. The influence of the larger educational environment

and the popularity of flexible/modular scheduling there can be seen in the nature of the consultant presentations and in the other sources of information used by the staff of Franklin High School during the unfreezing stage, including exemplary programs that were visited and reading materials that were made available.

The administration of Franklin High School appears to have been largely responsible for the mobilization of resources within the school and for planning and unfreezing activities which prepared the staff for the innovation. The adoption of flexible/modular scheduling was not precipitous, but was preceded by a period of planning two years in length. The teachers do not seem to have resisted the innovation, inasmuch as 98% of them cited their own reasons for electing to participate in flexible/modular scheduling initially, and the idea that such participation was voluntary on the part of teachers is not disputed anywhere in the documentary record. We are given no formal record of events during the pilot program which comprised the first year of the innovation's implementation, but the implication is that results were satisfactory enough to warrant large-scale adoption in the second year.

The expansion of the program in the second year (1967-68) was accompanied by rather extensive alterations in the internal structure of the Franklin High School building, which can be regarded as evidence of the support for the innovation of the school hierarchy which made resources available for this job. Expansion disclosed a

number of difficulties. Among these were the necessity for the staff to sharpen their skills and learn new skills, the inadequacy of elements of the facilities in spite of the building renovations, and the irregularities in student behavior which emerged in response to the freedom they were given under flexible scheduling. According to responses to a teacher questionnaire administered in February, 1968, only slightly more than one-third of the teachers at that time were in favor of continuing the innovation for another year. The program was continued, however, with the assistance of a number of efforts aimed at solving the problems that had been encountered. The bulk of the maintenance efforts between the second and third years were aimed at improving the scheduling procedures, improving teacher skills, and making adjustments in the use of space in the building. A large part of the maintenance process involved adjustments in the numbers of students and teachers enrolled in the program from year to year. It appears that one of the purposes of these fluctuations in the level of participation was to find an optimum level at which the innovation could be maintained.

Although the expressed purpose of the planners was not to institute The Franklin Plan as the sole instructional model at Franklin High School, their efforts appear to have been directed to installing it at the highest level of participation the system would support, given the facilities, teachers' choices, and the abilities of the

students to handle it. The strongest and most important force supporting the innovation appears to have been the interest of the local administration. To the extent that willingness to contribute material resources can be regarded as a measure of support, the data in the documentary sources suggest that the support of the Livonia schools hierarchy subsided after the initial push to institute the innovation. Teachers' concerns about the additional supervisory burden imposed on them by flexible/modular scheduling reportedly were allayed by the addition to the staff of teachers' aides to handle this task. There is evidence in the teacher assessments for the second and third years that some teachers' evaluations of the program were negatively influenced by their perceptions that students were not performing well under it--that the excessive freedom led to abuses of the system for too many students. Although the supervisory burden was relieved by the addition of teachers' aides, the flavor of teachers' remarks in the personal interviews implies that teaching in the flexible/modular system was more difficult and time-consuming than under a traditional program. The report for the fourth year and the lack of a written report covering the events of the fifth year leave some question about the thinking of teachers during those years. Because teachers' participation in the program was reportedly a voluntary matter, the high level of participation in the fourth year and the subsequent decline in the fifth year are questions which

must be deferred pending the presentation and analysis of personal interview data in the next Chapter..

FORCES AFFECTING THE MAINTENANCE OF AN INNOVATION: FLEXIBLE/MODULAR SCHEDULING IN A SENIOR HIGH SCHOOL

VOLUME II

by
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CHAPTER VI

PERSONAL INTERVIEW DATA

Introduction

The documentary sources provided a substantial body of data about the innovation. These sources were especially useful as a basis for documenting the chronological development of the innovation and the key events in its history. They provided information to make an initial identification of forces which were present in the situation and supplied a quantity of assessment data which gave us some insight into the way the program functioned and how people felt about it. The documentary sources did not, however, provide all the data necessary to complete the study. They did provide information and insights and the basis for additional questions. The personal interviews with persons who had been present during the course of the innovation afforded an opportunity to pursue the answers to some of these questions in greater depth and to fill some of the gaps in the documentary record.

The primary objective in the personal interviews was to inquire into the perceptions that participants had of the events at Franklin High School during the innovation period. The documents had represented what appeared to be the more

or less official version of the events. What we sought to find in the series of interviews was what was going on closer to the scene of action--how the participants felt about the situation and what kinds of things were happening that were not reported or were incompletely reported in the official records.

Questioning strategies used in the interviews were directed at shedding more light on the various stages of the innovation process and at elaborating on the existence of forces that were only suggested in the documentary reports. Specifically, we were interested in learning more about the following items:

1. How did teachers perceive the origin of the innovation? Did they see this as a product of their own effort? Was it a program that was imposed upon them? What inspired the change effort?

2. How was knowledge about the program disseminated among the staff? How was interest in innovating stimulated?

3. Once instituted, how was the program evaluated by staff? The documentary record reported in considerable detail on the formal evaluation measures which were used. How did participants evaluate the program informally?

4. Was there any organized resistance to the innovation? Did the program have a divisive effect on the staff?

5. Were the differences in levels of departmental participation an expression of a systematic difference or were they accidental?

6. How did the participants evaluate the several forces for and against the maintenance of the innovation which we have identified? Did we miss any in our study of the documents?

7. Which of the several maintenance efforts were perceived as effective by the participants? Which were relatively ineffective?

8. Did friendship or other interpersonal contacts have an influence on shaping individuals' attitudes toward the innovation?

9. What did participants see as the probable fate of The Franklin Plan had the alleged budgetary constraints not brought about its demise?

These were the salient questions which the items in the interview schedules were designed to answer.

Questions Relating to the Unfreezing and Moving Stages

The bulk of the documentary evidence consisted of reports which were issued during the life of the innovation, however there was little information in these documents about the early stages of the innovation process at Franklin High School. Items (1), (2), and (3) of the interview schedule and items (4b) and (4c) of the self-report form relate to this period. Item (1) sought to determine the sources of the innovation idea as perceived by teachers.

FRANKLIN PLAN STUDY INTERVIEW SCHEDULE

1. We are interested in how you perceive the manner in which the Franklin Plan became an innovation at Franklin High School. Please indicate to what extent you think each of the following items was important in developing the original idea to institute the Franklin Plan. Place a check mark in the appropriate column.

Column A means "to a great extent"
Column B means "to quite an extent"
Column C means "to some extent"
Column D means "a little"
Column E means "not at all"
Column F means you cannot say because you have no evidence.

The decision to institute The Franklin Plan was influenced by:

	A	B	C	D	E	F
a. The popularity of individualization of instruction in the larger educational community						
b. The popularity of flexible/ modular scheduling in the larger educational community						
c. A feeling among the Franklin staff that they wanted to innovate						
d. A desire to innovate on the part of a small group on the staff						
e. A desire to innovate on the part of the Franklin administration						
f. Encouragement from the Central administration to innovate						
g. Encouragement from the community to innovate						
h. Expressed or perceived desires of students for a different kind of program						
i. Other _____						

Table 4.1 indicates the frequency with which each item was selected according to the several degrees of influence. The degrees of influence were assigned numerical values ranging from "4" for "to a great extent" to "0" for "not at all." An average score for each item was obtained by summing the values of all the choices it received, and dividing by the total number of responses. These average values were used as the basis for a rank-ordering of the several sources of influence.

The item with the highest average, as well as the greatest frequency of choice as influential "to a great extent" was "A desire to innovate on the part of the Franklin Administration." Ranking last in this listing is "expressed or perceived desires of students" and a close next-to-last is "encouragement from the community." Question (2) on the interview schedule asked respondents to indicate which among the various choices was "most influential" and which was "least influential." Responses to this question are shown in Table (6.2). The interest of the Franklin administration again leads all other sources of influence by a sizable margin, and community encouragement leads in the number of choices as "least influential."

Several respondents volunteered additional reactions to these items. These responses shed some additional light on the data presented in the tables.

TABLE 6.1

SOURCES OF INNOVATION INFLUENCE
AS PERCEIVED BY TEACHERS

Activities	Frequency of Selection							
	To a great extent 4	To quite an extent 3	To some extent 2	A little 1	Not at all 0	Can't say N	Av. Val.	Rank
a. Popularity of individualization in the larger educational community	6	3	7	0	0	4	2.94	3
b. Popularity of the F/MS in the larger educational community	3	3	7	1	1	5	2.40	6
c. Feeling among Franklin staff that they wanted to innovate	2	7	9	1	0	1	2.53	4
d. A desire to innovate on the part of small groups on the Franklin staff	7	7	3	2	0	1	3.00	2
e. A desire to innovate on the part of the Franklin Administration	13	5	0	0	0	2	3.70	1
f. Encouragement from Central Administration to innovate	4	1	4	2	1	8	2.42	5
g. Encouragement from the community to innovate	0	3	4	4	1	8	1.75	7
h. Expressed or perceived desires of students for a different kind of program	1	1	4	3	3	8	1.50	8

TABLE 6.2

RESPONDENTS' SELECTIONS OF INFLUENCE SOURCES AS "MOST" INFLUENTIAL AND "LEAST" INFLUENTIAL

Items	Frequency of Selection	
	Most Influential	Least Influential
a. Popularity of individualization in the larger educational community	1	0
b. Popularity of the F/MS in the larger community	0	5
c. Feeling among the Franklin staff that they wanted to innovate	1	0
d. A desire to innovate on the part of a small group on the Franklin staff	4	0
e. A desire to innovate on the part of the Franklin Administration	12	0
f. Encouragement from the Central Administration to innovate	0	3
g. Encouragement from the community to innovate	0	8
h. Expressed or perceived desire of the students for a different kind of program	0	3
i. Other (Perceived need to better meet the needs of the students.)	1	0
j. Can't say	1	1
Total	20	20

With respect to the role of the Franklin administration, one individual said that the administration would provide this kind of leadership as a "matter of necessity." Others saw the role of the local administation as more volitional. One noted that "the Principal was more enthusiastic than others on the staff." Another stated that he was uncertain about the administration as a whole, but certainly the "key administrator" was behind it. Another attributed such influence to administrators because they get around more and have an opportunity to see other programs. Only one of the respondents elaborated upon his perception of community influence, noting that the community was supportive in the beginning, without realizing the full implications of the program.

The popularity of flexible/modular scheduling in the larger educational community ranked sixth among the nine choices, and received five votes as "least influential." In explaining their responses to this item, one respondent said he didn't think people at Franklin were aware of such popularity, another said he had not heard of it until he came to Franklin, and a third stated his belief that Franklin High School was "out front" in the adoption of this particular innovation. Another said that he personally did not think flexible/modular scheduling was popular in the larger educational community. If these responses are an accurate reflection of the attitudes of the entire staff, it would tend to discredit the idea that the adoption of flexible/modular

scheduling at Franklin was a product of a "bandwagon effect." Such an effect, in those terms, was suggested by one respondent however, and another mentioned the "Trump Plan"[1] as a source of influence. Another indicated his belief that the consultants who were called upon in the early stages exhibited this influence in their behavior.

In comparing the responses to the items about the feelings toward innovation of "the Franklin staff" and a small group on the staff," (c. and d., respectively), it appears that the latter was adjudged by these respondents as more influential. One respondent noted that there was interest among the staff in innovation, but for some of these, "The Franklin Plan was not "the" innovation they wanted to do." Another said that he thought the initial information the staff received was not sufficient for a person to make a commitment, but that expressions of interest from staff members had been interpreted as approval of the effort. None of the respondents was specific about the identity of the "small group," but one indicated that this kind of desire is always present on a staff, and another attributed this interest to those who believed that

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[1]Cf. J. Lloyd Trump, Focus on Change--Guide to Better Schools (New York: Rand McNally & Co., 1960). Ideas presented by Trump in this volume led to flexible/modular scheduling being frequently referred to as "The Trump Plan" in popular terminology.

special areas like labs could be used more effectively with a different type of program than the traditional one. On the other hand, the same respondent who had mentioned the "bandwagon" effect stated that he didn't think the staff as a whole cared "one bit" for the idea of the innovation. Another stated that "There were quite a few people on the staff who didn't want to innovate."

Influence of Unfreezing Activities

A major part of the unfreezing process apparently was an attempt to involve the staff broadly in programs designed to stimulate interest in increasing the individualization of instruction at Franklin High School. This program of "self-study" is alluded to in the initial Franklin Plan proposal and in later documents. Question (3) in the interview schedule sought to determine which of these activities were most influential, in the eyes of the respondents.

"Please indicate how helpful or influential the following items were in preparing the staff for the Franklin Plan, and how they affected you personally. In column A indicate which item you perceive as most important to the staff as a whole by writing the number 1 next to the most important for the staff as a whole, and a number 4 next to the least important. In column B write the number 1 opposite that which was most important for you personally, and the number 4 opposite that which was least important.

	A	B
a. In-service programs featuring speakers and/or films	____	____

		A	B
b.	Visits to innovative schools	____	____
c.	In-service programs of longer duration (workshops) focused on special problems	____	____
d.	Professional reading in journals and books	____	____
e.	Work in school-established study committees	____	____
f.	Informal discussion with colleagues	____	____
g.	Other _____	____	____

Table 6.3 shows the responses to this item. The single item in this list most frequently chosen as "least" influential was "professional readings." "Informal discussion with colleagues" was chosen as "most influential" for the staff as a whole by one individual, and as "least" influential by one other. When applied to "self" three respondents selected this factor as most influential for them. "Short in-service programs" and "workshops" gathered the largest number of choices as most influential. None of these choices overwhelm the others as either most or least influential, save that of "professional readings," which was chosen most often as least influential. Some additional substance was provided in qualitative reasponses to this item. Two individuals discounted the effect of visits to innovative schools because they were not available to everybody. One respondent recalled that "a certain amount of sensitivity training" had been programmed, and then noted as an aside,

TABLE 6.3

RESPONDENTS' RATINGS OF INFLUENCE OF VARIOUS UNFREEZING ACTIVITIES

Activities	Frequency of Selection			
	Staff		Self	
	Most	Least	Most	Least
a. Short in-service programs with speakers and/or films	6	1	2	0
b. Visits to innovative schools	1	2	4	1
c. In-service workshops focused on special problems	3	1	5	0
d. Professional readings	0	6	0	10
e. Work in school-established study committees	2	0	0	2
f. Informal discussions with colleagues	1	1	3	0
g. Other			1*	
No Response	7	9	5	7
Total	20	20	20	20

*R was influenced by own interest.

"for people who need this kind of artificial environment to be honest and open."

The in-service programs and workshops mentioned frequently featured consultants from outside the system. It has been noted above that one respondent thought these consultants represented the popularity of flexible/modular scheduling in the larger educational community. In response to question (3) two individuals mentioned the influence of consultants. One of these persons stated that he had been "sold" on the program by them. This remark did not appear to have been made with a negative connotation, but another respondent indicated that he felt that the consultants had "misled" the staff by making the entire project appear too easy. This person said that the entire proposal was founded on the assumption (not true in his opinion), that young people "naturally gravitate toward learning." Additionally, this respondent said he felt that the consultants had misrepresented to the staff the technical problem of scheduling--that they had concentrated on selling the program and had "begged off" at the point where the hard work began, leaving Livonia schools to solve the scheduling problem.

Staff Involvement in Innovation Decision

Two items on the self-report form sought to determine to what extent the respondents felt they had been consulted in the decision to institute The Franklin Plan. These items, (4b) and (4c), are reproduced below:

4b. To what extent do you think you were consulted in the decision that was made to institute the Franklin Plan at Franklin High School?

___A great extent; ___Quite a bit; ___To some extent;

___A little; ___Not at all; ___I was not on staff then

4c. To what extent do you think there was a clear educational need or problem in the system, which the Franklin Plan would help meet or resolve?

___A great extent; ___Quite a bit; ___To some extent;

___A little; ___Not at all

The responses to these items are summarized in Table 6.4. Of thirteen persons responding to item (4b), six said they felt they had been consulted either "quite a bit" or to "a great extent." Only one said "not at all." On the second of these items, referring to the existence of a "clear educational need or problem," fourteen of the seventeen responding in substance indicated that such a need existed at least "to some extent." None said there was "no need at all." These data appear to be unconclusive, except that they fail to show that these respondents regarded the innovation as either unnecessary or forced upon them. The data do not show that these respondents necessarily approved the form of the innovation, but they do apparently feel that they were consulted in the decision.

Summary

The interview data for the unfreezing and moving stages of the innovation suggest a situation in which the

TABLE 6.4

RESPONDENTS' PERCEPTIONS OF THE EXTENT TO WHICH THEY WERE CONSULTED IN INNOVATION-DECISION

Opinion	Frequency of Selection						
	A Great Extent	Quite A Bit	To Some Extent	A Little	Not at All	Cannot Say/ No Res.	Total
To what extent do you think you were consulted in the decision that was made to institute The Franklin Plan?	4	2	5	1	1	5	18
To what extent do you think there was a clear educational need or problem which the F.P. would help meet or resolve?	1	6	7	3	0	1	18

innovation-decision was strongly influenced by administrative initiative. This interest in innovating was reciprocated by a number of members of the staff, but the form of the innovation seems to have been strongly influenced by outsident consultants, who, it was noted by two respondents, reflected the popularity of flexible/modular scheduling in the educational community. The Franklin Plan does not appear on the basis of these data to have been stimulated by any forces in the community, as respondents uniformly ranked community influence as among the least influential factors. The most influential factor in gaining staff support for the innovation, according to these respondents, seems to have been the programs of in-service education sponsored by the administration, with staff bringing to the situation little knowledge gained from outside the school environment. Although the influence of the central administration of Livonia schools was ranked only fifth by respondents, there was reflected a recognition on the part of several that this source was influential in supporting the idea of innovating, if not in determining the form of the innovation.

Questions Relating to the Re-freezing Stage

We have postulated that the re-freezing stage of the innovation was the period during which various maintenance efforts were undertaken in order to solve problems which arose. Maintenance efforts were rather extensively described in the documentary reports reviewed earlier.

The purpose of the questions in the interview schedule relating to this stage was to elicit teacher perceptions of the forces for and against the innovation and the effect of maintenance efforts on them.

Basis of Teachers' Evaluations of Program

These questions begin with item (4) in the interview schedule.

4. Once the Franklin Plan had been instituted, which of the following most influenced your own personal evaluation of the Plan's effectiveness and desirability? Please rank the items in order of importance, with number 1 assigned to the most important, number 2 to the next most important, etc.

   a. _____ Evaluative data about student performance, like grades, attendance data, etc.

   b. _____ Your own observations in class and in the halls

   c. _____ The comments of your colleagues

   d. _____ The comments of students

   e. _____ Your perceptions of community attitudes

   f. _____ Its effect on your own working conditions

Responses to this question are shown in Table 6.5. Respondents indicated by a very large margin that they made their own personal evaluations on the basis of their observations in class and in the halls. They perceived its effect on their own working conditions as ranking second, on the average, and the comments of colleagues as third. The evaluative data which was emphasized in the documentary reports, such as grades, attendance, and test scores were

rated ahead of only the respondents' perceptions of community attitudes, which ranked last.

1. Personal observations in class and in the halls--This item might well have been divided into two, since most of the comments related to observations in the halls. One respondent acknowledged that students had an attendance problem--attributable in some cases to an inability to adjust (honest forgetting of where they were supposed to be), and in some cases to "goofing off." This person was highly favorable to the program and noted that in-class attitudes became better although grades remained the same. One of the rejecters interviewed laid the blame for alleged excessive vandalism on the numbers of students who were at large in the halls rather than in assigned places. This person also felt that conduct in general was poor and that the program actually increased "the anonymity of the student" through the scheduling system. Another agreed that behavior in the halls was not good, but saw this as resulting from the fact that there was no place, at least in the second year of the innovation, for students to go.

2. Effect on working conditions--Responses to this item were mixed; some regarded its effect on working conditions favorably, and some unfavorably. Favorable comments were related to the additional planning time available and the opportunity to see students individually. On the other hand, one individual noted that it was difficult to

TABLE 6.5

RESPONDENTS' RATINGS OF FACTORS WHICH AFFECTED THEIR OWN EVALUATION OF PROGRAM'S WORTH

Influences	Frequency of Selection of Various Rankings								
	1	2	3	4	5	6	No Res.	Av. Val.	Rank
a. Evaluative data about student performance, such as grades, attendance data, etc.	3	0	4	3	6	2	2	3.83	5
b. Personal observations in class and in the halls	13	5	1	0	0	0	1	1.37	1
c. Comments of your colleagues	1	3	5	6	4	0	1	3.58	4
d. Comments of students	1	6	2	6	3	2	0	3.50	3
e. Your own perceptions of community attitudes	0	1	1	1	2	13	2	5.39	6
f. Its effect on your own working conditions	1	4	6	3	3	1	2	3.33	2

teach in small-group rooms divided from adjacent rooms only by sight barriers. Another complained of the hectic pace required of teachers who had to move frequently from room to room, and stated the belief that not having a particular teacher responsible for any single classroom contributed to an alleged decline of the physical facilities and the loss of materials. A rejecter noted that "There were many, many good experiences." These were those, according to this person, in which people had certain classes specially suited to the program or were on teaching teams with others who were good workers together. This individual attributed his own non-participation in the program to the lack of an appropriate team worker. According to one informant, a traditional teacher might have as many as fifty more students assigned to him as a teacher in The Franklin Plan.

3. Comments of students--This item ranked third in the order of influences, although a low third, and close to "comments of colleagues." One respondent noted that students were "for it, but for the wrong reasons." The implication here was that students who supported The Franklin Plan did so because it enabled them to circumvent school work. A simple dichotomy was noted by two respondents who stated that those students who were doing well academically in the program liked it, and those who were not succeeding disliked it. One individual noted that this also extended to community attitudes--those parents whose students were doing well generally approved

the program for what he termed "built-in futility" for students. This futility, he said, stemmed from the fact that students were promised freedoms (i.e., that of being permitted to schedule their own time), that were not followed through on. He said this caused students to perceive the situation as "still the same old game." This respondent echoed a sentiment similar to that found in a number of instances in teacher interviews in the documentary reports, that the program was not appropriate for all students. He suggested the number for whom it was appropriate as probably around twenty per cent.

4. Comments of colleagues.--One respondent noted that he spoke mostly with people he worked with, and their comments were generally supportive. Another however, stated that he thought colleagues' comments got progressively worse and more negative as the program went on. One of the administrative and service personnel interviewed said he thought the comments of colleagues were attended to selectively, i.e., those who were seeking supportive comments found them, and those who wanted to hear complaints heard them. A rejecter, whose comments were not interpreted as hostile to the innovation generally, noted that in her opinion, the word "traditional" seemed to have become a "dirty word" when used to describe teaching practices. It does not appear from the relatively low ranking given this influence that comments of colleagues were of very great importance in affecting individual respondents' evaluations of the program. The qualitative remarks

suggest that this was perhaps due to the fact that opinion was divided and that people who expressed particular points of view had made up their minds on the basis of other criteria.

Organized Resistance to Change

It is evident from documentary sources as well as in responses to other questions in the interview schedule that there were some on the staff who did not approve of the innovation. The purpose of question (5) on the interview schedule was to find if the opposition had coalesced or organized sufficiently to constitute a driving force in the direction of terminating the program.

"Were you aware of any group who expressed an interest in abandoning the Franklin Plan? That is, not only rejecting it for themselves but wanting to see it discontinued completely?

If yes:

a. Inside the school or outside?

b. How was the interest expressed? Overtly? Covertly?

c. What was the outcome?

If no: How do you explain its lack?"

None of the informants indicated awareness of the existence of such a group, either inside the school or outside. Their remarks in response to this question disclosed, however, that a great deal of discussion had taken place in the lounge and at faculty meetings. In the words of one respondent, "There were some damn heated

faculty meetings." One person said the number of those opposed to The Franklin Plan was 30% of the staff; another said it was 33%. Three individuals thought these negative expressions were responsible for ultimately bringing about the demise of the program. One of the administrators stated that the concerns expressed by these opponents were helpful in the problem-solving process by bringing attention to problems. One of the teacher-respondents agreed that the effect of the criticism was to stimulate problem-solving efforts in the areas of attendance and use of unassigned time. With the exception of those noted, respondents did not see any particular effect from these discussions, and none believed that there was a particular group who sought the demise of The Franklin Plan. When queried on this matter, the Principal said that he did not believe cliques made a difference. He did not regard the staff as a "political" staff. The core of opposition as he saw it was among those individuals who believed the program was encouraging permissiveness toward student behavior.

Two individuals volunteered the idea that the formation of organized opposition was obviated by the fact that individuals had a choice as to whether they participated or not. This belief, that no one was forced to participate against his will, also came out in other conversations about other questions. The Principal said he could only remember having urged one person into the

program against his will. There were instances in which some persons were required to schedule courses in the flexible/modular system, according to one respondent, but these were very limited in number, and were due to exigencies of scheduling rather than reflections of an administrative attempt to enlarge the program. None of the respondents seemed to feel that participation in the program had been other than voluntary.

There are four high schools in the Livonia system, a fact which suggests that perhaps some of the explanation for the lack of organized opposition may have been that unhappy persons could request transfer to other schools in the system. Another conceivable option was that of leaving the system entirely in favor of employment elsewhere. One of the respondents volunteered that he knew personally of three persons who had requested transfer to another school in the system because they did not like The Franklin Plan. To inquire into the extent to which this kind of "flight" may have affected the situation, the Principal was asked how many people to his knowledge had left the staff because they did not like the program. He was able to name only five people who had done so. If this figure is an accurate one, we would conclude that opponents chose to stay rather than leave, and this "safety valve" would not explain the apparent absence of organized opposition. The Principal was given a staff roster including the names of all the persons who had been on the staff

during the period The Franklin Plan was in effect, and asked to indicate how many people on that list had been hired during the period on the basis of their compatibility with the Plan. It appears from these data that although removal of opponents did not figure largely in the maintenance process, selective hiring was a part of the process.

On the basis of responses to question (5) in the interview schedule, it appears that the situation was characterized by continuing discussion among the staff of the merits and shortcomings of the innovation. According to respondents, these discussions took place in the lounge and other places where teachers gathered, and in faculty meetings. Although two respondents categorized approximately one-third of the staff as being in opposition to the program, this opposition apparently did not coalesce in an effort to force a return to the traditional program. Informants' assessments of the effect of the opposition are mixed; some regarded such internal resistance as playing a part in the demise of the program, while others either thought it had no particular effect or was a positive influence.

Departmental Affiliation

A look at the levels of participation in the innovation year by year shows different patterns for the several departments. The sample was chosen to elicit responses from members of six departments whose patterns of participation seemed sufficiently different from each

other's to provide information on the nature of the departmental influence, if any. The question here is whether the differences in the levels of participation by departments can be attributed to any systematic influence or whether they are the accidental results of individual decisions by department members. Question (6) in the interview schedule was designed to elicit this kind of information.

"Here are graphic representations of the levels of participation of several different departments. To which of the following do you attribute these differences between departments?

_____ The personalities involved as individuals

_____ Relationships between personalities involved

_____ The nature of the subject matter being taught

_____ Characteristics of the students enrolled

_____ Administrative decisions

_____ Other _____

Please rank these in order of their importance, with number 1 being for the most important, number 2 the next most, etc.

Now what about your own department's involvement? Please rank these in terms of how they affected your own department's level of participation.

_____ The personalities involved as individuals

_____ Relationships between individuals involved

_____ The nature of the subject matter

_____ Characteristics of the students

_____ Administrative decisions

_____ Other _____"

This item was divided into two parts; the first part asked informants to speculate about the factors which may have affected the participation of the six departments generally, and the second part asked them about the participation of their own department. Respondents were shown graphic representations of the levels of participation of the six departments: English, foreign languages, science, home economics, mathematics, and industrial education. Responses are summarized in Tables 6.6 and 6.7.

Both tables show the same rank-ordering of influences. There was a greater number of non-responses to the first part of question (6) because individuals in some instances said they did not feel they had enough information to comment on the factors that affected departments other than their own. "The personalities involved" ranks first in both tables, and in terms of average value of rankings, by a substantial margin in both cases. This is consistent with opinions expressed in response to other questions, in which participation in the innovations was regarded as a matter of personal choice.

Qualitative responses to these items reflected modifying influences of the lower-ranked factors. The item, "relationships between personalities involved" was included in the list of choices in order to test the idea that perhaps friendship might have influenced individuals to participate. Some respondents interpreted this item,

TABLE 6.6

RESPONDENTS' PERCEPTIONS OF FACTORS INFLUENCING PARTICIPATION OF VARIOUS DEPARTMENTS IN THE INNOVATION

Influences	Frequency of Selection of Various Rankings								
	1	2	3	4	5	6	No Res.	Av. Val.	Rank
a. The personalities involved	8	3	0	2	0	0	7	1.69	1
b. Relationships between personalities involved	2	5	1	3	2	0	7	2.85	2
c. The nature of the subject matter being taught	3	1	4	1	3	0	8	3.09	3
d. Characteristics of the students enrolled	0	3	3	4	2	0	8	3.42	4
e. Administrative decisions	0	1	4	2	5	0	8	3.92	5
f. Other	0	0	0	0	0	0	0		

TABLE 6.7

RESPONDENTS' PERCEPTIONS OF FACTORS INFLUENCING THEIR OWN DEPARTMENT'S PARTICIPATION IN THE INNOVATION

Influences	Frequency of Selection of Various Rankings								
	1	2	3	4	5	6	No Res.	Av. Val.	Rank
a. The personalities involved	11	4	1	2	0	0	2	1.67	1
b. Relationships between personalities involved	2	8	3	2	2	0	2	2.16	2
c. The nature of the subject matter being taught	4	2	7	4	1	0	2	2.78	3
d. Characteristics of the students enrolled	1	2	5	6	4	0	2	3.55	4
e. Administrative decisions	0	2	2	3	11	0	2	4.28	5
f. Other	0	0	0	0	0	0	0		

however, in terms of its relationship to team teaching, and many took this as an opportunity to comment on the composition of teaching teams. One of the administrators mentioned team formation as an important factor in the participation of the English department, noting that individuals in that department were more apt to tie their participation to a team situation than were those in smaller departments where fewer sections were taught. The implication here is that where a larger number of sections of any particular subject is being offered, the opportunities for teaming increase. One respondent noted that he himself had had a bad experience in team teaching, due to the inability of other team members to cooperate. It was noted earlier in connection with another questionnaire item that one of the rejecters attributed her own lack of participation to the absence of persons with whom she thought she could team up effectively. In speaking specifically of the math department, one informant mentioned a geometry teaching-team which did an "outstanding" job; when this team was broken up through two members' leaving the staff, the level of departmental participation was diminished. Respondents expressed the opinion that when team relationships were good, team teaching was a good thing, but when they were bad the program and the participants suffered. In the words of one, "a few can really inspire others--getting the thinking of several people really helps."

Although the item, "the nature of the subject matter being taught" ranked only third, some informants regarded this as an important factor. An assistant principal labeled this the most important factor. Respondents mentioned the home economics, foreign language and science departments especially as examples of the effect of this influence. A member of the home economics department, speaking of her own subjects: "Longer labs were really helpful--this department lent itself beautifully to such an arrangement." This importance attributed to laboratory approaches to instruction was also reflected in comments about and by members of the foreign language and science departments. Three informants, two outside the department and one inside the foreign language department mentioned the importance of flexible/modular scheduling in contributing to effective use of the language laboratory and its equipment. Each of the four members of the science department who were interviewed mentioned the longer periods available for laboratory use as amongtthe distinct benefits of flexible/modular scheculing for their department. A respondent from the industrial education department, on the other hand, stated that the nature of the subject matter and methods of instruction in his department made it difficult to implement flexible/modular scheduling. This was because so much of the activity was individualized that the large-group/small group format could not be used effectively. Students in this area would typically receive only short increments

of group instruction, after which they would work on individual projects for varying periods of time. Once students had begun working on projects there would be little purpose in bringing them together for either small group or large group instruction until it was time to introduce a new tool or process.

The item, "characteristics of the students enrolled" was seen by the respondents as closely related to the subject matter. This was because certain subject matters attracted particular types of students. The home economics department was verymmuch in favor of flexible/ modular scheduling, as indicated by their levels of participation and their own statements. Because home economics was not a required subject at Franklin High School however, it was elected most frequently by non-academically-oriented students. According to statements of the department members interviewed, these students were generally regarded as more difficult to work with than more academically-oriented students, and as less able to function within the flexible/modular format. In the final year of the innovation, an administrative decision that only academically more able students were to be enrolled in flexible/modular courses resulted in home economics courses being excluded from the flexible/modular program, because these courses did not enroll very many academic students. This decision also affected enrollment in other departments; for example, in the English Department,

according to department respondents, in the final year, 1970-71, only "accelerated" English classes were placed on modular scheduling. That this policy accounted for the decline in participation in the final year was acknowledged by each of the administrative/service personnel interviewed.

In addition to the variables affecting departmental participation alluded to above, there were a number of miscellaneous comments applying to particular situations. Three individuals cited the experience of the foreign language department as being the result of the efforts of the department chairman. An innovator, he had developed his own courses in accordance with the flexible/modular system, and observers from outside the department regarded the growth in level of participation within that department as a result of his example. On the other hand, no respondent reported that any department chairman had applied pressure to members of their department to join in the program. Administrative decisions were acknowledged to have been an important factor in the final year, even though this item ranked last in responses to items (6) in the questionnaire. Apparently this difference is due to the perception of the respondents that the decisions in question had applicability in the final year, but did not characterize the situation over the course of the innovation.

In attempting to explain the varying levels of participation between departments, it is difficult to find

any factor which acted uniformly on departments. Interpersonal factors seem to have been effective in the formation of teaching teams, but there is no indication that they influenced independent operators. Department chairmen do not appear to have been influential in general terms. The nature of the subject matter and the type of student do seem to have influenced some, however. Flexible/modular scheduling seems to have been regarded as expecially appropriate for courses utilizing laboratories in instruction, as was true of the home economics, foreign language, and science departments. On the other hand, industrial education also uses a laboratory in instruction, but the level of participation here was relatively low.

The home economics department is an interesting case. The students served by this department were not the academically most able in the school, yet in three of the years of the innovation this department scheduled one hundred per cent of its classes in the modular system. By the account of the two individuals from this department interviewed, when their department reverted to traditional scheduling it was done reluctantly. When asked to explain the uniformly high level of participation of their department each of the respondents noted the suitability of their subject matter for the flexible/modular format, but indicated in addition that their physical proximity in sharing the same suite of rooms and a common laboratory had played a role. They felt that

because of the physical arrangements they were in regular communication with each other throughout the day and were able to provide stimulation and support for each other. One might regard this as an example of a teaching team that embraced an entire department. This was perhaps made easier by the fact that the membership in the department did not exceed four persons during the course of the innovation. One respondent from outside the department, in attempting to account for the level of participation in the department, stated: "One member of the department can talk others into it. Home economics is a tight group." Whether this was due to an accidental combination of personalities, the smallness of the group, or the relative isolation of this group in their own suite of rooms is difficult to tell, but it does seem that among the departments, the home economics group was most united in its posture toward the innovation.

Measuring the Forces

The purpose of question (7) in the interview schedule was to get an indication of the relative strength and importance of selected forces as perceived by the respondents. This question is reproduced below.

Please study the force field on the next page. It shows forces that may have been at work either tending to support or defeat the continuance of the Franklin Plan.

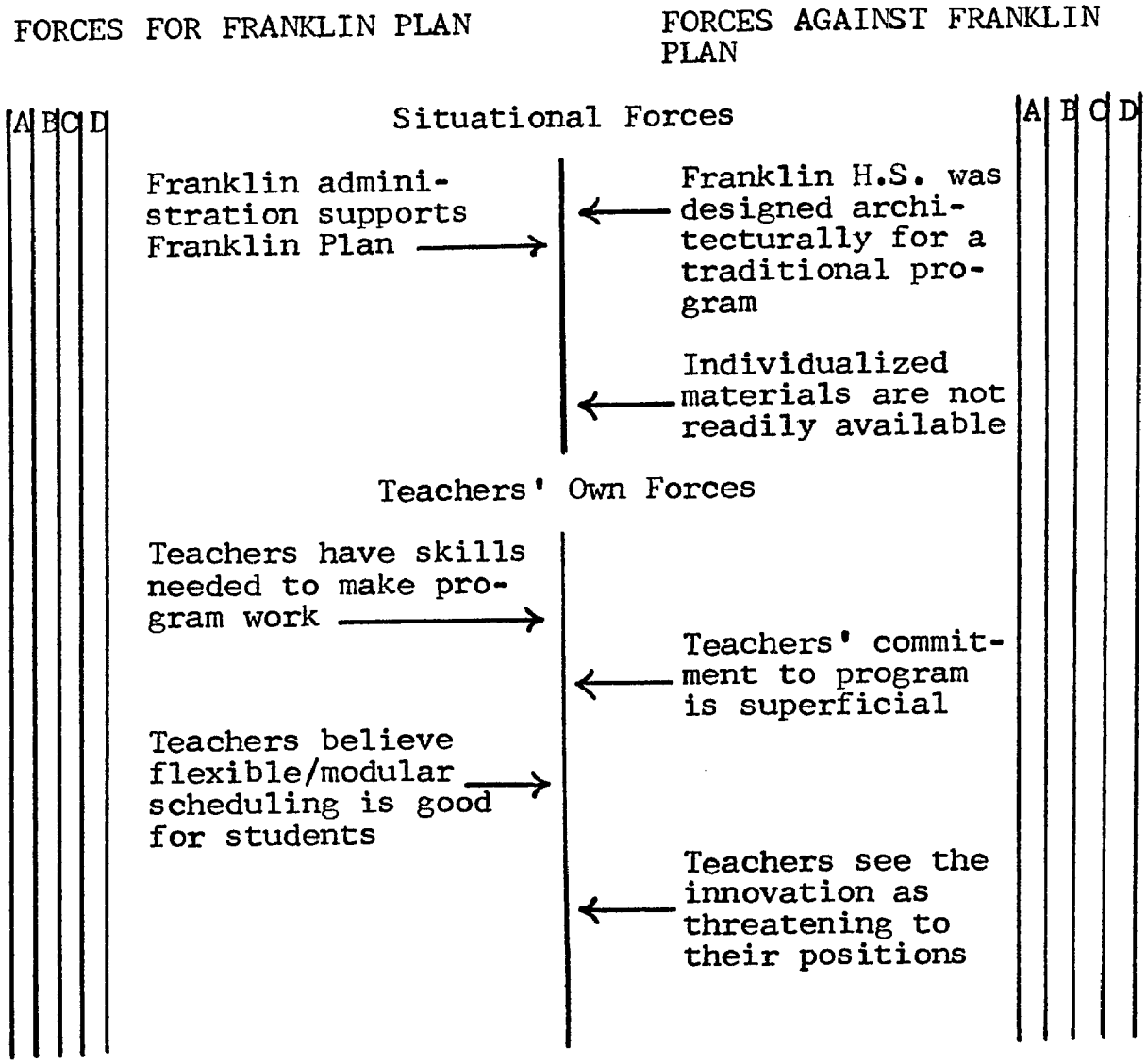
a. Add any forces to either side that you think ought to be included.

b. In column A, place a number 1 next to the force which you think was most important, and a number 4 next to the one which you think was least important. Do this for each side of the force field.

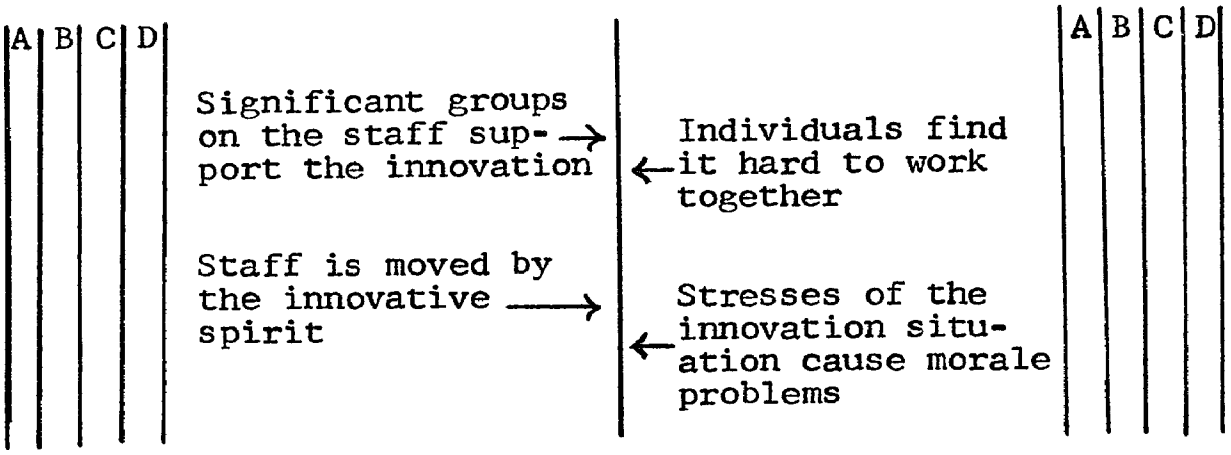
c. In column B place a number 1 opposite the force which was strongest or most resistant to change, and a number 4 opposite the one which was weakest.

d. In column C place a + next to each force you think you saw increasing in strength during the course of the Franklin Plan, and a - next to each force you think you saw getting weaker.

e. In column D place a number 1 next to the force that was most important to you personally, and a number 4 next to the one that was least important to you personally, in determining your own attitude toward the Plan.



Interpersonal Forces



There were three parts to this item: (1) respondents were asked to choose, for each side of the force field, the one force which they thought was most important, and the one which they thought was least important; (2) they were asked to select the strongest and the weakest forces on each side of the force field; (3) for each of the forces, they were asked to indicate whether they thought that force had increased in strength and importance, decreased, or stayed the same during the course of years the innovation was in effect. Responses to this item are summarized in Table 6.8.

Forces For

The support of the Franklin Administration for the plan was selected as most important by eight of nineteen persons responding to this question. It was followed closely by the item, "teachers believe flexible/modular scheduling is good for students," which received seven selections. The items gaining the greatest number of nominations as least important were "teacher skills" and

"staff is moved by the innovative spirit." A greater number by far (15 to 3) thought that the support of the Franklin Administration either increased or stayed the same over the course of the innovation. This view was strongly disputed by one respondent who said he, "really had the feeling the last couple of years that few of the administration really had their hearts in it." This person implied that finance was being used as a scapegoat when the program was finally terminated. He indicated that at the time of the program's termination there was still a number of the staff who believed flexible/modular scheduling was good for students, and who were interested in continuing the program on a reduced scale by going into a separate wing or suite of rooms.

Respondents were not in agreement on the effect of teacher skills in supporting the program. It can be seen from the table that although two individuals regarded it as the most important positive force, seven selected it as least important. All who commented on this item, however, thought that teachers' skills increased in strength and importance in a positive way over the course of the innovation, and none reported that they thought they had decreased. One respondent noted about teacher skills, that this was the force "we worked hardest on, and did a fabulous job." Another thought that teacher skills had improved, but attitudes had declined. This impression was supported by another respondent who stated his

TABLE 6.8

TEACHER-RESPONDENTS' RATINGS OF "FORCES AGAINST" MAINTENANCE OF THE FRANKLIN PLAN

Forces Against	Frequency of Selection			
	Most Important	Least Important	Most Strong	Least Strong
Situational Forces				
Franklin H.S. was designed architecturally for a traditional program	2	4	3	4
Individualized materials are not readily available	2	3	3	3
Personal Forces				
Teacher's committment to program is superficial	0	4	0	5
Teachers see the innovation as threatening to their positions	1	3	5	1
Interpersonal Forces				
Individuals find it hard to work together	0	3	2	2
Stresses of the innovation situation cause morale problems	7	1	4	1
Total	12	18	17	16

TABLE 6.8--Continued

TEACHER-RESPONDENTS' RATINGS OF "FORCES FOR" MAINTENANCE OF THE FRANKLIN PLAN

Forces For	Frequency of Selection			
	Most Important	Least Important	Most Strong	Least Strong
Situational Forces				
Franklin Adm. supports plan	8	0	9	2
Personal Forces				
Teachers have skills needed to make program work	2	7	2	7
Teachers believe flexible modular scheduling is good for students	7	0	4	1
Interpersonal Forces				
Significant groups on the staff support the innovation	0	1	1	0
Staff is moved by the innovative spirit	2	9	1	5
Total	19	17	17	15

TABLE 6.8--Continued

TEACHER-RESPONDENTS' PERCEPTIONS OF CHANGES IN STRENGTH AND IMPORTANCE OF FORCES

Forces For	Frequency of Selection				
	Inc.	Dec.	Stayed the same	Cannot say	Total
Situational Forces					
Franklin Adm. supports plan	4	3	11	2	20
Personal Forces					
Teachers have skills needed to make program work	16	0	0	4	20
Teachers believe flexible/ modular scheduling is good for students	3	4	7	6	20
Interpersonal Forces					
Significant groups on the staff support the innovation	4	5	8	3	20
Staff is moved by the innovative spirit	4	4	9	3	20

TABLE 6.8--Continued

Forces Against	Frequency of Selection				
	Inc.	Dec.	Stayed the same	Cannot say	Total
Situational Forces					
Franklin H.S. was designed architecturally for a traditional program	2	9	6	3	20
Individualized materials are not readily available	2	13	2	3	20
Personal Forces					
Teacher's committment to program is superficial	4	1	12	3	20
Teachers see the innovation as threatening to their positions	2	5	11	2	20
Interpersonal Forces					
Individuals find it hard to work together	3	6	5	6	20
Stresses of the innovation situation cause morale problems	11	3	3	3	20

impression that teachers who demonstrated skills as a result of in-service training programs failed later to put those skills into practice in the teaching of their classes.

Teachers' beliefs that flexible/modular scheduling was good for students was chosen as the most important force for the innovation by seven respondents, and least important by none. There is lack of agreement, however on the tendency of this force over time. Drawing a conclusion is made more difficult by the fact that six respondents were unable to say what they thought the tendency was. In the qualitative responses, one informant stated that "problems that occurred shook peoples' beliefs that the program was good for students; they began to favor a policy of containment, controlled attendance, and silence." Another believed that teachers were continually changing their minds on this matter.

The support for the innovation of "significant groups on the staff" was a force that did not draw much comment from respondents, relative to other forces. One selected it as least important; one selected it as most strong. On the question of whether this force grew or declined in strength and importance, four thought it had increased and five thought it had decreased, while eight thought it had stayed the same. A related question was the extent to which the staff was "moved by the innovative spirit." This force was selected as least

important by the nine individuals, over one-half of them responding on this item, and as most important by two respondents. Only one respondent remarked that he thought significant groups on the staff were in support of the innovation throughout. Another stated he did not feel the staff was moved by an innovative spirit, and a third stated, "it was not a grassroots thing--the Principal was the leader." These items generated very little discussion with the respondents; only three persons volunteered statements to clarify their rating of these forces. In short, the category of "interpersonal forces" did not seem to be highly regarded as influential in supporting the program, as seen by these respondents. This is reflected both in the quantitative data shown in the table and in their explanatory remarks.

Forces Against

The force against which drew the largest number of votes as most important was "stresses of the situation cause morale problems." This was selected by seven individuals as most important, and only one as least important. It was regarded as most strong among the forces against by four individuals, but eleven labeled it as increasing in strength and importance over the terms of years. One respondent remarked about morale problems that they "just ballooned and grew and there was no way of controlling it after a while." Another stated that

"it was just impossible, no matter what the administration did. The halls became quieter overnight when traditional came back." Several possible causes for the morale problems were mentioned. One respondent stated his belief that "the fire just went out." Another said that teachers did not know how to reach students who were not showing up to classes. This person stated that during this period he had had the highest failure rates of his career and felt very bad about it. That flexible/modular scheduling increased teacher work loads was put forth as a cause by three respondents. They believed that this was true of both participants and non-participants in the program. Those who opted for flexible/modular scheduling found that it was more difficult than running a traditional class, and those who remained with a traditional program thought in many cases that they were forced to work with larger classes in order to support the needs of The Franklin Plan. This belief was aggravated by the impression, mentioned by three informants, and attributed by them to others, that teachers on flexible/modular scheduling were taking advantage of the system. One noted that teachers saw others abusing the system," and reported that she not only saw others taking advantage of free time but also heard other teachers discussing it. As one respondent put it, "Teachers are only human; if they get a chance to sit and have coffee they will." In addition to these difficulties there was the impression held by some, as reported by one

respondent that the flexible/modular classes were attracting better students away from the same classes offered by traditional teachers and thereby diminishing the quality of students in the latter.

None of the reactions reported above, however, were marked by the frequency which accompanied statements about the students' apparent inability to meet the behavioral standards which the teachers thought they should. This appears to have contributed more than any other single factor to a diminishing of teachers' morale. One respondent noted that morale problems were not solely due to the innovation, but stemmed from changes in students' attitudes and behavior which characterized the period of the late 1960's. This person referred to the questioning of authority by students and the general popularity of unconventional behavior which went with it. This question of student behavior seems to have been one of the most stress-producing factors. One respondent stated, "Large numbers of the staff could not adjust to not having students assigned to spaces at all times." This sentiment was echoed in somewhat more emphatic terms by another who stated, "If there was any one force that killed it, it was that--the teachers' uncomfortableness with the large amount of students on unassigned time."

Respondents did not see individuals' difficulties in working together as a serious force against the innovation except, as mentioned in connection with an earlier

item, in the case of teaching teams. One informant noted that some of these groups would have required two or three years in order to learn to work together. Another stated that working together had not seemed to be a problem in general terms, but that in those instances were it was a problem it seemed very difficult to overcome.

There was very little support among respondents for the proposition that teachers' commitment to the program may have been superficial, and little more for the idea that teachers may have felt the program as threatening to their positions. Two informants expressed puzzlement at how the innovation could have been construed as threatening to teachers; they did not see how this could have been so, especially since in their opinion, teachers had been perfectly free to choose whether or not they would participate.

The physical structure of the Franklin High School building and the availability of individualized materials were situational forces which received about the same kind of response from the informants. There is division of opinion about both, with respect to importance and strength. On the question of building adequacy, one respondent noted that lack of appropriate financial support was reflected in this area. Another stated his belief that increasing student enrollment had aggravated this situation, and this position was also cited most prominently by a member of the administrative staff who was interviewed. With respect

to the availability of materials, thirteen respondents reported that they thought this force had diminished in strength and importance over the term of the innovation. The efforts of the Director of Instructional Materials and "hard work" by teachers were cited as responsible for this. Notwithstanding these facts, there seems to have been a residue of sentiment holding that materials lack was a force against of some importance. This may be explainable as being a problem that was more important for some individuals or some departments than for others. This conclusion is suggested by the remarks of a member of the science department, who stated that he had heard that this was a problem for some, but that he did not regard this as a problem for his own department.

Additions to Forces

Respondents were asked as a part of this question to suggest any additional forces they thought ought to be added to the force field on either side. Lack of sufficient funding was independently cited by eight of the respondents in the teacher sample and by all three of the administrative staff as a force against the maintenance of the innovation. One informant thought that the lack of money had made it impossible to implement the program in its "ideal" form. Another noted that the innovation had begun in a time when Livonia schools had had adequate resources for new programs and when funds from the Federal government were becoming available, but that by the time

the program terminated, the local school district was feeling a budget pinch and Federal moneys were no longer available in the same quantities. Another tied the lack of money directly to the inadequacy of facilities and materials, which had been cited by some as a force against. On the other hand, two respondents stated their beliefs that money was only an excuse for terminating the program--that it was a convenient scapegoat.

The references above to lack of adequate funding for the program were the only additions to the force field suggested by respondents on which there was a great deal of similarity. In addition to these, however, there were quite a number of suggestions which were scattered over several categories; some of these have been incorporated into the discussions of forces in preceding paragraphs where they seemed to fit. This leaves a few independent forces which, although they are not easily grouped with others, shed some light on the way respondents viewed the situation. Two informants, one teacher and one administrator, felt that an additional force against was the requirement of compulsory attendance. The idea of developing an open campus program in which students who did not have specific assigned classes could leave the school grounds had been considered and rejected. Had this been done, some of the concern about students loitering in the hallways might have been alleviated. This was one of alternative courses of action proposed by the Naple team

from The University of Michigan. Another force against mentioned by one respondent, and which is consistent with findings from the documentary data, was the difficulty of running both a traditional and a flexible/modular schedule side-by-side.

The favorable comments of graduates and of current students were cited as a force for the innovation by one of the members of the administrative staff. One of the teacher-respondents noted the manner in which the innovation had been introduced to the staff as a force for the program; this person complimented the administration for the high level of participation of staff in this process and for "objectivity and honesty." Other factors suggested as additions to forces against were: "conservatism of individuals," "continuing appeal of the old way of doing things," and "apparent inability of teachers to change their teaching styles." Each of these suggested forces apparently had saliency for the respondents who volunteered them, and therefore they have been reported separately. Their relative importance in the entire scheme of things will be reconsidered as a part of the summing up of findings from the documentary and interview data.

Rating of Maintenance Efforts

The final question in the interview schedule sought to measure the relative effectiveness of certain

categories of problem-solving activities or maintenance efforts. This question is reproduced below.

Please rate each of the following items according to how effective you perceived them to be in supporting the Franklin Plan over the period of time it was in effect.

The following efforts were effective:	great extent	quite an extent	some extent	A little	not at all	Can not say
a. Efforts to raise the level of student responsibility						
b. Efforts to raise the level of teacher skill						
c. Selecting students for the program based on their potential for success in it						
D. Selecting teachers for the program based on their potential for success in it						
E. Efforts to make the scheduling system more efficient						
f. Adjustments in the building space and use of space to make it more functional						
g. Efforts to explain the program to the community						
h. Efforts to improve and increase the communication between teachers						
i. Efforts to increase and improve the communication flow between teachers and administrators						
j. Efforts to make individualized learning materials more available						

Each of the items was rated by respondents. The ratings were assigned numerical values ranging from 4, for "Great extent," to 0, for "Not at all." The average of values for each item was computed, and the obtained average values were then ranked. The results are shown in Table 6.9.

The ranking of the item, "Efforts to raise the level of teacher skill" as first in this listing is consistent with teachers' comments with respect to this item in response to question (7). So, too, is the second ranking given to item (j), on making learning materials more available. Teachers responding to question (7) had indicated that both of these factors had been successfully handled during the course of the innovation and were not serious problems. In the same manner, it was noted above that teachers did not seem to rate the deficiencies in the building as important forces against the innovation, and this item was ranked third in terms of effectiveness in this listing.

Ranking at the bottom of this listing is the item, "Selecting students for the program based on their potential for success in it." Several respondents, including the three members of the administration who were interviewed, reported that this was a very difficult problem. The selection system ultimately chosen was to include in the flexible/modular schedule only those classes which enrolled the more academically able students. This was not a very

TABLE 6.9

RESPONDENTS' RATINGS OF EFFECTIVENESS OF SELECTED MAINTENANCE EFFORTS

	Frequency of Selection							
	Great Extent	Quite an Extent	Some Extent	A Little	Not at All	Cannot Say	Av. Val.	Rank
a. Efforts to raise the level of student responsibility	2	8	7	1	1	0	2.35	5
b. Efforts to raise the level of teacher skill	4	8	5	1	1	0	3.80	1
c. Selecting students for the program based on their potential for success in it	0	2	5	5	1	5	1.40	10
d. Selecting teachers for the program based on their success in it	1	3	3	2	2	7	1.62	9
e. Efforts to make the scheduling system more efficient	5	7	4	0	2	0	2.45	4
f. Adjustments in the building space and use of space to make it more functional	2	10	6	0	0	0	2.50	3
g. Efforts to explain the program to the community	2	7	3	2	0	4	2.19	6
h. Efforts to improve and increase communication flow between teachers	1	9	4	2	1	1	2.16	8
i. Efforts to improve and increase communication flow between teachers and administrators	3	4	8	1	1	1	2.16	8
j. Efforts to make individualized learning materials more available	5	10	1	2	0	0	2.79	2

satisfactory system, according to reports. The administrators said they were not satisfied because they felt this procedure for selecting students was too restrictive in that it denied opportunity to too many. Two of the teacher-respondents expressed vigorous opposition to this practice in the interview, stating that it was not true that the academically most able or most intelligent students were those who were best able to handle the program. They felt this ability to adapt to the needs of the program was not necessarily related to I.Q. As one of these put it, "Many advanced students could not handle it, while many less advanced could."

The item, "Efforts to raise the level of student responsibility," was ranked fifth in the list. This is puzzling in light of the frequent references to student lack of responsibility in the documentary and personal interview data. These comments would not seem to portend so high a ranking as this. A partial explanation for this apparent inconsistency was provided by one respondent who noted that the success of efforts to affect student responsibility varied depending upon which students one was referring to. Another elaborated on this theme by stating that those students who could accept responsibility at the start of the innovative program got better at it, while those who had difficulty did not get appreciably better. Another noted that these efforts were effective with average or better students, but not with less-than-average students.

There was little information in the documentary data relating to efforts designed to improve communication flow between teachers or between teachers and administrators. Items (h) and (i) were included in question (8) in order to find whether teacher-respondents recalled such efforts and how effective they may have perceived them to be. These items tied for eighth place in the list. In the qualitative responses, one respondent said he could not remember any particular efforts directed to this end. One other informant spoke directly to these items, noting that "there was a great communication within the original group" (of innovators). This person also spoke of almost constant communication with administrators during the first year of the innovation. It is apparent from these data that special efforts to improve communication between teachers and between teachers and administrators was characteristic of the unfreezing and moving stages of the innovation process, but were not major elements in the maintenance process.

There is some ambiguity about item (d), "selecting teachers based on their potential for success in it." This item ranked ninth in the list, based on average value of ratings, yet it was labeled as successful to a great extent by one respondent. Qualitative responses relating to this item found three individuals asserting that this was not done, i.e., that teachers in fact selected themselves. This was borne out in interviews with the members

of the administrative staff who indicated that no effort had been made to select teachers in this manner. Notwithstanding these disclaimers, and the remarks noted earlier that many respondents felt one of the strengths of the program had been the optionality of participation for teachers, some individuals seem to have felt that there was some sort of selection process.

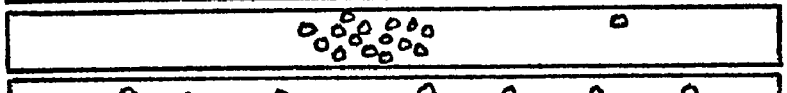
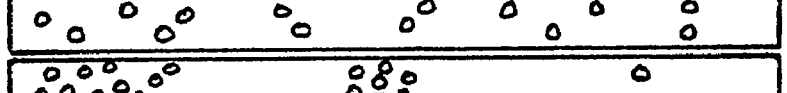
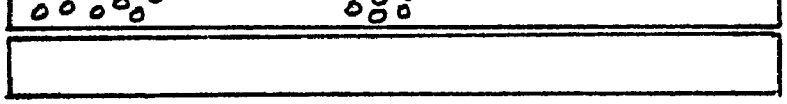
In summary, teacher-respondents' ratings of these maintenance efforts are generally consistent with their responses on questions discussed earlier. There is considerable agreement that improvement of teacher skills was one of the more effective areas of effort. In like manner, the availability of individualized learning materials seems to have been widely regarded as improved over the course of the innovation. On the other hand, the difficult problem of matching students to the program is perceived by these respondents as having been least successfully dealt with. The first four items in the ranking can be categorized as "technical" factors. These are: teacher skill, availability of materials, building adjustments, and scheduling. In these "how-to-do-it" elements of the program, respondents perceived efforts as generally successful. Excluding the lowest-ranking item, that of selecting students, and the item relating to the selection of teachers, about which there is some ambiguity, the next lowest-ranking items relate to communications--communications between teachers, between teachers and

administrators, and with the community. This suggests, if tenuously, that one of the unsolved problems in the innovation effort may have been in the area of communication of ideas.

Staff Relationships

The second question in the self-report form was designed to elicit information as to whether the staff relationships during the plan had had any special characteristics which may have indicated division of opinion about the innovation. Specifically, the intent of this question was to determine whether respondents regarded the staff as polarized or divided into other significant groups.

If you were to look at this staff of teachers as a group, which one of the drawings below would most nearly look like the Franklin High School staff? Please place a check mark in Column A to indicate which drawing best describes the staff <u>while The Franklin Plan was in effect</u>, and place a check mark in column B to indicate which drawing describes the staff now.

		A During the Franklin Plan	B Now
a.		____	____
b.		____	____
c.		____	____
d.		____	____
e.		____	____

Other--please draw

If the staff was seen by respondents as polarized on the innovation, it was assumed that diagram (d) would be chosen frequently. This diagram was indeed chosen by five of the respondents as characterizing the staff during the course of The Franklin Plan, but twice as many selected diagram (a) as being most representative. The latter diagram shows a staff that is divided into five small tight groups, rather further removed from each other. Inasmuch as there was no direct questioning of respondents on this item, we do not know the basis on which they regarded the staff as divided, i.e., we do not know the identity of the several groups. What is evident from the selections is that if the innovation polarized the staff, it was not seen as doing so by the majority of the respondents. Responses to this item are shown in Table 6.10.

Several earlier questions had sought to discover some sort of group influence on the institution and maintenance of the innovation. These questions had not suggested any substantial effect on either the decision to innovate or on subsequent maintenance efforts which could be attributed to the influence of cliques, interest groups, or friendship. Question (3) in the self-report form was a further attempt to discover what influence, if any, such factors may have had. When respondents were asked, in connection with question (6) on the interview schedule, what had been the most important influence affecting levels of participation in the innovation within the various departments, they had indicated that decisions of this

TABLE 6.10

RESPONDENTS' PERCEPTIONS OF EFFECT OF PROGRAM ON INTRA-STAFF RELATIONS

Drawings	High School Staff	
	During Franklin Plan	Now
a.	10	8
b.	1	2
c.	1	4
d.	5	2
e.		1*
f. Can't say	1	1
Total	18	18

*Attributed by R to fact that a portion of the staff is now housed in a separate building.

type were mostly a matter of individual choice. Question (3) then, was an attempt to discern whether there may have been some more subtle influence, not obvious to the respondents, that may have stemmed from interpersonal communications either within departments or across departmental lines.

The following questions concern some important interpersonal relations within the school staff. Your answers are absolutely confidential. Use the roster of the staff on the last two pages to write the numbers which identify the appropriate people for the following questions.

			Ident. Number
a.	Please indicate by number three persons with whom you discussed The Franklin Plan most often.	Communicated with most	_____
		Communicated with next most	_____
		Communicated with third most	_____
b.	Whom did you speak to when you wanted help or had ideas to share? (That is, when The Franklin Plan was in effect)	Communicated with most	_____
		Communicated with next most	_____
		Communicated with third most	_____
c.	Whom did you speak to when you had complaints about the way things were going under The Franklin Plan?	Communicated with most	_____
		Communicated with next most	_____
		Communicated with third most	_____
d.	Please list the identification numbers of six teachers whom you feel are most influential in developing staff opinion about education matters (e.g., curriculum, school policy, etc.)	_____	_____
		_____	_____
		_____	_____
e.	Please indicate the numbers of three teachers whom you like best.		_____
			_____
			_____

It was assumed in the framing of this question that three kinds of communication might possibly have been influential. These were: (a) discussion, which reflects a neutral evaluation; (b) sharing ideas, which assumes a more positive attitude; (c) complaining, which implies negative feelings. Two additional parts to this question sought to determine whom respondents liked best among their colleagues and whom they perceived to be most influential among the "staff" in educational matters. Table 4.11 shows how respondents' selections were distributed with respect to departmental relationship.

The sample contained four members of the English Department; they selected in the aggregate, twelve persons with whom they had discussed The Franklin Plan most frequently. Of these twelve choices, ten were people within the English Department, and two were administrators; these respondents did not select any teachers outside the department. A similar pattern is observable in the selections of people in the home economics department. In each of the other departments, however, about one-half of the discussants selected were from outside the department.

Selections pertaining to the idea of "sharing" are shown in Table 6.12. The results here are similar in distribution of numbers to those derived from the question on discussing. If we assume that "sharing ideas" implies a more positive evaluation than does "discussing," there is a slight implication here that persons may have sought

TABLE 6.11

RESPONDENTS' SELECTIONS OF PERSONS ON STAFF WITH WHOM THEY MOST FREQUENTLY DISCUSSED THE FRANKLIN PLAN

Departments	N	No. of Selections	No. in Dept.	No. out of Dept.	No. of Adm.
English	4	12	10	0	2
Foreign Language	3	9	5	3	1
Home Economics	2	6	5	0	1
Mathematics	4	12	6	2	4
Science	4	12	5	5	2
Industrial Educ.	1	3	1	1	1
Total	18	54	32	11	11

TABLE 6.12

RESPONDENTS' SELECTIONS OF PERSONS ON STAFF WITH WHOM THEY MOST FREQUENTLY SHARED IDEAS ABOUT THE FRANKLIN PLAN

Departments	N	No. of Selections	No. in Dept.	No. out of Dept.	No. of Adm.
English	4	12	10	0	2
Foreign Language	3	9	2	3	4
Home Economics	2	6	5	0	1
Mathematics	4	12	6	1	5
Science	4	10	6	3	1
Industrial Educ.	1	3	1	0	2
Total	18	52	30	7	15

support for their beliefs from outside their departments as much as inside. This is based on the assumption that one might discuss one's ideas with almost anyone who is handy, but that the sharing of ideas requires a certain compatibility of beliefs. The English department figures for this item are the same as for the previous item, as are those of the home economics department, but those in the mathematics department selected administrators five times--almost as often as they selected members in their own department.

The figures for the responses on the item which asked to whom respondents complained are shown in Table 6.13. Once again, the English and home economics departments have confined their choices of teachers to members of their own departments. The largest difference in responses to this item in comparison to responses to the two previous items is in the increase in the number of times administrators were selected. Only eleven choices were given administrators in response to the item, "with whom did you discuss?" while twenty-one choices pegged administrators as the target of complaints.

Respondents were also asked to indicate which three persons on the staff they liked best. The purpose of this item was to determine whether friendship might have had an influence on an individual's participation in the innovation. The results of this part of the question are shown in Table 6.14.

TABLE 6.13

RESPONDENTS' SELECTIONS OF PERSONS ON STAFF TO WHOM THEY MOST FREQUENTLY COMPLAINED ABOUT THE FRANKLIN PLAN

Departments	N	No. of Selections	No. in Dept.	No. out of Dept.	No. of Adm.
English	4	12	8	0	4
Foreign Language	3	7	1	3	3
Home Economics	2	6	3	0	3
Mathematics	4	12	4	2	6
Science	4	11	5	2	4
Industrial Educ.	1	3	1	1	1
Total	18	51	22	8	21

TABLE 6.14

RESPONDENTS' SELECTIONS OF PERSONS ON STAFF WHOM THEY LIKED BEST ON STAFF

Departments	N	No. of Selections	No. in Dept.	No. out of Dept.	No. of Adm.
English	4	12	8	1	3
Foreign Language	3	9	0	8	1
Home Economics	2	6	5	0	1
Mathematics	4	12	6	5	1
Science	4	12	6	5	1
Industrial Educ.	1	3	0	1	2
Total	18	54	25	21	8

Patterns in response to this part of the question are again similar to the previous patterns. The members of the English department chose the greatest proportion from among members of their own department. Liking patterns are also strong within the home economics department, while the math and science teachers' responses are rather evenly divided between individuals inside and outside their respective departments.

Another logical question arising from these data is that of how homogeneous these patterns of communication may have been. To what extent were discussants, sharers, and friends the same people? When the data are looked at from this perspective, the following facts emerge:

1. Three respondents selected the same three individuals for each of the categories, i.e., the persons they chose as most frequent discussants were also chosen as the people they most often shared ideas with and as the people they liked the best.

2. Nine respondents both discussed and shared with the same three individuals, but chose others whom they included liking.

3. Four respondents did not include any of the three people they said they liked the best among those they identified as either discussants or sharers.

4. In the aggregate, of the fifty-four persons who were selected as discussants, thirty-nine were also chosen as sharers, but only twenty-six were included in the best-liked category.

Responses of these informants do not suggest the existence of homogeneous groups in which individuals confined most of their communications to a small number of persons. Although respondents indicated they often shared ideas with

the same persons with whom they discussed the innovation, liking does not seem to have been an important factor in determining with whom they discussed the innovation or shared ideas about it.

With the exception of the English and home economics departments, respondents indicated that they were as apt to discuss the innovation, share ideas about it, and complain about it with people outside the department as inside. If we assume that such communications are evidence of influence patterns, it appears that for four of the six departments represented in the sample, within-department communications did not strongly influence individuals' attitudes toward the innovation. This is consistent with the respondents' assertions, reported earlier, that the patterns of participation of the various departments were primarily the products of the independent decisions of the individuals involved. These data need to be interpreted with care for two reasons: (1) the responses recorded here represent the experiences of the sample, and cannot be generalized to the entire staff; (2) what we are asserting is not that departmental influences could not have affected individuals' participation, but that there is not sufficient evidence to demonstrate that such an influence was present among the departments generally.

On the face of it, the data may seem to suggest that there was sufficient within-department communication in the English Department to justify a conclusion that

there was a departmental influence present affecting the decisions of individuals. Closer examination of the data reveals, however, that the communication patterns reported by the respondents do not indicate the kinds of associations within the department that would be expected to influence groups of individuals to either reject or adopt the innovation. Each of the respondents representing this department selected diverse groups of persons in answer to the questions, "with whom did you discuss, etc." No respondent reported that his contacts were limited to innovators, rejectors, or adopters. In contrast, the members of the home economics department responding reported that they spoke most frequently with members of their own department, and did not list teachers from any other department as among the top three in any of the categories of communication; the sole discussants outside the department whom they identified were members of the administrative staff. The pattern of participation of the English department over the course of the innovation closely approximated that of the staff as a whole; the communication pattern reported by the respondents suggests a considerable amount of discussion between supporters and rejectors of the innovation. The home economics department's level of participation was highest among the departments during three years of the innovation. The communication pattern for the latter shows a high degree of within-department discussion, and we assume, support

for the innovation. The home economics department, then, appears to have been the only one of the departments in which strong departmental influences affected the decisions of the teachers to participate or not participate in the innovation.

Speculation About the Fate of the Plan

Some respondents had suggested that the explanation given for the termination of The Plan as due to the financial difficulties stemming from the loss of the millage election was only an excuse--that disenchantment with the substance of the innovation was the real reason. One respondent had said he thought he detected a diminishing of enthusiasm for the innovation among the local administration. Question (4) in the self-report form was included in order to test the extent of these beliefs among the respondents.

4a. In your opinion, had the millage not failed in 1971, would The Franklin Plan:

___ have continued indefinitely at the same level as in 1970-71

___ have continued but at a lower level of participation

___ have continued at an expanded level

___ have been discontinued within a few years

4b. To what extent do you think you were consulted in the decision that was made to institute The Franklin Plan at Franklin High School?

___A great extent; _____Quite a bit; _____To some extent;

___A little; _____Not at all; _____I was not on staff then

4c. To what extent do you think there was a clear educational need or problem in the system, which The Franklin Plan would help meet or resolve?

_____A great extent; _____Quite a bit; ___To some extent;

_____A little; _____Not at all

4d. Finally, we would like some background information about yourself:

Sex: _____; Age _____; Race _____;

Residence _____
(city, town, township)

Marital status: _____Single; _____Married;

_____Widowed; _____Divorced

Highest degree held: _____Institution: _____

When granted: _____Major _____

Years in teaching: _____; Years in Livonia system:_____

Years at Franklin: _____

Responses to this question are shown in Table 6.15. These responses show that a majority of this group of respondents believed that if the millage proposition had not failed, and had the budget cuts not been made, The Franklin Plan would have continued in some form. The greatest number of these thought The Plan would have continued at a lower level of participation. Only one person thought the program would have increased in scope, while two thought it would have continued indefinitely at the 1970-71 level. Its discontinuance within a few years was forecast by four persons. Of the seventeen persons who responded to this question, thirteen looked forward to some level of continuance of the program.

TABLE 6.15

RESPONDENTS' OPINION ABOUT THE PROBABLE FATE OF THE FRANKLIN PLAN HAD THE FUNDS BEEN AVAILABLE

a. Continued indefinitely at the same level as in 70-71	2
b. Continued but at a lower level of participation	10
c. Continued at an expanded level	1
d. Been discontinued within a few years	4
e. Can't say	1
Total	18

Residual Effects

One of the questions in the initial interview schedule (prior to its revision) asked respondents whether the teaching/learning processes at Franklin High School had changed as a result of its experience with The Franklin Plan. This was in an attempt to determine to what extent the system had reverted to its condition prior to the institution of the program, and whether there were some residual effects on the behavior of teachers. This question was dropped from the final version of the interview schedule in the interests of economy and of not overburdening the respondents, and because the answers given to this question in the early interviews had been so consistent. Each of these respondents indicated that The Plan had had a continuing effect on the teaching process at Franklin. They mentioned specifically the continuing use of individualized materials that had been developed in conjunction with the program, and the use of groupings within the classroom. One of the rejecters noted that she had been able to attain flexibility within the bounds of the traditional classroom during the course of the program and was continuing to do so.

The Director of the IMC was able to list a number of changes in the teaching process, engendered by the innovative program, which had carried over into the return to traditional scheduling. These changes were in the areas of services offered by the IMC, teachers' use of

materials, and teaching practices. The IMC had created special reading collections and bibliographies to correlate with specific courses and units of instruction, and these were still being widely used. Additionally, the non-book room had been retained, and here students could go to view filmstrips and listen to audio tapes related to their course work. The IMC was also continuing to provide the service of administering make-up exams to students who missed these in their regular class periods. Many teachers had moved away from reliance on a single text, and were continuing to use films, tapes, and filmstrips. The IMC director also mentioned that teachers were making efforts to incorporate flexibility in grouping and use of time within the constraints of the traditional schedule, and were sending more groups of students to the IMC to perform purposeful tasks than prior to the innovation's inception.

A programmatic outgrowth of The Franklin Plan has been an English instruction program known as "English 101." This program enrolls all incoming tenth graders in a special course designed to diagnose students' language abilities and problems and to provide individualized programs of instruction. The class meets in a large classroom with about seventy-five students who are divided into groups of about fifteen, each under the direction of a teacher. This perpetuates small-group instruction, one of the features of The Plan which many teachers found most satisfying. In addition to concentrating on each student's special weaknesses as objects of instruction, a great

deal of emphasis in this program is placed on helping students set objectives for their own learning. Students are taught to anticipate the kinds of expectations teachers are likely to have for various kinds of instruction and to plan their studying accordingly. A great deal of use is made of contracts with the students, in which students commit themselves to complete certain units of work and in the process gain experience in budgeting their time and effort. This program seems to contain a strong flavor of the kinds of activities initiated and promoted by the team from The University of Michigan, directed by Frank Maple.

In summary, it appears that with the return of traditional scheduling, Franklin High School has not reverted completely to the practices which characterized the instructional program prior to the inception of The Franklin Plan. Among the residual affects of the innovation experience are different and more extensive uses of the IMC, greater use of individualized learning materials, and more "flexible" in-class techniques by teachers. In short, there seems to be an attempt to continue the use of the instructional technology of flexible/modular scheduling within the constraints of a traditional schedule. The extent of these practices cannot be documented, but the many comments of individual respondents give the impression that they are rather widespread. To the extent that some of these practices

have taken hold, the effect of the experience with the innovation seems to have been to move the system in the direction of greater individualization of instruction.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The purpose of this study was to examine the forces which influenced the institution and maintenance of an innovation in flexible/modular scheduling. The last ten years has witnessed the development of numerous prescriptions for the improvement of secondary education in this country. Flexible/modular scheduling has been one of these. These prescriptions for change have been directed at an educational system that has not been noted for easy acceptance of change, nor for longevity of those innovations that are adopted. Most research on innovation in education has been directed at the processes of dissemination and implementation of innovative ideas. Our purpose here has been to look at the events following the introduction of an innovation in order to determine the nature of the forces which affected its maintenance over a period of time. In addition to examining the forces which influenced this particular innovation it was hoped that the study might disclose findings of importance which would assist in improving the staying power of other innovative programs in other school settings.

Review of the Forces

It is evident from the data that the Livonia Public Schools hierarchy was initially responsible for creating an environment conducive to innovation. The Franklin Plan was a program that was developed as a part of a larger Project aimed at creating innovation efforts in each of the public high schools in Livonia. This interest of the school hierarchy in promoting innovation was thus an initial driving force in the development of the program. To attribute this influence to the school hierarchy is not in any way, however, to diminish the importance of the interest in innovating which was present among the staff of Franklin High School. Teacher-respondents rated the influence of the central administration in the initial decision to innovate as low. In their perception the local school administration was most influential. It appears that the interest of the central administration was important in establishing a climate conducive to innovation and in providing resources, but that the real moving spirits behind the innovation effort were members of the Franklin High School administration chiefly the Principal, although it is clear that they had the support of an undetermined number of members of the teaching staff. Respondents indicated that the influence of the community and the expressed interests of the students were relatively unimportant as sources of influence.

The interests of teachers in innovating were stimulated and directed by the extensive program of in-service

activities which characterized what we have termed the "unfreezing" stage of the innovation process. Teacher-respondents selected the in-service experiences they had had as the most important sources of their own information about flexible/modular scheduling. The effect of the in-service experiences seems to have been to enlist the interests of teachers as an additional driving force in the direction of adopting the innovation. This is evident from the fact that in the first year of implementation, which was the pilot program year, more persons volunteered than could be used. In the second year, which was the first year of large-scale implementation, the great majority of teachers who participated reported that they had chosen to do so either because they saw advantages to the flexible/modular system or because they wanted the experience. Most significantly, teacher-respondents said that the decision to participate or not participate was motivated by persons' own reasons rather than because of peer influences or administrative pressure.

Barriers to Implementation

We have noted that the interests of the school hierarchy, the Franklin administration, and as a result of the in-service activities, the teachers, constituted driving forces in the direction of innovating. The barriers that were perceived initially were the limitations of the school physical facilities and the rigidities in the traditional time schedule. It was assumed that the

former problem could be solved by making certain alterations in the structure of the building, and that the technical capability to build a flexible/modular schedule would solve the problems of rigid time use in the traditional scheduling system. There was also an awareness expressed in the early documents that teachers would need special opportunities to learn the new and different skills associated with the flexible/modular system. Although there is little data available about events in the year of the pilot program, the fact that so many volunteered to participate in the second year of the program implies that the driving forces for the innovation were in the ascendancy and that the persons involved felt that the technical problems of facilities and scheduling had been sufficiently resolved to warrant going ahead.

Forces in the Re-freezing--or Maintenance--Stage

We have postulated that the unfreezing stage of the innovation process comprised the period from 1964 to 1966, during which a rather extensive Program of self-study and in-service experiences prepared the system for the innovation effort. The year of the pilot program and the first semester of the second year constitute the moving stage in our conceptualization. Accordingly, we have regarded all efforts after the first semester of 1967-68 as belonging to the re-freezing, or maintenance phase--that stage of the process in which efforts were directed

to fully institutionalizing the innovation and preventing a return to the situation as it had been. These efforts involved an attempt to solve a number of problems which had arisen and which constituted forces against the maintenance of the innovation.

Situational Forces

Several sets of forces in the situation appear to have been barriers to the maintenance of the innovation. These were facilities inadequacies, scheduling difficulties, the inability of many students to adjust their behavior to the demands of the system, and what ultimately came to be perceived by participants as a lack of support by the school system hierarchy. The first and the last items in this listing were related, inasmuch as the hierarchy failed to respond to requests for correction of shortcomings in the facilities which were identified repeatedly in the annual progress reports. The extensive alterations in the building which had accompanied the implementation of the program had proven to be unsatisfactory in several ways as described in Chapter V., above. The inability or unwillingness of the school system hierarchy to make resources available appears to have been interpreted by participants as a lack of support for The Franklin Plan's continuance.

The scheduling problem appears to have been most serious during the second and third years of the program. That this problem emerged in the second year when the program was expanded considerably implies that this

difficulty was related to the scale on which the program was implemented, as well as to the fact that the administration was committed to operating a traditional schedule and a flexible/modular schedule simultaneously. It appears that this problem was satisfactorily resolved after a period of experimentation.

By most accounts the most troublesome problem faced during the course of the innovation was the inability or unwillingness of a great many students to comport themselves in the school situation in accordance with adult expectations. Dissatisfaction with students' behavior appears to have been related mostly to their out-of-class behavior, specifically their use of unassigned time. It was asserted that students were using their unassigned time on non-educational tasks and were too often found in the halls or on the school grounds. In the second year of the innovation, students' marks were seen to decline in comparison to those of preceding years at Franklin High School. Although students' marks had recovered by the third year, and students' abilities to use the unassigned time in their schedules more productively seem to have improved, a fully satisfactory resolution of the problem was never found. There appears to have been a general consensus among the staff that The Franklin Plan program was "not for all students." The substantial reduction of the program in what was to be its final year was attributed to a continuing effort to determine a

system for ascertaining which students would be best able to function in the program, and to limit enrollment to that group.

Personal Forces

The initial project proposal contained a recognition that teacher re-training would be necessary in order to help staff members adjust their modes of instruction, planning, giving assignments, etc. to the new system. There is no evidence on which to draw conclusions about the experience of the participants in the pilot program in this regard, but the assessment data from the second year as found in the documents indicates that many teachers were frustrated in trying to make these adjustments. In response to these expressed frustrations an extensive in-service training program was instituted in the summer between the second and third years. Teacher-respondents in the interview sample indicated that they thought the area of teacher skill was one in which maintenance efforts had been most successful and that by the time of the program's termination teachers' skills had become highly developed. The implication here is that if teacher lack of skill had been a force against the program initially, the development of appropriate skills had become a force for the maintenance of the innovation by the time of the program's end.

In addition to the frustrations of learning to adjust teaching styles to the demands of the new system,

teachers in the second year expressed concern about what they perceived to be an increased work load stemming from the flexible/modular program. This increase was attributed to both the increase in the supervisory duties which devolved upon teachers as a result of the numbers of students on unassigned time, and to the additional time required to plan for the large-group and small-group instruction phases of the program. These problems appear to have been alleviated considerably by the addition of teacher-aides in the third year, at least insofar as the supervisory duties were concerned, but qualitative responses of teachers imply that even beyond these peripheral duties the tasks of planning for instruction were more difficult and time consuming under the flexible/modular system. One innovator confided that she could not have done it had she not been young and unmarried at the time and thus able to devote full time both in and out of school to the program.

We assume that if teachers evaluated the program as pedagogically effective, that would constitute a force for the continuance of the innovation, and conversely, if they found it not effective, that would amount to a force against its continuation. It was difficult to conclude on the basis of the data whether on balance this element weighed in favor of or against the innovation. Most teachers interviewed observed that there were mixed results, with the general assessment that whereas the

program was beneficial for some students it was not for others. Respondents indicated that their own personal assessments of the program's effectiveness were based on their observations of students' behavior in the halls and in class.

Interpersonal Forces

Neither the documentary reports nor the responses of teachers in the interview sample provided evidence that interpersonal forces were significant in either supporting or tending to undermine the continuation of the program. Although the patterns of participation of several departments seemed to show some intra-departmental influence, respondents discounted departmental sources of influence other than to say that some subject-matter areas lent themselves better than others to the variable uses of time and group size inherent in the flexible/ modular system. Neither the department chairmen nor the attitudes of other department members appear to have been a decisive influence, at least as reported by the persons interviewed. Similarly, when respondents were asked to name the persons with whom they communicated most about the program, and the persons whom they liked best, no patterns of communication or liking emerged which would suggest that cohesive groups either were influential in supporting or opposing the innovation's continuance. Respondents did not perceive the staff as polarized

during the course of the innovation. The Principal indicated that he did not perceive this staff as "political." Nothwithstanding these disclaimers, there were a number of references in the documentary summaries of teacher remarks and in the personal interviews conducted by this researcher to suggest that the program did arouse strong passions on the part of both supporters and opponents that were expressed in faculty meetings and in impromptu meetings in the lounge and other places where teachers gathered. The consensus, however, was that opponents did not coalesce and there was no organized resistance to the program.

The Force Field at Termination

The official explanation for the termination of The Franklin Plan at the close of the school year in 1970-71 was that the budgetary constraints imposed by the loss of revenues from the failure of voters to approve requested millage in the spring of 1971 made it impossible to continue staffing the program at the levels required. The impact of this factor on the staff of Franklin High School was described in the newsletter sent to parents as noted in Chapter IV, above. This force against the continuance of the innovation is shown in Figure 7.1, along with other forces which appear to have been present.

The citation of budgetary difficulties as the reason for terminating an innovative program logically raises a question as to whether this was the reason in fact, or whether it was a convenient excuse for ending what

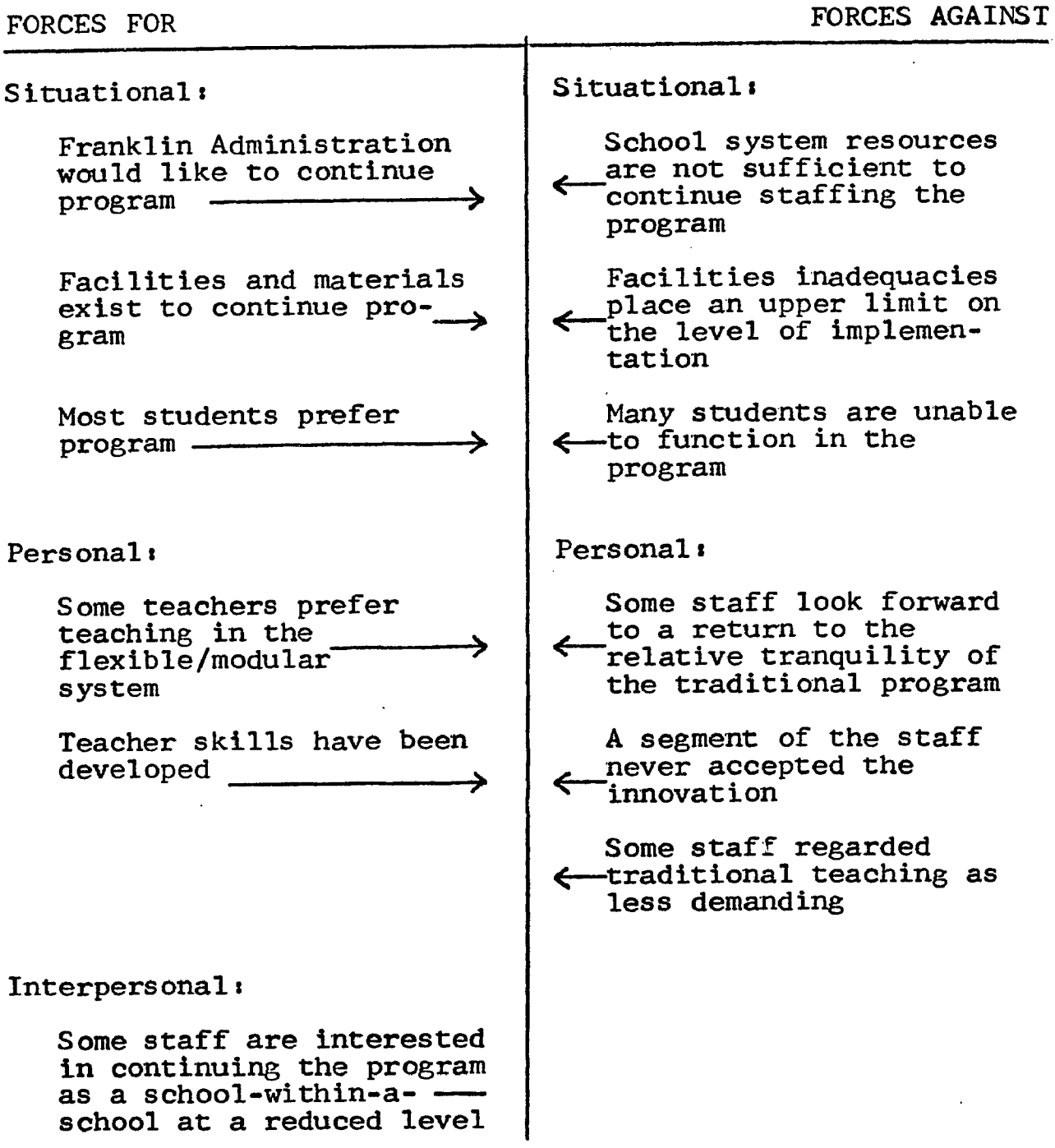


Figure 7.1.--The Force Field Showing the Balance of Forces at the Time of the Termination of the Franklin Plan.

had been evaluated as an unsatisfactory experience. When respondents were asked, however, what they thought the fate of the innovation would have been without the failure of the millage election, most indicated their belief that the program would have continued, either at the same level of participation as in its last year or at a reduced level. Thus in the perceptions of persons close to the scene, the cited financial reasons for the program's termination were valid ones. It would appear, therefore, that whatever forces were present that were internal to the system, the most important single force which brought about the demise of The Franklin Plan was an external force in the form of diminished financial ability of the school system.

Internal forces for and against the continuance of the innovation are also shown in Figure 7.1. One of the unsolved problems continued to be the inability of some students to function in the flexible/modular system. Furthermore, a satisfactory formula for determining which students ought to be included was never arrived at. We have indicated under "personal forces" that a force against maintenance was that some of the staff looked forward to the relative tranquility of the traditional program. This is in recognition of the feeling expressed by some respondents that the sharing of classrooms and the frequent movement which characterized the flexible/modular schedule, as well as the alleged looseness of control over student behavior had together contributed to the creation of a chaotic atmosphere. One respondent noted that the

halls became quiet "overnight" when the traditional schedule was restored. In addition to this factor, there had continued on the staff a number of persons who had never approved of the innovation and had declined to participate in it. The last item in the forces against column reflects the fact that even among those who elected to participate in the innovation there were some who regarded teaching in the flexible/modular system as harder work than teaching in the traditional mode.

On the forces for side of Figure 7.1 are listed several forces which would have tended to support the continuance of the program. Forces in the situation were the continuing support of the Franklin administration, the fact that facilities and materials had been developed, and the fact that most students seemed to prefer the flexible/modular system. Similarly, we would assume that the teacher skills that had been developed constituted a force in favor of maintenance, and it seems certain that a number of teachers really preferred teaching in the flexible/modular system. With respect to interpersonal forces, several respondents related that there was a group of teachers who had asked at the time the program was terminated that they be permitted to set aside a part of the building in which they could continue to operate The Franklin Plan as a kind of school within the school. Our research did not disclose much about this proposal or the reasons for its rejection. It illustrates, however,

that there was a residual interest among some of the staff in the direction of continuing, even under less than ideal conditions. Based on the responses of teachers to the question about the innovation's fate had the millage request not been rejected by the voters, it appears that the forces in favor of continuation would have been sufficient to maintain the innovation for an indefinite period of time at about the level of the final year. However, as has been noted, the withdrawal of financial support represented the intervention of an external force which was important enough to overcome the forces for continuation within the system.

Maintenance Strategies

Maintenance strategies were directed primarily at strengthening the technical capability of the system to support the innovation. This involved efforts to make the scheduling system more efficient, to alter the internal structure of the building, to acquire individualized learning materials, and to raise the level of teachers' skills. Efforts to improve the scheduling system appear to have been successful, as were the programs designed to raise the teachers' skills and to acquire individualized materials. The IMC, which was referred to as the "hub" of the individualized learning materials system was the recipient of a number complimentary remarks in the documents and in the interviews. As has been noted,

efforts to make the building itself more hospitable to the program were not completely successful. Some of the spaces which had been created were inadequate in a qualitative sense, and there was a continuing request for more space. Viewed chronologically, the maintenance efforts we have referred to were concentrated in the second and third years of the innovation. Thus it appears that by the fourth year the level of teachers' skills had been raised sufficiently and the scheduling system was functioning adequately. By the fourth year it had become possible for the planners to begin to develop new departures in the school program which were elaborations on the original theme of individualization of instruction; these were the independent study and continuous progress programs which we have described in Chapter V.

Another area of problem-solving efforts was attempting to deal with the inability of many students to perform in the desired ways. Several efforts were mounted in the second and third years relating to this area that was termed "student responsibility." One of the key assumptions and one of the most desired outcomes of The Franklin Plan was that students would be and would become more able to exercise responsibility for the furtherance of their own learning. As we have noted, an opinion seems to have been formed among the staff that this was not a realistic assumption or goal for many students. The most relied-upon method for dealing with this problem over the course of the innovation was selective enrollment. Thus in

the third year, the number of students enrolled in the program was reduced by eliminating almost all tenth graders and all upper classmen who had had low grades or attendance or other disciplinary problems in the second year, and by permitting students and parents of students to ask to be placed in a traditional program. This particular method of solving the problem reached its height in the final year of the innovation, when the only classes scheduled in the flexible/modular system were those enrolling what were generally regarded as academically more able students.

There were additional attempts to deal with the problem of student responsibility. The implication in the documentary record is that these programs were either found to be ineffective or for some reason were not fully carried out. The effort which received the greatest coverage in the documents was that of the team from The University of Michigan directed by Frank Maple of the School of Social Work. This group worked with a small number of teachers and students to develop small-group teaching skills among the teachers and study skills among the students. It seems that this group's impact remained limited to the staff members directly involved, because when respondents were probed on this matter, most had little recollection of the project and some indicated complete lack of knowledge of it. The advisement team approach, in which each teacher would become a sort of academic advisor to a group of about twenty students was

tried in the third year, but was plagued by logistical problems and apparent lack of interest and was abandoned. A similar fate seems to have befallen the "Way of Learning Inventory" and the "Responsibility Scale." The former was developed with the intention of deriving a profile for each student which would show in which modes, e.g., visual, auditory, verbal, the student learned best; this information would then be used in designing learning experiences which would make optimum use of the student's learning style. The "Responsibility Scale" was a device to be used in pre- and post-testing Franklin students to measure whether their experience in The Franklin Plan affected their respective abilities to exercise responsibility in learning activities. These programs were conceived in the second year of the innovation. Some difficulties in implementing them were mentioned in the documentary assessments of the third year, but there is no further mention of them in the record, nor did they emerge during the personal interviews.

Findings

At the beginning of this study we stated that our purpose was to inquire into the process by which this particular innovation was instituted and maintained, with the end in view of being able to contribute to an understanding of how the staying power of educational innovations might be improved. It was noted initially that some findings might well be innovation-specific, inasmuch as flexible/modular scheduling is an innovation with a

number of special characteristics. Our hope has been to avoid focusing too narrowly on findings that might be relevant only to situations involving this particular innovation.

The "Band Wagon" Effect

The adoption of an innovation as popular as flexible/modular scheduling was during the 1960's raises the question of whether the effort was motivated by a wish to be up-to-date--to get on the "bandwagon," so to speak. Respondents rejected the idea that this was true in the case of The Franklin Plan. Several of them expressed a belief that Franklin High School was "out front" in the adoption of this particular innovation. One respondent indicated he had not heard of flexible/modular scheduling until he came to Franklin. If there was a band wagon influence at work it was not perceived as such by the teachers we interviewed. To the extent that this factor was influential its point of application was apparently not directly on the teachers who elected to adopt but indirectly through the consultants, the content of the in-service activities, and the exemplary schools which were visited by members of the staff.

Administrative Influence

We have noted that the central administration of the Livonia Public Schools constituted a driving force in the direction of innovating. This force was not perceived

as influential by teacher-respondents, however. The building principal was chosen overwhelmingly by teachers as the most important influence in the decision to adopt. The Principal was regarded by the respondents in our sample as the foremost advocate of the innovative program. This role for the principal is consistent with the findings of the Medeiros, Rubenow, Beggs, and Lawrence studies cited in Chapter II.

Sources of Teachers' Information and Attitudes

Based on the interview resppnses it appears that teachers had little independent information about flexible/modular scheduling; their attitudes and opinions were almost solely dependent upon the information they received as a part of the in-service training and self-study programs, consisting of presentations by consultants, viewing of films, and visits to exemplary schools. Respondents in the sample reported very little influence from alternative sources such as independent reading or course work.

Teachers' Decisions to Participate

A most consistent finding was that teachers reported having made the decision as to whether or not to participate in the flexible/modular program independently, on the basis of their own perceptions of the program's desirability. They disavowed the influence of friendship or departmental affiliation. This attitude carried over as

well into the teachers' evaluations and assessments of the program, according to our respondents. The tendency to independent decision-making in this regard was further illustrated by the fact that no respondent was able to cite the existence of any organized opposition to the program, although all acknowledged that there were a number of persons on the staff who desired the innovation's termination. Additionally, although the program seems to have aroused passionate arguments in faculty meetings and other places where teachers gathered, respondents did not perceive it as having polarized the staff.

Community Influence

Respondents reported their perceptions that the community had placed a relatively small role in either the initial innovation-decision or in later evaluations of the program. Community reactions to the program were reported as being of extremely little influence in determining teachers' own evaluations of the program's desirability. A number of respondents felt that parents generally approved of the program if their students were doing well in it, and disapproved if their students were having difficulty.

Voluntarism and Compliance

Teacher-respondents uniformly supported the contention in the documents and reiterated by administrator-respondents that teachers' participation in the innovation

was a voluntary matter. It is apparent that no one who was interviewed felt that participation was coerced, although one rejecter confided that a stigma seemed to be attached to rejecters by administrators. This latter was an isolated comment. Several respondents mentioned that they thought the element of voluntary participation accounted for the absence of organized resistance to the program. On the other hand, it was acknowledged by both teachers and administrators who were interviewed that the fluctuations in levels of implementation from year to year were the product of administrative decisions. These decisions as to the scale of the program in each of those years were an important part of the maintenance process, as the planners sought to find the optimum level at which the program could be supported. We would conclude from these facts--that the participation by teachers was voluntary and that the aggregate levels of participation in each year were administratively determined--that many teachers stood ready to volunteer to staff the innovative program at whatever level as administratively decided upon.

Rating the Forces

Forces For the innovation's continuance.--The strongest and most important force for the continuance of the innovation appears to have been the support of the local school administration. In this the administration was abetted by the willingness of the teaching staff to volunteer to staff the program at whatever level was decided upon.

Based on the comments of respondents, it seems that the level of teachers' skills had been developed to the extent that teachers felt competent to make these adjustments.

Forces Against the innovation's continuance.--Ultimately the most important force contributing to the program's demise appears to have been the inability of the school system to continue supplying the necessary resources. This was expressed initially in the failure to respond to request for more space and improvements in the facilities and finally in the reductions in staff that brought about the program's termination. This force was an intervention from outside the immediate Franklin High School system, but there were also forces within the system that constituted barriers to the innovation's successful maintenance. The easiest of these to overcome were those barriers related to the technical capability to operate the program. Included here were such things as the ability to schedule, organize space and time, and develop teachers' skills. The most resistant barrier internal to the system was the inability of students to perform in accordance with program expectations. This particular factor seems to have been the cause of a great many teachers questioning the program's efficacy and desirability.

Evaluation of the Innovation Process

In this section we shall attempt to discuss selected findings with respect to their relevance to the larger

topic of innovation in education systems, compare these findings with those of other studies, and comment upon elements of the innovation process at Franklin High School.

We have noted that problem-solving efforts appear to have been successful in improving the technical capability of the system to support the innovation, with the exception that resources were not available to make the additions to and adjustments in the physical facilities that were requested after the second year. Many of the problems encountered at Franklin High School appear to be endemic to flexible/modular sceduling. Each of the studies of flexible/modular programs which we reviewed found that student use of unassigned time was a problem in programs of this type. Other problems associated with flexible/modular scheduling in the literature were attendance problems and excessive stress on teachers and administrators. These were also prominently mentioned by respondents and in the documentary record of The Franklin Plan. In this respect it might be concluded that the problems encountered at Franklin were not unusual nor perculiar to The Franklin Plan. None of the studies reviewed provided solutions to these problems, so it may be that the difference between success and failure with flexible/modular scheduling lies in different levels of tolerance for these problems in adopting systems. Although we would not label it a finding, this conclusion was suggested by the fact that in relating their own assessments of The

Franklin Plan, respondents who agreed in acknowledging the existence of these problems evaluated them differently; some regarded the students' freedom as healthy and growth-producing, while others viewed it as destructive to the learning environment.

It has not been our purpose in this study to evaluate flexible/modular scheduling as an instructional model. Certain observations seem to be in order, however, based upon evidence generated by other studies reviewed and by the experience of The Franklin Plan. Flexible/modular scheduling by its very nature is disruptive of the "regularities" in traditional school practices cited by Sarason.[1] It imposes on practitioners a heavy "cognitive burden," which Orlosky and Smith found to be a strong impediment to successful adoption of innovations.[2] Lippitt noted that educational change requires significant changes in the values and attitudes of practitioners, in addition to skills.[3] Johnson, in his review of literature, also found that the norms of schools were barriers to change.[4]

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[1]Cf., Seymour Sarason, The Culture of the School.

[2]Donald Orlosky and B. Othanel Smith, "Educational Change: Its Origins and Characteristics."

[3]Ronald Lippitt, "The Use of Social Research to Improve Social Practice," in Watson, ed., Concepts for Social Change.

[4]David W. Johnson, "Influences on Teachers' Acceptance of Change."

In the case of The Franklin Plan, it has been noted that many staff members reacted most negatively to what they interpreted as a breakdown in the learning environment due to excessive student freedom. The most frequently cited example of this was in what was termed "abuse" of unassigned time, but some noted in addition that one of the outcomes of excessive student freedom was a breakdown in respect for authority, it seems evident from both the documentary and interview data that although teachers may have mastered the skills to teach in the flexible/modular system, the attitudes of many of them remained wedded to the expectations of the traditional model.

In their efforts to implement The Franklin Plan on a basis in which teacher participation would be a voluntary matter, the planners recognized that the program would not be suited to the needs, talents, and preferences of all teachers and students. Nonetheless, there appears to have been an effort to implement the program at the highest level of participation at which the system would support it. This tendency to move toward the highest sustainable level of implementation brought the system into conflict with problems of scale. In each of the years in which the system moved closest to full implementation it was necessary to pull back from that level in the succeeding year. This was viewed by the planners as a problem rooted largely in the inadequacy of the facilities, but it seems to have also been a result of enrolling more

students than could cope with the program's demands. It may also have been due to the involvement, at higher levels of participation, of teachers whose interest in and commitment to the program was marginal. This was suggested by one respondent who indicated that the decision in the final year to limit the program to those classes enrolling academically more able students had had the side-effect of excluding from the program a number of teachers who really wanted to participate but who did not teach such classes. It has been observed that teachers seemed ready to volunteer to staff the program at whatever level the administration decided to implement it in each of those years. If we can regard as stable the number of teachers who indicated at the end of the second year that they preferred the flexible/modular program (slightly more than one-third of the staff), it is evident that in the years of high participation there may have been many whose commitment to the program was less than complete. This conclusion was reinforced by one respondent who remarked that the level of participation in the program was not a good index of the level of support for it among the staff.

Some Possible Alternatives

Consideration of Students' Needs

We turn now to a consideration of some things that might have been done differently in the planning and implementation of The Franklin Plan. Both the Rubenow and

Salmon studies cited in Chapter II, above, found that successful innovations were characterized by having considered specific needs of students during the planning stages. Judging from the fact that many of the Franklin students had difficulty in adjusting their own behavior to the flexible/modular schedule, it would appear that for a number of students, the flexible/modular system was not appropriate to their needs. A number of studies cited in Chapter II found that the most common reason for instituting flexible/modular programs was to promote the individualization of instruction. Taking as a cue the term "individualization," it may be that the freedom to structure one's own time which is characteristic of flexible/modular programs is not the best way of individualizing instruction in every case. Had the planning for The Franklin Plan begun with a more careful scrutiny of the particular needs of classes of students at Franklin High School it may have been possible at the outset to have developed other instructional models which would have been efficacious with students of different types and with different needs.

We have seen that one of the strongest barriers to the successful implementation of The Franklin Plan was negative teacher reaction to the ways in which students chose to use unassigned time. This use--or abuse--of unassigned time was a sub-part of the larger problem that was most frequently labeled students' "lack of responsibility." The ubiquitessness of this particular

problem suggests a question about the meaning of the students' behavior. It might have meant, as it was most generally interpreted, that large numbers of students were indeed unable to exercise responsibility for their own learning. Another interpretation is possible, however, and that is that students in their failure to comply with expectations may have been sending a message about the way in which they evaluated the importance of the tasks they had been assigned.

The Lawrence study cited in Chapter II found that there was a direct relationship between successful implementation of flexible/modular programs and the extent to which curricular offerings in the adopting schools were expanded. It was, however, the stated purpose of The Franklin Plan to maintain the curricular offerings as they had been. Stating that The Franklin Plan would involve a change in organizational structure, the planners asserted that "Course content, textbooks, and materials would be the same as employed in the traditional organization."[1] Other passages imply that curricular change was a long-term goal--as in the development of independent study and continuous progress programs--but in light of the findings of the Lawrence study it is conceivable that if an expansion of curricular offerings had accompanied the introduction of the program the responses of students might have been more positive.

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[1] Franklin Plan, 1966, p. 54.

Strengthening Interpersonal Forces

It has been noted that interpersonal forces did not seem to play a part in teachers' decisions to participate or not participate in the innovation. Neither opponents nor supporters of the program appear to have formed cohesive groups. Departmental affiliation did not influence teachers' decisions, according to respondents, except insofar as the particular subject-matters lent themselves to the flexible/modular system. There reportedly was a group who, when the innovation was about to be terminated, sought to continue it in a greatly reduced form and staffed only by themselves. As nearly as we can tell, this kind of intra-staff collaboration was a rarity. The closest thing approaching intra-staff organization had been teaching teams, and we were told by a number of respondents that even in team-teaching situations teachers had tended to retain their individuality. In short, there appears to have been an absence of group spirit or a feeling of "we-ness" that might have helped teachers overcome some of the difficulties and doubts about the program's desirability.

We have remarked that we were unable to find any systematic influence on participation in the program which could be attributed to departmental affiliation. The experience of the home economics department was unusual in this respect, however. This department consistently had the highest level of participation among the several departments until the final year of the innovation when

their department was excluded from the program by administrative decision. It is possible that this difference from the patterns of other departments may be accounted for by chance. It might conceivably be attributed to the small size of the department, or to the relative homogeneity of the students served. There are arguments to dispose of each of these explanations, however. Small size was a characteristic shared with the art department and the foreign language department, neither of which developed a pattern matching that of the home economics department. Similarly, relative homogeneity of students enrolled was a characteristic also of the foreign language and industrial education departments, and neither of these had similar patterns of participation.

A difference between the home economics department and other departments that may have some explanatory value is that the members of the former shared a single suite of classrooms. This may seem a trivial difference but it had the effect of keeping the members of this department in regular daily contact in a situation in which cooperation and communication were essential. We have mentioned the fact that most respondents reported that teachers generally made their own decisions with respect to the program. This independence of teachers is facilitated by the separation of teaching stations into separate classrooms. The members of the home economics department carried on their daily activities in an atmosphere of greater functional interdependence than was

true of other departments or other teaching teams. It could be said of this department that they were in effect a department-sized teaching team. It has been noted previously that the teachers in this department were the only ones among our respondents who consistently selected each other on the questionnaire items which asked about communication, sharing, and liking patterns.

The maintenance strategies adopted by the planners at Franklin High School were directed primarily at providing appropriate physical and material facilities and at strengthening the skills of individual teachers through extensive in-service training programs. We did not find evidence that efforts were made to systematically develop support groups within the staff as a part of the maintenance process. One respondent spoke of the high degree of group support felt during the first year of the innovation when the group of innovators consisted of less than twenty teachers. This period was marked, according to this person's account, by a great deal of daily contact between participants and administrators. This "hand holding," in the terms of the respondent, helped innovators adjust to the stresses of the situation. This quality of cohesiveness appears to have been lost when the program was increased in scale.

School-Within-A-School

Among the suggestions made by the Maple team from The University of Michigan was a proposal that the planners

consider organizing The Franklin Plan as a separate unit within Franklin High School. In this scheme those staff members who were fully committed to the concept would be assigned to a particular part of the building along with an appropriate number of students. There they would work together on learning the skills needed to function in the flexible/modular system. Under this proposed format, students would have been directly involved in helping to plan learning activities. Another part of this suggestion would have had both teachers and students not enrolled in the program shifted in and out for short periods of time in order to partake in demonstration and training activities.

Although not without its own potential problems, one of which might have the creation of an atmosphere of elitism against which non-participants might have reacted negatively, the Maple proposal--had it been adopted--might have mediated some of the difficulties which arose. It would for example, have enabled persons who were favorable to the concept to have had a working environment which was supportive. By providing a kind of "nursery" for developmental aspects of the program it may have made possible a more orderly growth and diffusion of the requisite skills and attitudes to other members of the staff. Additionally, that part of the design which provided for student participation in planning might have helped the program develop in ways that were more suited to students' needs and interests. The impression one

receives from reviewing the documents is that in spite of several efforts to elicit reactions and evaluative comments from students, throughout the course of the innovation students were cast more in the role of acted-upon than of actors. The bulk of maintenance efforts seemed to be directed at improving the system's ability to execute, whereas students' attitudes and skill levels were regarded as relative constants. The role for students envisioned in the Maple proposal may have enlisted some of them as real participants in the change effort.

The Use of Consultants

Consultant assistance was used in two ways during the course of the innovation process at Franklin. The first was in the activities of the unfreezing stage of the process, in which people from several local universities were called upon to speak to the faculty about innovations in education and to explain the processes and techniques of the flexible/modular system. The second was during the maintenance, or re-freezing stage, when consultants were called upon to assist in solving the various problems that had arisen.

With respect to the first use, that of disseminating information to the staff about new ideas in education in general and about flexible/modular scheduling in particular, the use of consultants appears to have been very successful. Teacher-respondents indicated that they received most of

their information and opinions about flexible/modular scheduling in this way. Moreover, the unfreezing stage of the process appears to have been successful in involving large numbers of the staff in planning for the innovation; at least, respondents perceived themselves as having been consulted in the innovation-decision. One respondent related that he had been "sold" on the innovation by the presentations of consultants. Another scored the consultants who had been engaged at this stage of the process for having painted too rosy a picture of what was to be expected if the program were adopted. This respondent indicated that he had felt sold out by the consultants who had advocated flexible/modular scheduling, had convinced everyone of its desirability, and then had left the people at Franklin to work out the details of implementation. This would seem to be a practical example of what Rogers had in mind when he observed that "Change agents should recognize their responsibility for the consequences of innovations they introduce. They should be able to predict the advantages and disadvantages of an innovation before introducing it to their clients, but this is seldom done."[1] It is difficult at this remote point in time to pass judgment on the behavior of consultants or "change agents" in this particular situation. We would not wish to deny persons who have developed expertise in an area the opportunity to advocate

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[1]Everett R. Rogers, Communication of Innovations, p. 319.

particular innovations which they find worthy. Without passing judgment, however, the fact that some persons felt they had been encouraged to hold unrealistic expectations merely underlines the importance of change agents' retaining objectivity and of presenting the possibility of as wide a range of consequences of their proposals as intelligence will allow.

Another element which we noted was the use of consultants and outside experts as a part of the maintenance phase of the innovation. The use of three different sets of consultants was mentioned in the documentary record. We have described the use of the Maple team from The University of Michigan. Initially engaged to work with staff members on techniques of small group instruction, this group's contact with the system was extended and expanded into the project to assist a small group of teachers and students in the development of small group teaching techniques and study skills. This relationship lasted eighteen months, from the middle of the pilot year, in 1966-67, until the end of the second year, 1967-68. As we have noted earlier, the impact of this effort seems not to have spread beyond those staff members who were directly involved. A second use of outside expertise was to engage Mr. Donald Barr of the Institute for Social Research at The University of Michigan to assist in the preparation of what came to be called the "Student Responsibility Scale." This was an effort

to measure students' aptitudes for the flexible/modular program and, through repeated use, to determine whether experience in the program produced growth in students' responsibility. Although this scale was reportedly administered to one group of students,[1] there is no record of its later use or the results of its use. The third consultant relationship mentioned in the documents was with Mr. Joseph Hill of Oakland Community College. He assisted members of the staff of Franklin High School, along with others from other sub-projects in Livonia Schools, in the development of performance goals to measure the progress of their respective projects.[2]

This brief summary of the manner in which consultants were used illustrates what appears to have been a consistent strategy for the use of consultant services. The pattern followed at Franklin appears to have been to identify problems needing attention, and then to consult outside sources for assistance. It is our impression that a more effective use of such expert assistance could probably have been achieved if the planners instead had developed a continuing relationship with one consultant or consulting agency. The three consultants we have mentioned were engaged in activities

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[1]Franklin Plan, March, 1969, p. 74.

[2]Ibid., p. 5.

relating to three different, but closely related elements of the program. The Maple team was working on productive use of unassigned time from the angle of improving teachers' assignments and use of small-group skills, and by helping students learn study skills. The "Responsibility Scale," which was developed with the assistance of Donald Barr, from the Institute for Social Research, was also concerned with the students' use of unassigned time, which was a major concern within the larger context of student responsibility. Somewhat more remote was the effort, with the assistance of Joseph Hill of Oakland Community College, to devise a scheme for measuring the attainment of program goals. This project, however, also contained elements related to students' development of responsibility and programs designed to attain that end.

Without depreciating the efforts or the contributions of any of the various consultants either in the planning or maintenance stages of the innovation, it is possible to speculate that a more unified assault on the problems encountered during the course of the innovation might have been possible had the consultants involved had a more inclusive perspective on the various dimensions of the problems. Evaluation of program objectives, student use of unassigned time, teacher skills, and student responsibility or the lack of it, it can be argued, are closely interrelated, yet in this case, each of these elements was being attacked separately. It is our impression that

problem-solving efforts were fragmented as a result of this practice. Another factor which tends to support this view is that, probably because of the short term of the contact each of the consultants had with the system, some of the efforts begun with their assistance either were not carried out to the fullest or were in other ways abrogated. Specifically, we can refer to the program in small-group skills development begun by the Maple team--a program that seems to have had little impact beyond those persons directly involved in it.

Our review of research on flexible/modular scheduling led to the conclusion that it is a particularly difficult innovation to implement. It requires considerable adjustment in the skills and attitudes of practitioners and students, and was found by other researchers to impose heavy burdens on teachers and administrators. These findings would appear to be borne out in the record of The Franklin Plan. It appears that the staff of Franklin High School could have benefited from a continuing relationship with a single change agent or change agency which could have eased some of the problem-solving tasks which the administrative staff had to carry in addition to carrying out the necessary tasks of "keeping school." As it was, each of the consulting agencies was employed for a relatively short time in working on a small segment of the total problem, and in isolation from one another. The administration had the

multiple tasks of assessing needs, locating the kind of help that was needed, and coordinating the activities of the consultants--all of these in addition to overseeing the daily operation of the school.

Lippitt, Watson, and Westley outline a change process which includes seven phases:

Phase 1: The client system discovers the need for help, sometimes with stimulation by the change agent.

Phase 2: The helping relationship is established and defined.

Phase 3: The change problem is identified and clarified.

Phase 4: Alternative possibilities for change are examined; change goals or intentions are established.

Phase 5: Change efforts in the "reality situation" are attempted.

Phase 6: Change is generalized and stabilized.

Phase 7: The helping relationship ends or a different type of continuing relationship is defined.[1]

These phases assume a process of planned change in which a consulting agency or professional "change agent" is involved throughout as a helper to the client or client system.

An examination of the process followed at Franklin shows that different change agents were used at different

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[1]Ronald Lippitt, Jeanne Watson, and Bruce Westley, The Dynamics of Planned Change (New York: Harcourt, Brace and World, Inc., 1958), p. 123.

phases of the change process, that during some phases none were used and that some phases were in fact skipped. Specifically, in Phase 1, change agents were used to expose staff members to the possibilities of change; Phase 2 was skipped; Phases 3 and 4 appear to have been carried on within Franklin High School by local personnel without outside assistance; Phases 5 and 6 were characterized by the fragmentation we have alluded to, and Phase 7 did not exist.

Havelock describes three primary roles a change agent might play in a change situation: (1) catalyst, who gets things started; (2) solution giver, who had definite ideas about what the form of the change should be, and who works to implement it; (3) process helper, who provides clients with assistance in working through problems and developing problem-solving skills. He asserts that the last of these is probably the most important role. Specifically, fulfilling this role involves the helper in the following activities:

(a) showing the client how to recognize and define needs
(b) showing the client how to diagnose problems and set objectives
(c) showing the client how to acquire relevant resources
(d) showing the client how to select or create solutions
(e) showing the client how to adapt and install solutions

(f) showing the client how to evaluate solutions to determine if they are satisfying his needs.[1]

Usage of consultant services at Franklin appears to have fitted the first two classifications set forth by Havelock, rather than the third. During the unfreezing stage of the innovation process, consultants were used to very good effect as catalysts. During the maintenance stage, which corresponds to the fifth and sixth phases in the Lippitt, Watson, and Westley model, it appears that consultants were used primarily as solution givers, even though a part of their efforts may have been process-oriented. Had a single consultant or consulting agency been involved throughout the process, the following beneficial results may have emerged:

1. A change agent who had committed himself to the program for a protracted period of time would have been more interested in the long-term effects of the innovation at Franklin High School than with promoting the merits of a particular instructional model.

2. A single agent could have helped the system to diagnose and see the connections between the wide range of problems which emerged during the maintenance stage.

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[1]Ronald G. Havelock, A Guide to Innovation in Education (Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, The University of Michigan, 1970), p. 7.

3. A single agent could have taken the responsibility for locating relevant research on the experiences of other schools with flexible/modular scheduling and prepared the system better for some of the problems which arose.

4. A single agent could have helped the planners to produce a comprehensive evaluative design at the outset of the innovation, including the setting of realistic goals. We have seen that although the grades earned by students and the results of standardized testing indicated The Franklin Plan was as effective as the traditional program in attaining traditional goals of instruction, relevant measures of the special objectives of flexible/modular programming were not arrived at.

5. A single change agent could have helped the system to follow through more effectively on some of the promising innovations that were designed within the context of The Franklin Plan (e.g., advisement teams, independent study) as well as assisting in developing a process for continuing change efforts.

None of this is to imply that change agents are miracle workers or that all of the outcomes described above could have been perfectly achieved. These projects and outcomes are implicit, however, in the Havelock and Lippitt, Watson, and Westley models that we have described. We think that particularly in the case of an innovation as complex, as taxing, and as comprehensive as flexible/modular scheduling, local personnel need the continuing

assistance of people who are trained and have the skills to assist in the several dimensions of the change process.

Implications

One of our stated purposes for this study has been to derive implications from the study of The Franklin Plan which might be useful in other change situations. Based on findings from this study and a review of related research, the following implications appear to be warranted.

The role of the building principal is central in creating and sustaining an innovative program. Respondents were in agreement that the strongest and most important force for the program, both initially and throughout the maintenance period was the interest of the Principal.

In-service training can be an effective method for sensitizing a staff to and diffusing information about innovations. Noting the reported lack of information derived by respondents in this study from other sources such as professional reading and course work, in-service programs may be the only effective way of disseminating new ideas widely among the staff.

Innovating systems should carefully consider the longer-term as well as the short-term costs of proposed innovations, in both human and material resources, for it seems that problem-solving efforts in the case of The Franklin Plan were hampered by a lack of resources.

All of the persons whose behavior must change as a result of the innovation should be involved in the

planning process and special provisions should be made for building training and experiences into the program to help participants learn the desired behaviors. This process appears to have been done well in The Franklin Plan insofar as it related to the professional staff, but not as it related to students.

All of the evidence gathered in this study depicts teachers as quite individualistic in the performance of their professional tasks; therefore, if an innovation requires teachers to collaborate or if the establishment of a group spirit will contribute to its success, special provisions should be made to create such a spirit, perhaps through the development of functional work groups or a similar structure to provide support for persons attempting to learn new behaviors. The system of organization by academic departments does not appear to have served this function in the case of The Franklin Plan.

When an innovation, as flexible/modular scheduling does, calls into question a number of traditional expectations about the behavior of teachers and students, the nature of the new behaviors ought to be clearly specified in advance and appropriate systems should be designed to measure the attainment of the new objectives.

Innovators should be aware that solving the technical problems relating to the implementation of an innovation may be easier than changing the attitudes of participants.

Force-field analysis can be a useful technique in assessing problem areas and disclosing strengths to a assist in problem-solving efforts during the several phases of the innovation process.

Especially in the case of complex or large-scale innovations, the assistance of outside consultants or change agents can contribute to the effectiveness of problem-solving efforts in each of several stages of the change process. It is advisable to establish a relationship with a single consultant agency who can become familiar with the innovation in all its manifestations and can therefore aid in finding solutions to the broad range of problems which might arise in a change situation.

Suggestions for Further Research

In this study we have attempted to document and analyze a range of forces internal to the innovating system (which we have defined as Franklin High School) which affected the implementation and maintenance of an innovation. We purposely excluded from the study those forces in the environment which may also have had an effect on the innovation process. The impression gained from our sample was that the influence of the school community, at least as perceived by our respondents, was negligible, but that the influence of the school system hierarchy was important, especially in the maintenance and terminal phases. School system managers have a great deal of power to affect innovative processes through their

control of the system's resources. It would be interesting to study the forces which motivate system hierarchies in the making of such decisions.

The behavior of students, and teachers' and administrators evaluations of the behavior of students were topics that arose frequently in our data. We purposely excluded students from our sample of respondents in order to keep the problem within workable bounds. Student attitudes and behavior seem to have played such a prominent role in this innovation situation, however, that an inquiry into student attitudes toward innovations would appear to be a fruitful area for study.

We have noted that teacher-respondents reported that they evaluated the program's effectiveness and its desirability for them on very individualistic grounds. It would seem that further study into the components of the personal forces which affected individuals' evaluations of the program would be worthwhile. Such a study should perhaps be a participant-observation study with continuous data collection or a longitudinal study of one or more change efforts, using a random sample of teachers and other school personnel. Similarly, even though our respondents discounted the influence of interpersonal forces in this particular case, an interesting topic for study would be an examination of intra-system structures and other factors which might be related to higher levels of interpersonal influence, whether in favor of or against innovation and change.

Some Comments on Innovation in Education

In our study of The Franklin Plan we have avoided the question of whether or not the program was a pedagogical success. Based on standardized test data and students' marks it would appear that it was as efficacious in producing student learning of the type measured by those devices as the traditional program had been. Yet it failed to attain full implementation and was no institutionalized as a permanent part of the Franklin High School program. In a time of resource shortages the system was returned to a traditional program. Thus the criteria which Thelen has said ought to be applicable to a situation qualifying to be termed as in instance of change.[1] The changes in the force-field which were brought about were not sufficient to support the system in a new quasi-stationary equilibrium in which flexible/modular scheduling would continue to play a role, although as several respondents attested, many of the specific instructional practices nurtured in the innovative program were carried over into the traditional model.

It seems clear to this writer that the full institutionalization of The Franklin Plan was thwarted by a combination of forces that was specific to the Franklin

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[1] Cf., page 4, above.

High School situation. This is not to imply that every change situation is totally unique. If it were so, research of this type would have little utility. However, even though we should expect to find similar forces at work in different situations, the particular mix of these forces and their relative strengths will probably differ from situation to situation. The implication to be derived from this argument is that the focus of change efforts in education ought to be at the level of adopting systems. It is difficult in education to say that a given procedure is demonstrably superior to others in any and all situations. Thus, this or that potential adopting system cannot be assured that if they adopt a particular innovation they will be able to show measurable improvement in the attainment of their goals. Therefore, where innovation and change in education is concerned, each potential innovating system ought to be encouraged to study its own situation, the needs and talents of its own personnel, including its clients, and to select from among the many innovations available those which may work in their situation. This effort to make the innovation fit the local situation would probably result in adaptations rather than outright adoptions. What this would require on the part of local schools and school districts would be the development of the disposition and the skills to view the educational process as continually under assessment and open to new ideas. What it would require on the part of the larger educational system is an active

effort not only to communicate to the practicing systems the findings of research in the behavioral sciences and in education, but to assist them in the development of the requisite problem-solving orientations. In the Havelock study of a random sample of innovating districts it was found that university, state, and federal agencies were mentioned as key factors in the innovation effort in less than 5% of the cases.[1] We think this is evidence that there is room in innovation efforts at the local level for outside assistance.

In summary, if no single instructional model or set of procedures can be demonstrated to be universally more effective than all others, it follows that local schools and school systems must develop the capacity to sift new programs and locate those which can contribute to an improvement in their own performance. This implies the need for the development of a macro-system for the untilization of knowledge in education, in which schools develop the capacity to engage in problem-solving activities and in which agencies at other levels are actively involved in assisting practitioners in this process. The outcome should be an instructional program for each school that fits its peculiar needs and can be

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[1]Ronald G. Havelock, Educational Innovation in the United States, p. 16.

changed as needs change. This may well mean different programs in different schools, for as John Dewey has said, "A single course of study for all progressive schools is out of the question."[2]

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[2]John Dewey, Experience and Education, Collier Books (New York: The Macmillan Company, 1970), p. 78.

APPENDIX A

APPENDIX A

FRANKLIN PLAN STUDY INTERVIEW SCHEDULE

1. We are interested in how you perceive the manner in which the Franklin Plan became an innovation at Franklin High School. Please indicate to what extent you think each of the following items was important in developing the original idea to institute the Franklin Plan. Place a check mark in the appropriate column.

Column A means "to a great extent"
Column B means "to quite an extent"
Column C means "so some extent"
Column D means "a little"
Column E means "not at all"
Column F means you cannot say because you have no evidence.

The decision to institute The Franklin Plan was influenced by:	A	B	C	D	E	F
a. The popularity of individualization of instruction in the larger educational community						
b. The popularity of flexible/ modular scheduling in the larger educational community						
c. A feeling among the Franklin staff that they wanted to innovate						
d. A desire to innovate on the part of a small group on the staff						
e. A desire to innovate on the part of the Franklin administration.						
f. Encouragement from the Central administration to innovate						

A	B	C	D	E	F

g. Encouragement from the community to innovate

h. Expressed or perceived desires of students for a different kind of program

i. Other_____

2. Now please consider the list and place a letter M next to what you consider the Most important influence, and a letter L next to the least important.

3. Please indicate how helpful or influential the following items were in preparing the staff for The Franklin Plan, and how they affested you personally. In column A indicate which item you perceive as most important to the staff as a whole by writing the number 1 next to the most important for the staff as a whole, and a number 4 next to the least important. In column B write the number 1 opposite that which was most important for you personally, and the number 4 opposite that which was least important.

	A	B
a. In-service programs featuring speakers and/or films	____	____
b. Visits to innovative schools	____	____
c. In-service programs of longer duration (workshops) focused on special problems	____	____
d. Professional reading in journals and books	____	____
e. Work in school-established study committees	____	____
f. Informal discussions with colleagues	____	____
g. Other_____	____	____

4. Once The Franklin Plan had been instituted, which of the following most influenced your own personal evaluation of the Plan's effectiveness and desirability? Please rank the items in order of importance, with number 1 assigned to the most important, number 2 to the next most important, etc.

   a. ____ Evaluative data about student performance, like grades, attendance data, etc.

   b. ____ Your own observations in class and in the halls

   c. ____ The comments of your colleagues

   d. ____ The comments of students

   e. ____ Your perceptions of community attitudes

   f. ____ Its effect on your own working conditions

5. Were you aware of any group who expressed an interest in abandoning The Franklin Plan? That is, not only rejecting it for themselves but wanting to see it discontinued completely?

   If yes:

   a. Inside the school or outside?

   b. How was the interest expressed? Overtly? Covertly?

   c. What was the outcome?

   If no: How do you explain its lack?

6. Here are graphic representations of the levels of participation of several different departments. To which of the following do you attribute these differences between departments?

   ____ The personalities involved as individuals

   ____ Relationships between personalities involved

   ____ The nature of the subject matter being taught

   ____ Characteristics of the students enrolled

____ Administrative decisions

____ Other_____

Please rank these in order of their importance, with number 1 being for the most important, number 2 the next most, etc.

Now what about your own department's involvement? Please rank these in terms of how they affected your own department's level of participation

____ The personalities involved as individuals

____ Relationships between individuals involved

____ The nature of the subject matter

____ Characteristics of the students

____ Administrative decisions

____ Other_____

7. Please study the force field on the next page. It shows forces that may have been at work either tending to support or defeat the continuance of The Franklin Plan.

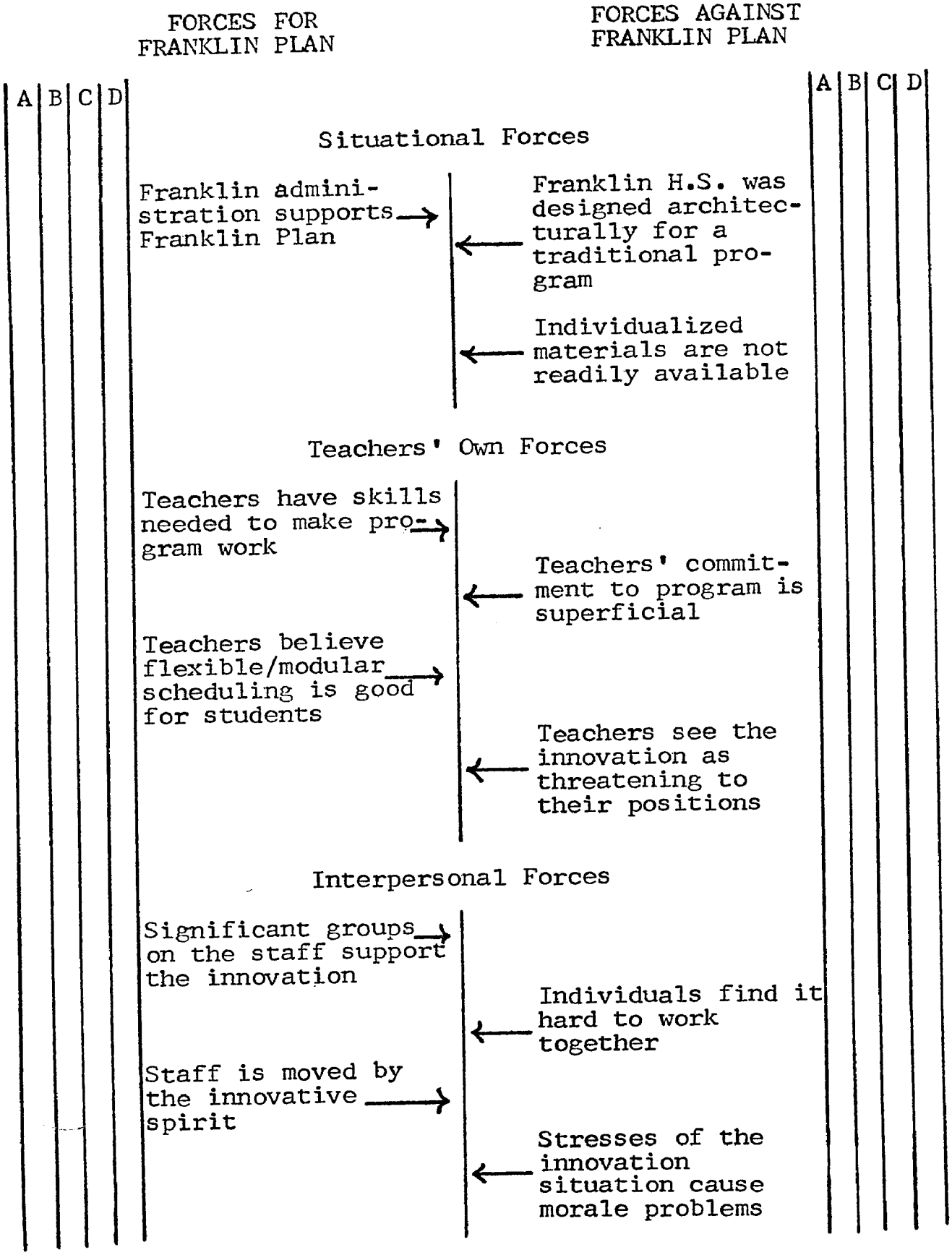
   a. Add any forces to either side that you think ought to be included.

   b. In column A, place a number 1 next to the force which you think was most important, and a number 4 next to the one which you think was least important. Do this for each side of the force field.

   c. In column B place a number 1 opposite the force which was strongest or most resistant to change, and a number 4 opposite the one which was weakest.

   d. In column C place a + next to each force you think you saw increasing in strength during the course of The Franklin Plan, and a - next to each force you think you saw getting weaker.

   e. In column D place a number 1 next to the force that was most important to you personally, and a number 4 next to the one that was least important to you personally, in determining your own attitude toward the Plan.


FORCES FOR FRANKLIN PLAN
FORCES AGAINST FRANKLIN PLAN
A B C D
A B C D
Situational Forces
Franklin administration supports Franklin Plan
Franklin H.S. was designed architecturally for a traditional program
Individualized materials are not readily available
Teachers' Own Forces
Teachers have skills needed to make program work
Teachers' commitment to program is superficial
Teachers believe flexible/modular scheduling is good for students
Teachers see the innovation as threatening to their positions
Interpersonal Forces
Significant groups on the staff support the innovation
Individuals find it hard to work together
Staff is moved by the innovative spirit
Stresses of the innovation situation cause morale problems

APPENDIX B

APPENDIX B

FRANKLIN PLAN STUDY TEACHER
SELF-REPORT FORM

Some of the following questions ask for factual data and some ask for your perceptions. Although you may sometimes find it difficult to draw firm conclusions about how things really were, it is your perceptions of the situation that we are chiefly concerned about.

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1. We are interested in knowing whether The Franklin Plan was associated with any changes in educational objectives at Franklin High School. Each of the four hypothetical schools listed below emphasizes a different aspect of education. In column A please place a 1 next to the one that is most like Franklin High School before The Franklin Plan was instituted, and a 4 next to the one that is least like Franklin before The Franklin Plan. Then please do the same for columns B, C, and D. Please remember, 1 means "most like" and 4 means "least like." Column D asks what you regard as most desirable.

	A Before the Plan	B During the Plan	C After the Plan	D Most Ideal
School #1 feels that the most important task of the schools is primarily intellectual; that is, to provide children with information about many things, teach them reading, writing, and arithmetic, give them the ability to figure things out for themselves, and a desire to learn more.	____	____	____	____

	A Before the Plan	B During the Plan	C After the Plan	D Most Ideal
School #2 is primarily interested in social things; that is, teaching children how to get along with others, to know about people in other countries, and to be good citizens.	____	____	____	____
School #3 is concerned with the personal development of students; that is, seeing that they possess a sense of right and wrong, develop into mature and stable persons who are in good physical condition and learn to enjoy things like music and hobbies.	____	____	____	____
School #4 is most concerned about the more practical things; that is, helping students choose the right occupation or college, giving them specialized job training, and preparing them for marriage and family living.	____	____	____	____

2. If you were to look at this staff of teachers as a group, which one of the drawings below would most nearly look like the Franklin High School staff? Please place a check mark in Column A to indicate which drawing best describes the staff while The Franklin Plan was in effect, and place a check mark in column B to indicate which drawing describes the staff now.

		A During the Franklin Plan	B Now
a.		____	____
b.		____	____
c.		____	____
d.		____	____
e.		____	____

Other--please draw

3. The following questions concern some important interpersonal relations within the school staff. Your answers are absolutely confidential. Use the roster of the staff on the last two pages to write the numbers which identify the appropriate people for the following questions.

		Ident. Number
a. Please indicate by number three persons with whom you discussed The Franklin Plan most often.	Communicated with most	_____
	Communicated with next most	_____
	Communicated with third most	_____

Ident. Number

b. Whom did you speak to when you wanted help or had ideas to share? (That is, when The Franklin Plan was in effect)

Communicated with most _____

Communicated with next most _____

Communicated with third most _____

c. Whom did you speak to when you had complaints about the way things were going under The Franklin Plan?

Communicated with most _____

Communicated with next most _____

Communicated with third most _____

d. Pleast list the identification numbers of six teachers whom you feel are most influential in developing staff opinion about education matters (e.g., curriculum, school policy, etc.)

_____ _____

_____ _____

_____ _____

e. Please indicate the numbers of three teachers whom you like best.

_____

_____

_____

4a. In your opinion, had the millage not failed in 1971, would The Franklin Plan:

____have continued indefinitely at the same level as in 1970-71

____have continued but at a lower level of participation

____have continued at an expanded level

____have been discontinued within a few years

4b. To what extent do you think you were consulted in the decision that was made to institute The Franklin Plan at Franklin High School?

____A great extent; ____Quite a bit; ____To some extent;

____A little; ____Not at all; ____I was not on staff then

4c. To what extent do you think there was a clear educational need or problem in the system, which The Franklin Plan would help meet or resolve?

____A great extent; ____Quite a bit; ____To some extent;

____A little; ____Not at all

4d. Finally, we would like some background information about yourself:

Sex: _____; Age _____; Race _____;

Residence _____
(city, town, township)

Marital status: _____Single; _____Married;

_____Widowed; _____Divorced

Highest degree held:_____ Institution:_____

When granted: _____ Major _____

Years in teaching: _____; Years in Livonia system: _____

Years at Franklin: _____

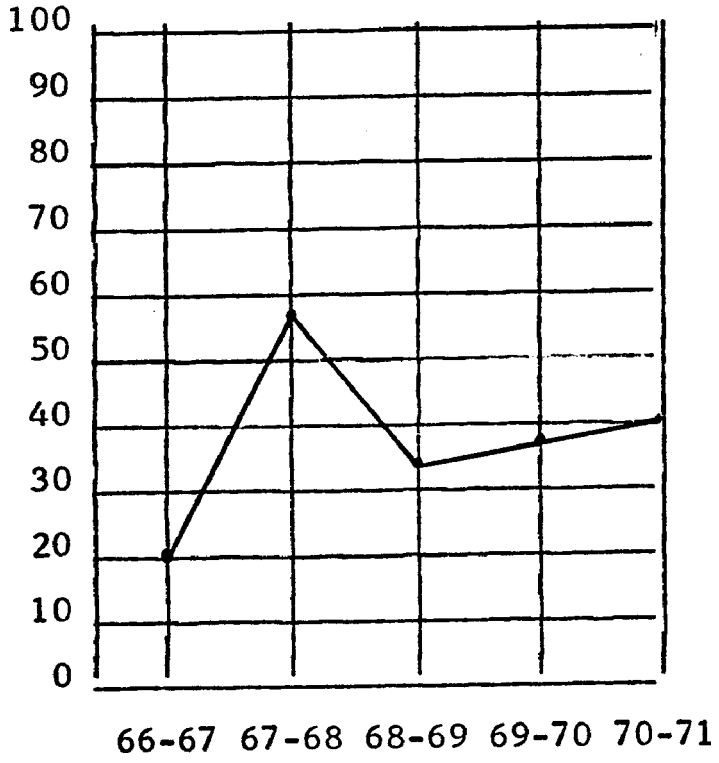
THANK YOU VERY MUCH FOR YOUR COOPERATION. ALL ANSWERS WILL BE HELD IN STRICTEST CONFIDENCE.

APPENDIX C

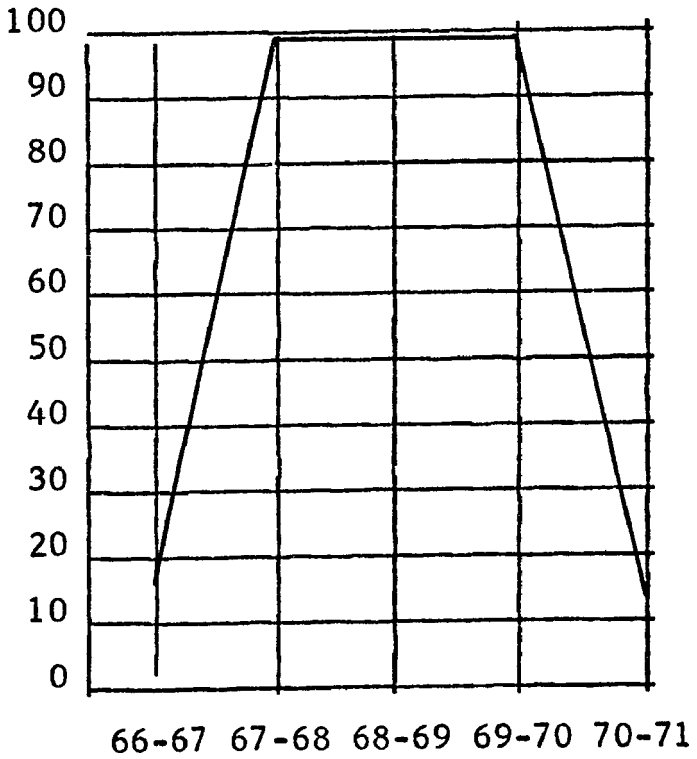
APPENDIX C

LEVEL OF PARTICIPATION IN THE FRANKLIN PLAN AS MEASURED BY THE PERCENTAGE OF CLASSES SCHEDULED IN THE FLEXIBLE MODE

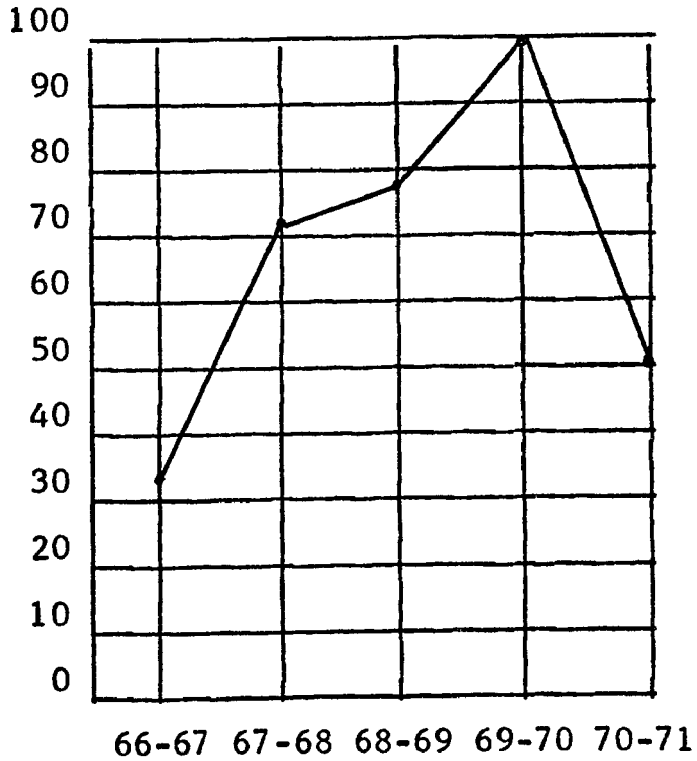
Mathematics Department



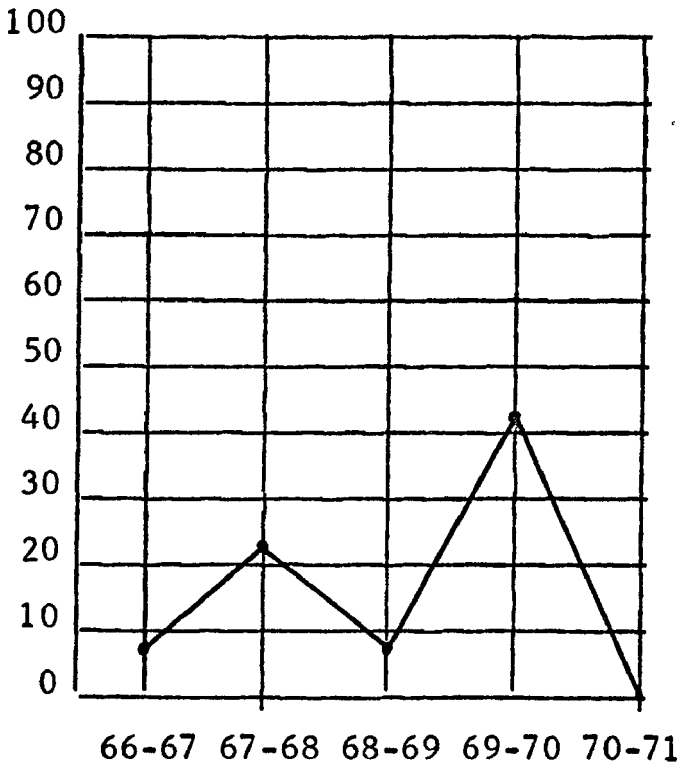
Home Economics Department



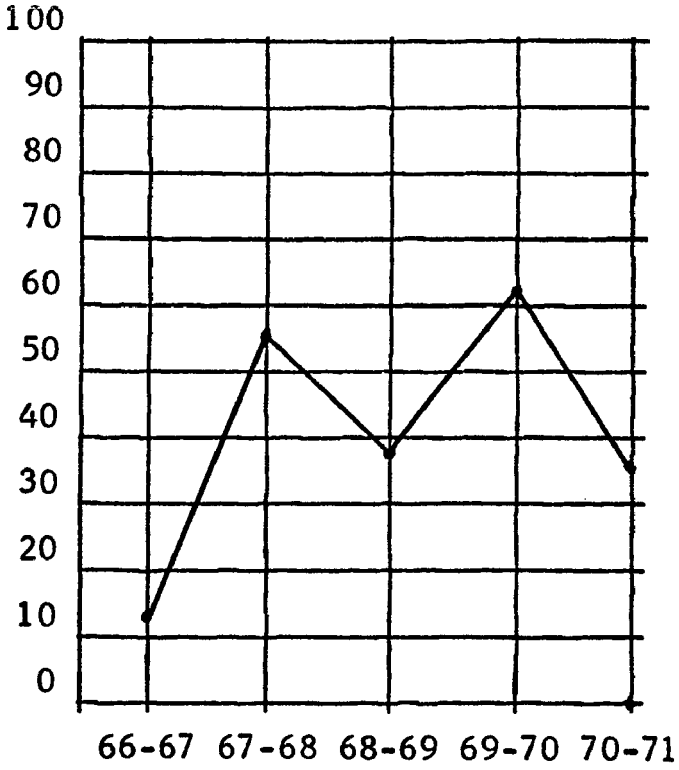
Science Department



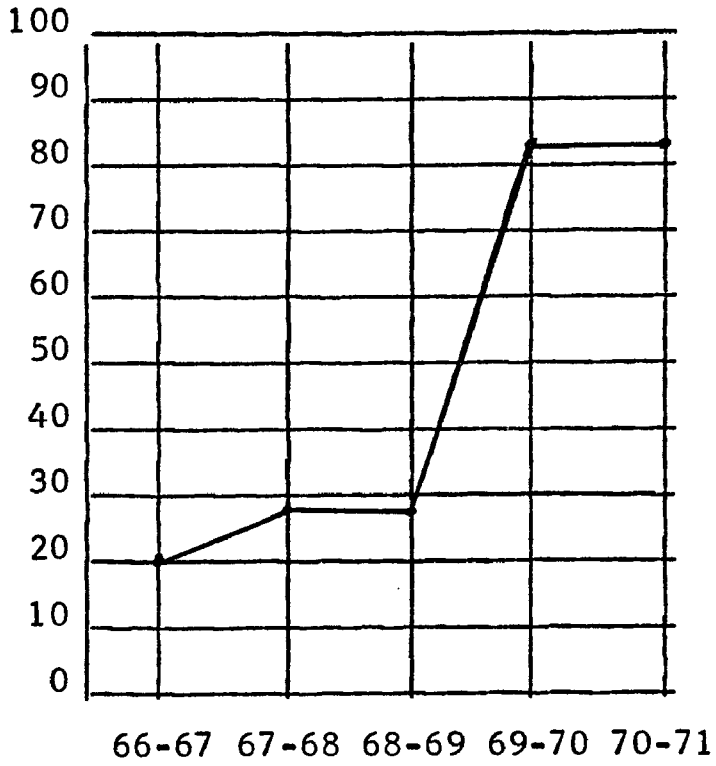
Industrial Education Department



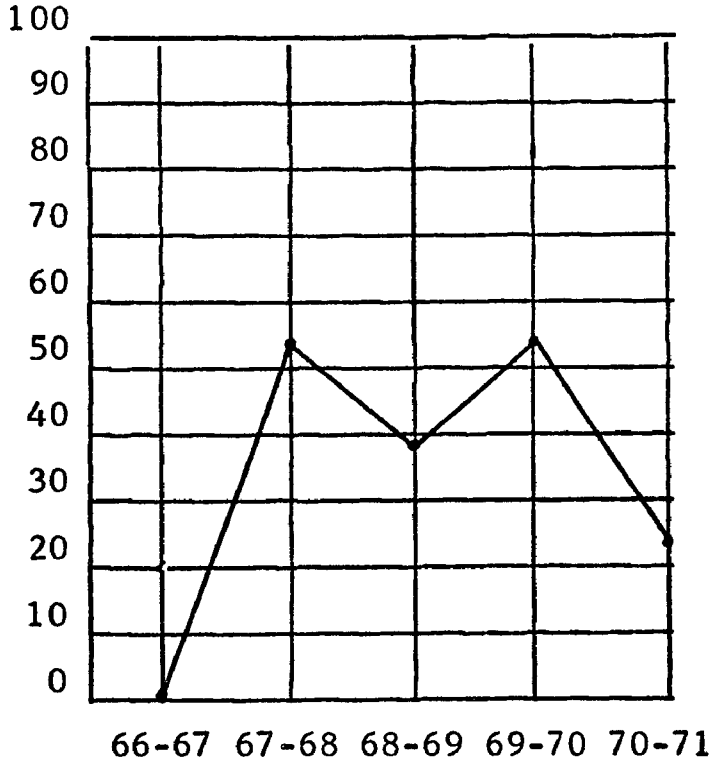
English Department



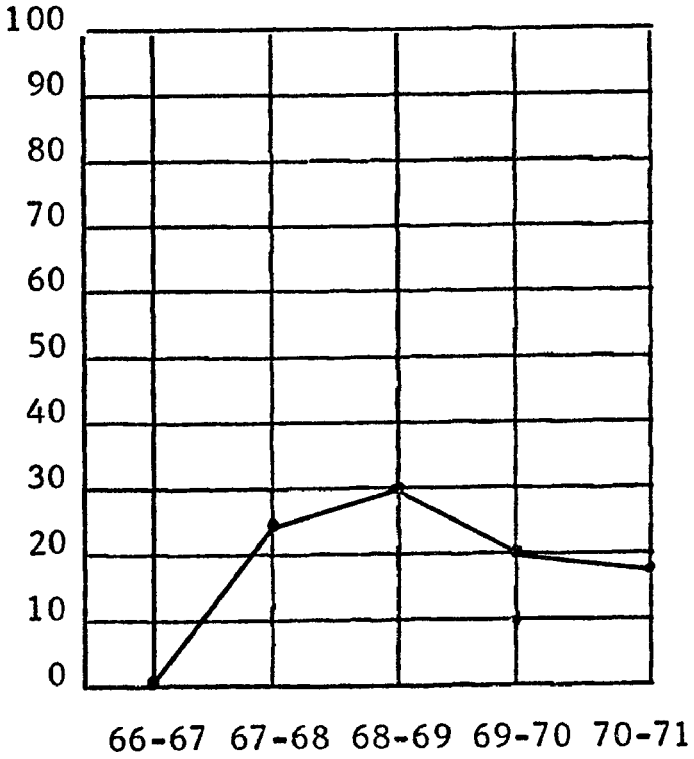
Foreign Language Department



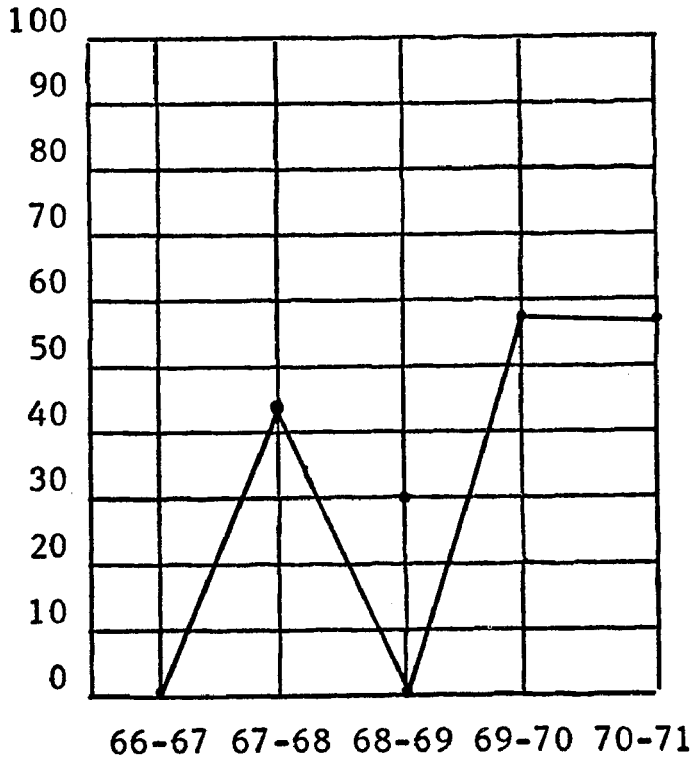
Business Department



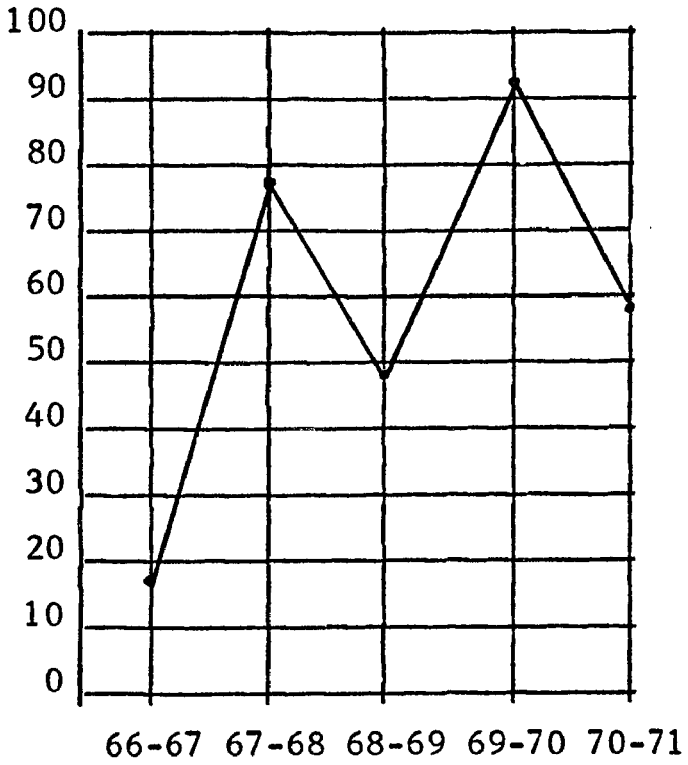
Art Department



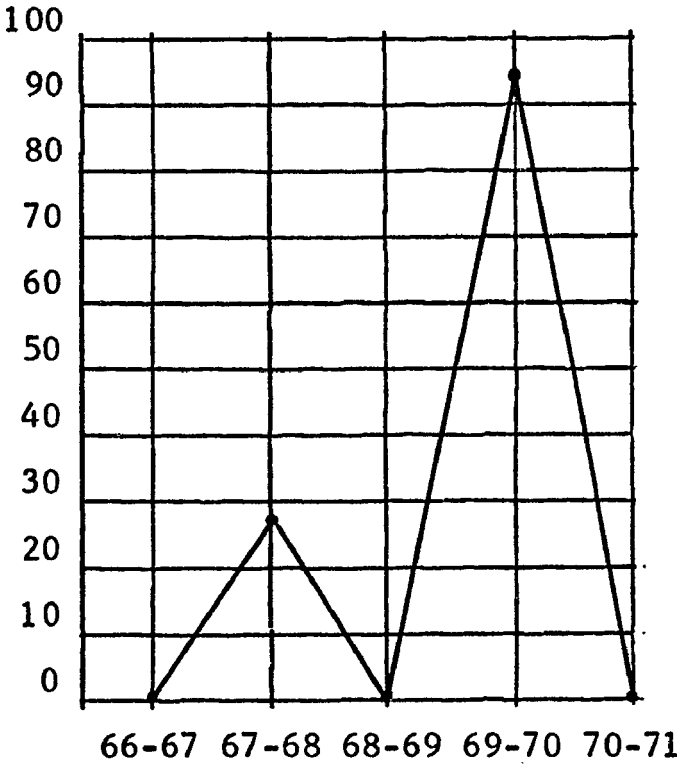
Music Department



Social Studies Department



Physical Education Department



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