

THE UNIVERSITY OF MANITOBA

A STUDY OF ORGANIZATIONAL CHANGE:  
HIGH SCHOOL BUDGETING

by

DEIRDRE JEAN DUNCAN

A THESIS  
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

WINNIPEG, MANITOBA

JUNE, 1976

"A STUDY OF ORGANIZATIONAL CHANGE:  
HIGH SCHOOL BUDGETING"

by

DEIRDRE JEAN DUNCAN

A dissertation submitted to the Faculty of Graduate Studies of  
the University of Manitoba in partial fulfillment of the requirements  
of the degree of

DOCTOR OF PHILOSOPHY

© 1976

Permission has been granted to the LIBRARY OF THE UNIVER-  
SITY OF MANITOBA to lend or sell copies of this dissertation, to  
the NATIONAL LIBRARY OF CANADA to microfilm this  
dissertation and to lend or sell copies of the film, and UNIVERSITY  
MICROFILMS to publish an abstract of this dissertation.

The author reserves other publication rights, and neither the  
dissertation nor extensive extracts from it may be printed or other-  
wise reproduced without the author's written permission.

## ABSTRACT

The object of the research was to describe analytically an organizational change that occurred in a city high school. The change involved a transfer of control over the School's supplies and equipment budget from the School Division to the School staff.

The study includes a description of the origins and implementation of the change and the technical aspects of the school-based budgeting system. The change is viewed from both organizational and sociological perspectives. The introduction of the new system was examined within the framework of the following organizational variables:

1. control systems;
2. formal authority structure; {communications  
decision-making  
roles and responsibilities
3. programs;
4. goals.

The research was divided into two time dimensions: past (January, 1971 to September, 1975) and present (September, 1975 to March, 1976). To study these two dimensions, a multi-model conceptual framework was developed. The systems model formed the basis for research about the past where a structured approach was used. For the present period a phenomenologically based approach was followed and it involved both the perceptions and observed behaviour of the organization's members. Consequently methods used for the second period of the study included interviewing the organization's members; documentary analysis and observation of

budget-related functions. For the first period of the study, data were collected by interviewing all those who had been present at the time of the change and by analyzing change documents and School records.

Analysis of the data revealed that organizational change had definitely occurred and the School staff now had control over development of their budget and spending on supplies and equipment. There had also been an increase in communications within subject areas or departments but not among departments. In departments where the head allowed teachers to participate in budgeting, teachers also experienced an increase in decision-making power. After the budgeting change, equipment and supplies were up-dated and a response to local needs was reflected in the type of resources purchased. The School's goals did not seem to be affected by the change but some teachers felt they were now easier to achieve. The School's programs were expanded. This expansion, however, was not directly related to the budgeting change. The new system did mean that the staff now thought in terms of programs rather than individual courses.

The main conclusions drawn from these results were that the departmentalized approach to budgeting fostered a narrow perspective of the School's function. Success of organizational change in the school setting appeared to depend to a large degree on the presence of a skilled change expert who was either an outsider to the system or had had experience outside it. The manner in which the Change Agent acted out his role was also an extremely important factor in ensuring the success of the change. Another conclusion was that department heads in the High School played an important part in

implementing change when they served as communication links between teachers and administrators introducing change. In a similar manner, the Principal served an important function as a 'boundary' person linking the ideas of staff members with ideas from outside the School. Finally, it was concluded that, since the change involved delegation of control, its survival to a large degree, depended on the ability of the organization's members to maintain control at the level to which the control had been delegated.

## ACKNOWLEDGEMENTS

Sincere appreciation is extended to Professor J.W. Peach for his assistance and guidance throughout my doctoral program. I am also grateful to Professors J.A. Riffel, J.L. Gray and C. Bjarnason for their professional help and the time they devoted to assisting me with my research.

Finally, I would like to thank my family in Australia for their moral support and the many Canadian families who made my task easier by offering me their friendship and encouragement. Of course the research would have been impossible without the cooperation of the Principal and staff of the School, who gave generously of their time, and for this I am deeply indebted.

## TABLE OF CONTENTS

	Page
ABSTRACT . . . . .	ii
ACKNOWLEDGEMENTS . . . . .	v
LIST OF TABLES . . . . .	xi
LIST OF FIGURES . . . . .	xii
 Chapter	
I. ORGANIZATIONAL CHANGE AND ITS SETTING IN THIS STUDY . . . . .	1
OVERVIEW OF THE PROBLEM OF ORGANIZATIONAL CHANGE	1
THE SETTING	3
The School Division	3
The School	7
II. LITERATURE REVIEW . . . . .	15
ORGANIZATIONAL DIMENSIONS	16
Goals	16
Roles and Responsibilities	17
Authority	18
Control	19
Decision-making	20
Programs	22
Communications	22
Informal Organization	23
Organization Types	24
ORGANIZATIONAL CHANGE	25
Conditions for Successful Planned Organizational Change	31
Change Models	32

	Page
IMPORTANT ASPECTS OF ORGANIZATIONAL CHANGE	34
The Use of Power in Organizational Change	34
Resistance to Change	37
Role and Characteristics of the Change Agent	39
RESEARCH ON ORGANIZATIONAL CHANGE	42
Resistance to Change	42
Change in the Multi-unit Organization	44
The Change Agent	45
Change Involving Decentralization	46
RESEARCH ON CHANGE IN EDUCATIONAL ORGANIZATIONS	47
The Change Agent	47
Resistance to Change	49
Research on Changes in Budgeting in Educational Systems	52
CONCEPTUAL FRAMEWORK	54
SUMMARY	58
III. STATEMENT OF THE PROBLEM AND RESEARCH METHODOLOGY . . . . .	63
STATEMENT OF THE PROBLEM	63
Questions	65
SIGNIFICANCE OF THE PROBLEM	66
RESEARCH PARAMETERS	68
Assumption	68
Limitations	68
Delimitations	69
Definitions	69
RESEARCH RATIONALE	71
Scientific Method	71
Approaches to Research	72
Historical/Survey Approach	74
Phenomenologically-Based Research	75

	Page
RESEARCH DESIGN	78
Data Collection Methods	80
Interview	80
Documentary analysis	82
Observation	84
Data Collection	85
Past period of study	85
Present period of study	88
Interviewing	89
Data Analysis	93
IV. FROM CENTRALIZED BUDGETING TO DECENTRALIZED BUDGETING . . . . .	97
OVERVIEW OF ORGANIZATIONAL CHANGES BETWEEN 1971 AND 1976	98
CENTRALIZED BUDGETING	100
Technical Aspects of the Budgeting System	100
Organizational Aspects in Relation to Centralized Budgeting	102
Formal roles and responsibilities	102
Communications	106
Decision-making	108
Resources	109
Programs	110
Control systems and authority structure	111
Conceptual Framework	113
Informal Adaptations of the Formal Organization	114
ORGANIZATIONAL CHANGE	114
Origins of the Change	114
Planning for the Change	116
Division's Role	118
Implementation of the Change	119
Initial Problems	124
DECENTRALIZED BUDGETING	127
Technical Aspects of Program-oriented Budgeting	127
Budgeting Procedure	130
Organizational Aspects of the Budgeting System	132
Formal roles and responsibilities	132
Communications	134
Decision-making	138
Resources	139
Programs	141

	Page
Control systems and authority structure	143
Sociological Aspects of the Budgeting System	147
Pressure	147
Conflict	149
Influence	150
Strategy	151
The Functions of the Finance Committee	153
Problems Associated with the System	155
V. ANALYSIS OF CHANGE . . . . .	158
ASSESSMENT OF CHANGE IN ORGANIZATIONAL DIMENSIONS	158
Roles and Responsibilities	158
Communications	161
Decision-making	165
Authority Structure	167
Control Systems	167
Resources	168
Programs	170
Goals	171
STAFF MEMBERS' PERCEPTIONS	172
SURVIVAL OF THE CHANGE	174
RESEARCH QUESTIONS	176
DISCUSSION OF FINDINGS	188
Propositions	201
VI. SUMMARY AND CONCLUSIONS . . . . .	205
SUMMARY	205
CONCLUSIONS	211
IMPLICATIONS	213
REFERENCES . . . . .	219
APPENDICES . . . . .	228
A. INTERVIEW SCHEDULES FOR STAFF MEMBERS WHO EXPERIENCED CONDITIONS BEFORE AND AFTER THE CHANGE	229
B. INTERVIEW SCHEDULE FOR POST-CHANGE STAFF MEMBERS	235
C. STAFF LETTER	241

	Page
D. INTERVIEW SCHEDULE FOR FORMER PRINCIPAL	243
E. FORMER REQUISITION FORM	246
F. BUDGET MODEL - FLOW CHART	255
G. IMPLEMENTATION PROCEDURES	258
H. MODIFICATIONS AT SCHOOL DIVISION	264
I. PROGRAM BUDGET REQUEST DOCUMENT	266
J. NEW REQUISITION FORM	268
K. REIMBURSEMENT FORM	275
L. PROGRAM BUDGET DOCUMENTS	277

## LIST OF TABLES

Table	Page
1. Teaching Experience of School's Staff . . . . .	9
2. Male/Female Composition of Staff . . . . .	10
3. School's Teaching Staff and Enrollment . . . . .	11
4. Change Models . . . . .	33
5. Models of Change . . . . .	35
6. Consulting Approaches of Change Agent . . . . .	40
7. Print and Non-Print Expenditures for the Period 1972-1976 . . . . .	182
8. School Budgets for Period 1972-1976 . . . . .	183

## LIST OF FIGURES

Figure	Page
1. Floor Plan of Junior High Section . . . . .	12
2. Floor Plan of Senior High Section . . . . .	13
3. Systems Model of the Organization . . . . .	56
4. Research Methods as Applied to the Present Study . . . . .	79
5. Time Line Showing Major Organizational Changes . . . . .	99
6. Organizational Structure of School Prior to 1973 . . . . .	103
7. Budgeting Process Under Centralized System . . . . .	112
8. Force Field Analysis of Factors Assisting and Resisting the Change . . . . .	125
9. School's Organizational Structure with Decentralized Budgeting . . . . .	134
10. Budgeting Process Under Decentralized Budgeting . . . . .	146
11. Communications Pattern Pre- and Post - POB . . . . .	162
12. Model of Change at the High School Studied . . . . .	200

## CHAPTER I

### ORGANIZATIONAL CHANGE AND ITS SETTING IN THIS STUDY

The creation of a service economy and the pre-eminence of professional and technical occupations characterize the structure of a post-industrial society (Bell, 1967) and it is the task of education to produce the required professional and technical manpower for this society in which we live. Related to these demands on the education system, there is an increasing trend towards urbanization and it is estimated that by 1980 more than three out of four Canadians will be living in large urban centres. One means of coping with these changes in society, which have produced a new urban environment, is for the school to undergo a change. Such change is necessary because our urbanized society has subjected the individual to new demands and pressures not previously experienced and there is a general belief that one of the school's main functions is to prepare the individual so that he can fulfill a useful role in that society.

#### I OVERVIEW OF THE PROBLEM OF ORGANIZATIONAL CHANGE

The cause of such change may not be confined to environmental pressures alone but may also be the result of internal system strain. In this case there may be adjustments and compromises among competitive and conflicting elements in the organization's structure and membership or there may be differential rates of growth which result in organizational strain. Where differential rates of growth occur, strain may be reduced by other subsystems acquiring momentum and catching up to

the leading subsystem or the latter may be checked in its expansion or the total organization may undergo some degree of restructuring to find a new equilibrium. No matter which of these causal factors is involved, the organization "is challenged to change its structure or its way of functioning in order to cope more effectively with the changed state of affairs" (Lippitt, Watson and Westley, 1958: 9) and herein lies the problem, since it is sometimes difficult for the organization to change successfully. Organizational change can be achieved by spontaneous, developmental changes within the organization; by fortuitous, unplanned changes outside the organization or by deliberate, planned attempts to change the organization. Of recent years much organizational change has been aimed at the total organization as well as its subparts and, because it has been planned, it has involved formal education methods in preparation for the change. Such methods have included personal counseling, sensitivity training and management development programs. These methods are all part of the Organization Development movement which has developed in the last fifteen to twenty years as a means of bringing about change in an organization.

In education much of the research on organizational change has focussed on organizational development, almost to the neglect of other types of organizational change. Apart from the "people" approaches of the Organization Development movement, involving alterations in attitudes, motivation and behavioral skills, the other main target areas for change are the technological approaches and the structural approaches. The former emphasize rearrangements in work flow and the latter bring about change through the introduction of new formal guidelines and procedures such as budgeting methods or rules and

regulations.

Much of the research in the area of structural change in schools has focussed on such organizational arrangements as differentiated staffing and multi-unit organization. However, the research undertaken in this study examined a planned change in structure as it applied to the control system of a school. This change centred on a change in control of the budget, whereby the School staff assumed responsibility for the School's budget. The research involved tracing the origin of the change, its implementation and its impact on the School. However, details of the problem forming the central focus of the study are described in Chapter III. Now it is important to examine the setting in which the organizational change occurred, since, as mentioned earlier, the organization's environment can be an influential factor in regard to the origin and successful implementation of change.

## II THE SETTING

### The School Division

The School Division forms a large part of the school's environment. It is the administrative unit to which the authority for operating schools has been delegated by the Provincial Government. Hence it has the power to create demands causing organizational changes in its schools.

The Division forming part of the environment for the School in this study is administered by a board of school trustees, who have been elected, for a three year term, by and from the local community. The School Division is divided into three wards and three trustees represent each ward. Only three of these have served as school

trustees in this Division for a period of longer than four years.

As referred to on Page 1 of this chapter, today's society has helped create a new urban environment which places new demands on schools. This School Division is located in the heart of just such an environment, since it includes the core area of the city, where a number of innovative high schools are attempting to cope with the economic, social and physical problems created by the environmental factors of such an area. However, some of the Division's eighty-two schools operate in upper to middle class areas, so its territory covers a wide range of socio-economic conditions. The Division employs approximately two thousand teachers and provides educational services for approximately forty thousand pupils.

Finance for the Division is controlled by the School Board's Secretary-Treasurer and his department and he is responsible to the Board, whose members represent the tax-payers of the community, as well as the community at large. Finance for education is raised by grants from the Provincial Government and is supplemented by local property taxes. Such grants are usually allocated on a per pupil basis and on the number of specified, qualified teachers, as determined by the Provincial Department of Education's regulations. Some grants are also made for such programs as special projects, special education and capital expenditure. For the 1976 financial year, the School Division budget was approximately \$64.4 million.

In the last eight years the administrative structure of the Division itself has undergone major organizational changes. Underlying these changes were changes in policy as outlined by the Division's

Superintendent in 1973. Among these was the desire to develop:

...an educational system in which principals and teachers would have sufficient autonomy in matters of curriculum and structural matters to ensure the development of individual potential of all kinds to the highest degree.

The major thrust of the changes was the achievement of the individualization of instruction, whereby the student could progress at his own rate and be evaluated in terms of his own development. Forming the basis of these policy changes and of particular relevance to this study were the following guidelines:

1. A relatively small central office staff with a series of area staff.
2. A relatively flat organization with a broad span of control.
3. Clear distinction between line and staff officers.
4. Provision for broad participation of staff in decisions affecting their schools.

Congruent with this philosophy the Division was divided into three administrative areas, whose boundaries did not correspond with the wards' boundaries. The motion allowing this was passed by the Board on March 8th, 1973 and the three areas became operative June 1st, 1973. However, planning for these changes began much earlier. An area superintendent was placed in charge of each area and each superintendent was assisted by an assistant superintendent and a deputy assistant superintendent. This administrative team became responsible for education at all levels from Kindergarten to Grade XII in its area. In most cases, each area contains a small number of schools, with one or more Junior - Senior Highs, some Senior Highs, Junior Highs, and Elementary schools.

In addition to these decentralization moves, the positions of subject coordinators at the Division level were eliminated. Many of these coordinators became consultants attached to one or other of the new areas. One of the more recent changes involved a change of leadership at the top management level. In 1975 a new superintendent was appointed and he continued the Division's policy of increased decentralization.

Prior to these changes in the Division, a neighbouring school division had undertaken a program of budget decentralization. It was a flexible plan in that the principals of schools had a choice as to whether they participated in the program. If they decided to participate, a further choice was available to them in that four levels of decentralization were offered. These levels ranged from one covering only textbooks, substitute teachers and a base budget financing instructional supplies and equipment to one including all budgets.

It should be mentioned that all these changes took place amid an atmosphere of change at the Provincial level. Hence, at the same time, the Provincial Department of Education had been undergoing a number of changes. Some of the major ones affecting this study included the abolition of external examinations in 1969, which allowed more flexibility in terms of course content; the relaxing of curriculum restrictions; the introduction of a credit system of student evaluation and the encouragement of school-and student-initiated-courses.

It was in this state of change at both the Provincial and Division level that the present study was undertaken. Having briefly described these changes, it is now appropriate to examine the subject of this research.

### The School

The School that formed the subject of the research was a high school with an enrollment of 1,486 in Grades VII through XII at the time of the study. The divisional area in which the School is set contains twenty-seven schools and the School itself has five feeder elementary schools. It is located near the boundary of the inner city in what is largely an industrial area. Hence, its pupils mainly come from working class homes, with some families on welfare and problems such as "drop outs" and drug abuse were experienced.

The School originally opened as a junior high in 1955. Then, in 1958, a senior high school with a different name was opened next to the original school. Each of these secondary schools operated with its own principal until 1968, when they were amalgamated by the appointment of one principal for both schools. Each retained its own vice-principal but the two schools were joined by a connecting linkway and the combined school took on the name of the senior high school.

Some senior high classes such as Art and Industrial Arts are held in the junior high section and some junior high classes are held in the senior high section. Only one subject area, English, has both a junior and senior high department head. All the other subject areas have the one department head located in the senior high section.

Despite these attempts at integration, the amalgamation has not been successfully achieved. The School still functions as if it were two schools. In many cases senior high staff have little real knowledge of course content in the junior high and vice versa, and there is a very real communications gap between the two staffs. Despite the Principal's efforts, which are aimed at increasing the integration of the "two

schools", there are virtually insurmountable factors working against the union. These include the physical layout of the school plant with the junior and senior high sections largely housed in two separate buildings, except for the single joining linkway; the Vice-Principal of each section has his office in his own section, so that the junior high Vice-Principal acts almost as a principal in his own area; there is a staff room in each building, which leads to little social intermingling of senior and junior high staffs and finally, the senior high staff contains a hard core of older, more experienced and influential teachers and the junior high staff contains a core of young, male teachers cast less in the traditional mold.

The School has a teaching staff of 81.5 and an ancillary staff of sixteen, which includes custodians, laboratory assistants, library clerk and audio-visual technician. A breakdown of the teaching staff shows that of the 81.5, twenty-eight are female and only ten of the staff do not have at least a first degree. Of the twelve department heads only one does not have a degree. Total teaching experience of the staff is shown in Table 1 and the departments presently existing in the School, with a breakdown according to sex, are shown in Table 2.

Since the time of the amalgamation, there have been three successive principals. The present Principal was appointed in January, 1975 and the one preceding her had held the position since September, 1972. In each case, both principals had served at the School as vice-principal (senior high) for a brief period prior to their appointment as principal.

Table 1  
Teaching Experience of School's Staff

Years of Experience	No. of Teachers
20 +	19
10-20	22
5-10	19
<5	23
Average	12
Total	83*

\*Three teachers teach half-time

Of the 81.5 staff members, only twenty-one have been at the School for less than a period of four years. The staff turnover that has occurred has mainly been due to such factors as retirement or the out-of-Province transfer of a non-teaching spouse. A possible significant factor in this low turnover trend is the general popularity of city teaching appointments.

During the period of the study the enrollment and teaching staff were as shown in Table 3. In 1972 there was an influx of students due to the closure of a junior high school in the area. To accommodate these students some "portable" classrooms were added to the complex on a temporary basis. However, these rooms are still in use and provide inadequate classroom facilities. The classrooms of the permanent buildings consist of traditional-type classrooms with

Table 2  
Male/Female Composition of Staff

Department	Head	Members	
		Male	Female
Business Education	female	2	6
Science	male	11	1
Languages	female	3	3
Junior English	male	9	1
Social Science	male	8	3
Senior English	male	6	1
Physical Education	male	3	2
Mathematics	male	7	4
Home Economics	female	-	4
Industrial Arts	male	3	-
Art	female	1	3
Guidance	male	3	4

Music, with two staff members, and library, with two, operate without heads.

desks still arranged in rows, in most cases, chalkboards and linoleum tiled floors. Sporting facilities are limited and, although there are two gymnasiums, only one of these is full size. Art courses have to be conducted in small, overcrowded rooms and subjects such as Business Education and Music have rooms scattered in different parts of the plant (see Figures 1 and 2).

Table 3  
School's Teaching Staff and Enrollment

	Teaching Staff	Enrollment
1971 - 72	76.5	1467
1972 - 73	84	1630
1973 - 74	84	1497
1974 - 75	81	1441
1975 - 76	81.5	1486

In the junior high section regular subjects such as English, Mathematics, Science, Social Science, Physical Education, Art, French, Music, Home Economics and Industrial Arts are offered, largely on a compulsory basis, except in the case of French. However, in the senior high, in 1975 -76, courses in the following areas were offered: Accounting, American History, Art, English, Band, Biology, Business Principles, English and Law, Canadian Literature, Chemistry, Choral Music, Computer Science, Drama, Economics, French, General Business, Geography, German, Home Economics, History, Industrial Arts,

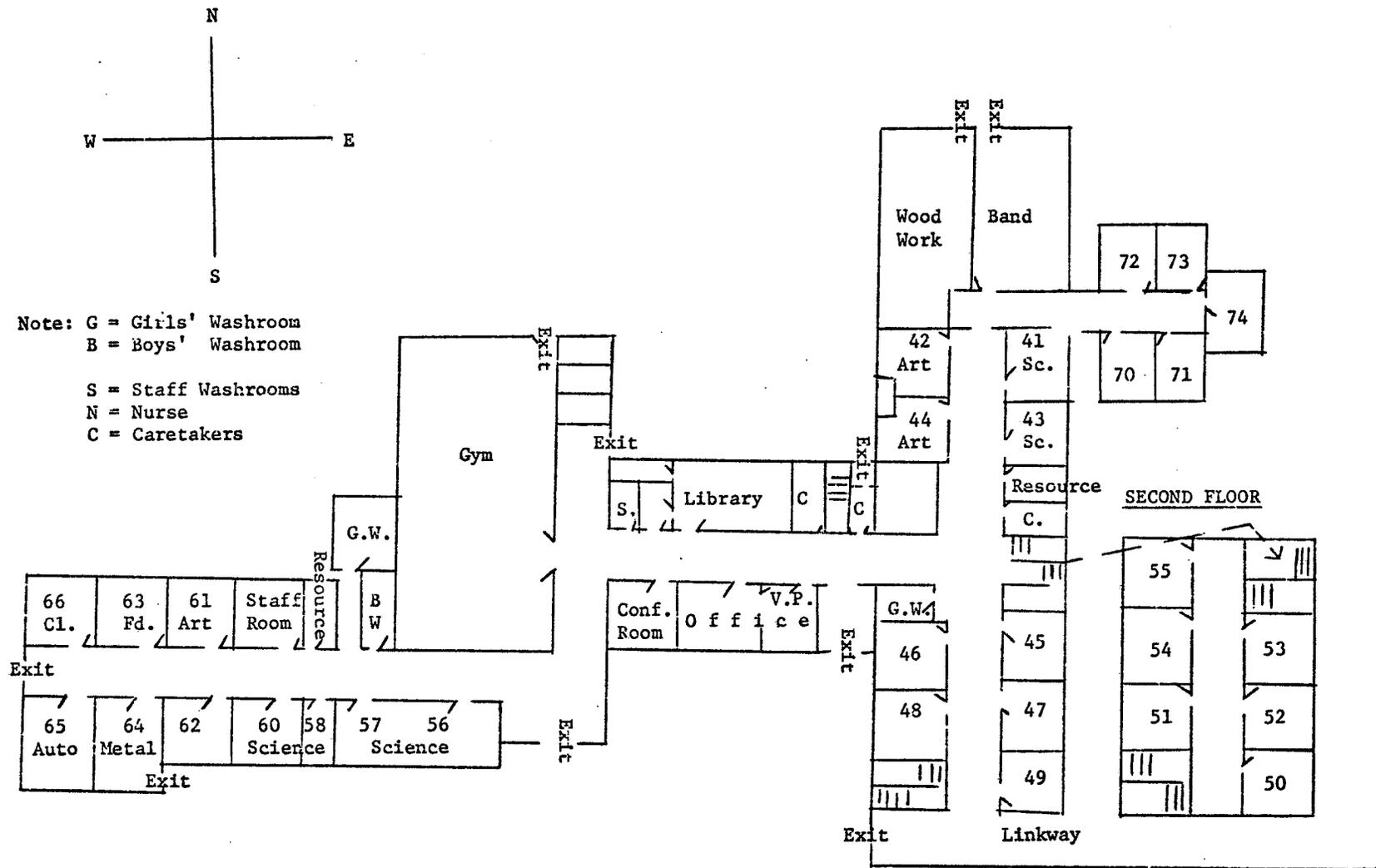


Figure 1. Floor Plan of Junior High Section

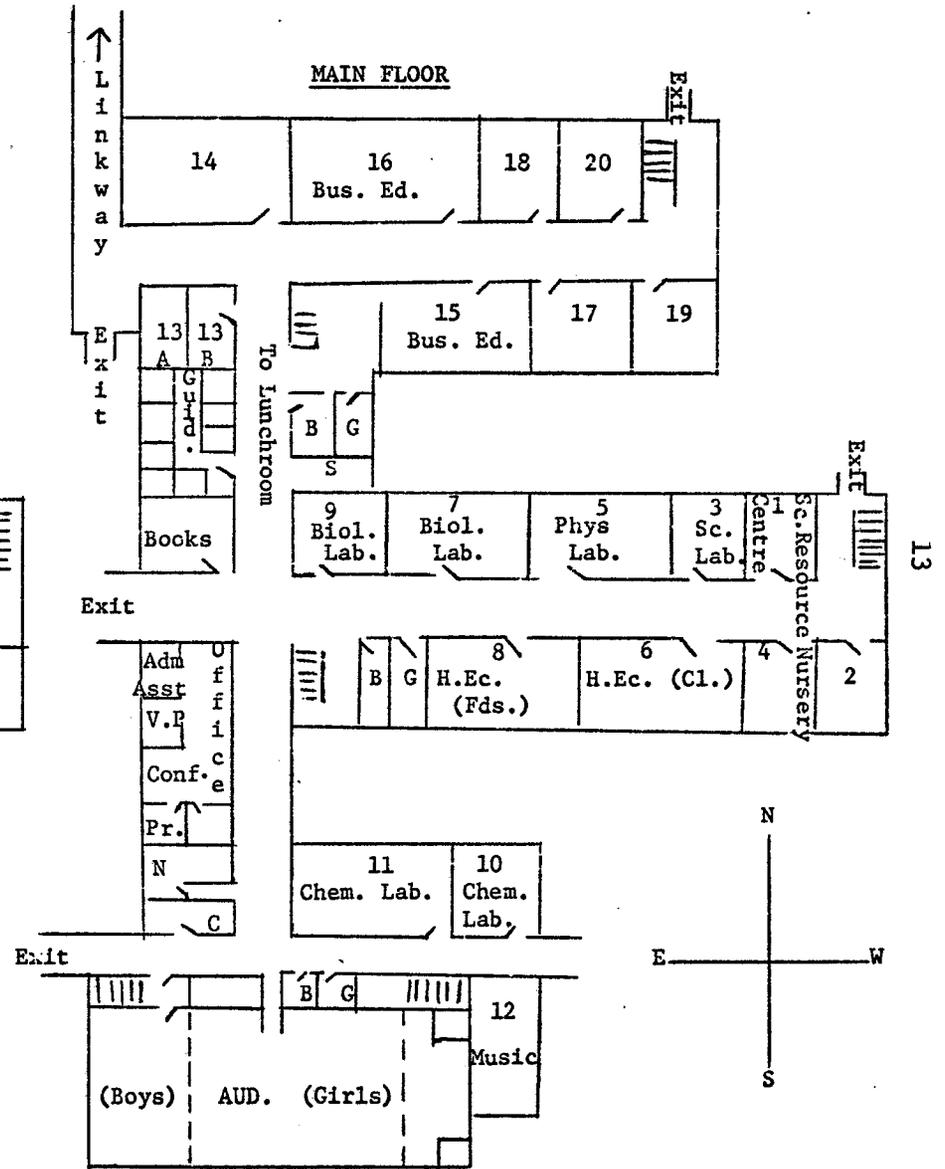
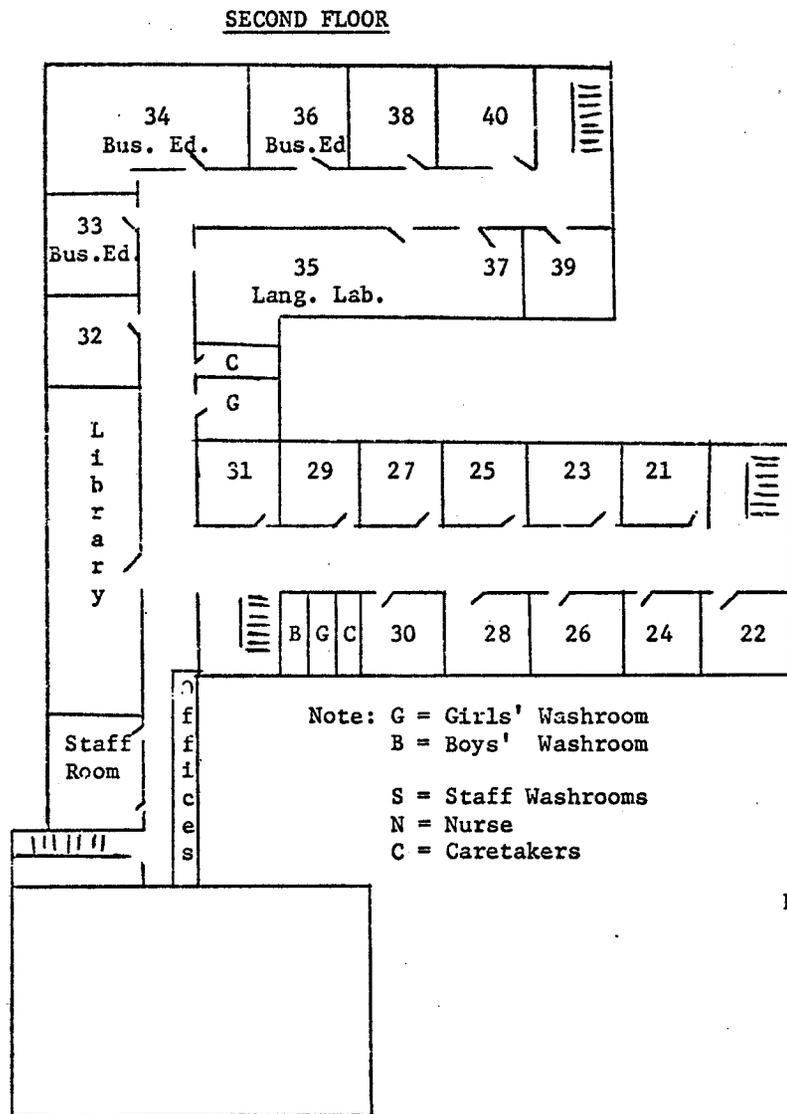


Figure 2. Floor Plan of Senior High Section

Mathematics, Office Practice, Physical Education, Physics, Psychology, Science, Shorthand, Typing, Ukranian.

Of the total student population only about twenty per cent continue their education at university. Therefore, subjects such as Chemistry and Physics cater for small numbers at the senior high level. The majority of the students enter the working force upon leaving school, and this is usually in a position that requires little or no further, formal training.

It was in this setting that the organizational change that formed the major focus of this study occurred. However, before examining the details of this change, a review of the literature on organizational change and the development of a conceptual framework will provide an appropriate background for the study. This is undertaken in the next chapter. Following this, Chapter III contains the rationale for the particular research methodology used and the methodology itself is described. Chapter IV contains an analytic description of the organizational change. The effects of the change are discussed in Chapter V, which also includes the propositions generated by the research and a discussion of the findings. In Chapter VI, the research is summarized, conclusions are drawn and the implications of the major findings are stated.

## CHAPTER II

### LITERATURE REVIEW

Writers on organizations have for years grappled with the phenomenon of organizational change. They have focussed on various aspects related to change in an attempt to explain failures and to ensure success in future attempts. Such aspects include the conditions necessary for planned change, the use of power, the change agent himself/herself and resistance to change by the organization's members. In the attempt to achieve success some research has been completed on actual change efforts and this too has been recorded.

This chapter contains a review of relevant literature in this area. However, before reviewing the literature on organizational change it is necessary to examine the "organism" on which the change is effected. Thus, organizational dimensions, as seen by different writers on organizations, are reviewed in the next section. There is also a brief review of the types of organizations produced by different combinations of these dimensions, since it is possible that a major organizational change could bring about a change or modification in the type of organization being studied. The chapter concludes with the development of the conceptual framework that formed the basis for this study.

## I ORGANIZATIONAL DIMENSIONS

A school such as the one that is the focus of this study may be viewed as an organization since it contains the basic organizational characteristics as described by most writers on organizations.

According to Barnard (1938) an organization comes into being when

(1) there are people able to communicate with each other (2) who are willing to contribute action (3) to accomplish a common purpose.

If there is a combination of these elements that is appropriate to the external conditions, the organization's initial existence is relatively secure. Such a beginning occurred at this School in 1955.

The essential characteristics of an organization as they are found in the School used in this study are that:

1. It comprises a set of individuals in office;
2. There is individual responsibility for definite tasks; i.e., functional activities, which are parts of a division of labour;
3. There is one or more organizational goals to which the activities of the staff contribute;
4. There is a stable system of coordinative relationships which constitute the structure of an organization (Weiss, 1969).

### Goals

Each of these characteristics have been enlarged on by a number of writers on organizations (e.g. Barnard, 1938; Weber, 1946 and Blau, 1965). Barnard's "common purpose" is the organization's goal and Perrow (1961) writes of two types of organizational goals:

1. the official goal; and
2. the "operative" goals.

The first type usually refers to the general purpose of the organization as stated in the charter or annual reports. These are often expressed in vague and general terms. Hence the operative type actually designate the ends sought through the operating policies of the organization. They provide the specific content of the official goals. Closely related to the goals are the basic tasks of the organization which Perrow considers to be:

1. to secure inputs in the form of capital that are sufficient for the organization to establish itself, operate and expand as the need arises;
2. to secure acceptance in the form of a basic legitimization of the organization's activity;
3. to secure necessary skills; and
4. to coordinate members' activities and the relations of the organization with other organizations and with its clients.

The manner in which these tasks are accomplished is often determined by the organization's goals (Litterer, 1969). According to Thompson and McEwen (1958), the setting of these goals is largely the problem of defining the desired relationships between the organization and its environment. Change in either demands review and perhaps alteration of the goals.

### Roles and Responsibilities

Among the organizational characteristics Weiss (1969) referred to was a set of individuals in office. The office mentioned is a position in the organizational structure, with role prescriptions related to it. Thus there exists shared expectations among members

regarding the duties to be performed by the individual occupying the office. It usually has associated with it a title, salary scale and the formal specifications of duties. Such elements are the formal representations of expectations regarding duties, privileges and formal coordinative relationships and these are the roles and responsibilities of each position in the organization. The organization allocates to offices tasks which then become the responsibilities of whoever holds office. The tasks usually contribute to the organization's efforts to reach its goal and as such may be regarded as functional activities (Weiss, 1969).

Weiss also claims that the top members of the organization's hierarchy have a special role in relation to organizational goals because they have the responsibility of developing a program or plan of action for the organization. It is by the implementation of this plan of action that the organization's goals may be achieved.

These positions or offices may be depicted on an organization chart which is a schematic presentation that identifies the positions, their groupings and their reporting relations (Litterer, 1969). These relationships provide the basis for the organization's structure, which also reflects the division of labour and the distribution of the total task among the staff.

### Authority

Associated with these positions and their roles and responsibilities is the concept of authority. Writers on organizations see this concept in many different lights. For example, Bendix (1956) and Weber (1946) identify the authority of legitimacy where those in

authority have the right to demand obedience and those subject to it have a duty to obey. The authority of position is that inherent in an office and not in the particular person performing the official role (Presthuss, 1958; Urwick, 1947). The authority of competence is based on the technical skill, knowledge and experience of the person (Gouldner, 1969; Etzioni, 1959), while Barnard (1938) and Fayol (1949) recognize the "authority of person" as being dependent on the possession of certain leadership traits.

According to Litterer (1969), the person(s) in authority has to allocate responsibility for particular functional activities to particular members of the organization and coordinate these activities and responsibilities. If they are suitably allocated, they will be acceptable to most members, provided there are also appropriate rewards to ensure the continued contributions of members' efforts.

The authority system in an organization involves a form of interaction in which one person issues a command and a second complies with it. This may be a specific command or it may be more inclusive and enduring with general rules applying and other persons continually conforming to them. In a complex organization there will be complex structures of authority comprised of ordered sets of complex relations and interactions within them. This authority structure is usually embedded in some kind of group in which the members share the norms and values that justify the existence of the authority system (Hopkins, 1961).

### Control

Since, as stated above, authority systems involve organization

members conforming to general rules, this implies some kind of control system, which is implicit in the "coordinative relationships" (Weiss, 1969) referred to at the beginning of this chapter. Cyert and March (1959) see the organization as having two mutual control systems operating between superiors and subordinates. The first is the budget, which they see as being a highly explicit elaboration of previous commitments. Since the department that exceeds its budget suffers severe costs and, in turn, those which are not paid in full also suffer, the budget applies some form of control. The second mutual control system is the allocation of functions. By defining the limits of discretion, the individual or subgroup is constrained from acting outside those limits. At the same time other members of the organization are prohibited from acting within those limits.

The control systems which operate over finance, personnel and resources provide the necessary coordination through the organization's hierarchy or managerial group. Administrative apparatus such as policy manuals and rules inform employees of their roles and responsibilities (Litterer, 1969) and organizational sanctions and rewards, which form part of the control system, ensure their compliance.

### Decision-making

Certain decisions about roles, responsibilities, sanctions, rewards and other organizational functions must be made. Hence decision-making is a vital feature contributing to the organization's existence. Parsons (1956) identifies three types of decision:

1. policy decisions;
2. allocative decisions; and

### 3. coordination decisions.

The first type are related to the organization as a whole and are associated with its primary functions. Such decisions range from very broad ones concerning major changes in the organization down to the day-to-day decisions about the current operation.

Allocative decisions involve the distribution of resources, both personnel and financial. The decisions relating to personnel often have to do with the allocation of responsibility for decisions. Budget allocation decisions give suborganizations access to the means required for carrying out their assignments and such decisions form part of the present study.

Coordination decisions are the operative decisions concerned with the integration of the organization as a system. They are aimed at keeping the performances of subunits and individuals in line with the requirements of the organization.

All these decisions may vary in scope; i.e., the extent to which the decision-maker can decide what, when and how a certain activity will be completed (Litterer, 1969). The organizational level at which the decision will be made is determined largely by the control system. For example, when positions at the lower levels of the organization are primarily concerned with making and executing decisions without restrictive controls from the top, the organization is decentralized. Such an organization is said to provide a means of adapting operations to local environmental demands and of developing subordinates (Lippitt, 1973). The present study examines a change from centralized to decentralized decision-making in the area of budgeting.

### Programs

In any organization many of these decisions are related to the organization's programs. March and Simon (1958) describe such programs as a highly complex and organized set of responses which are evoked by an environmental stimulus. The content of the program is adaptive, according to the characteristics of the initiating stimulus and it is composed of the decomposition of tasks into their elementary program steps. As new situations arise, usually adaptation occurs through the recombination of lower-level programs already in existence. Thus they depict the activity of an organization as a mosaic of program patterns. In the context of a school such programs would include the courses offered and all activities related to them.

### Communications

Before these programs can become operative, their details must be communicated to the organization's members. Thus there are communication networks in any organization to facilitate the organization's work.

March and Simon (1958) identify two types of communications. One involves procedural matters and the other substantive content. By communication of procedural matters they mean communications associated with nonprogrammed activity or that needed to initiate and establish programs, including day-to-day adjustments and coordination of programs.

Communication dealing with substantive content provides data for the application of strategies and information on the results of activities. It also evokes a program suitable for the given stimulus.

Each program has associated with it a set of information flows that communicate the stimuli and data required to evoke and execute the program. Information and stimuli move from their sources to points of decision, while instructions move from points of action to points of decision and control. March and Simon (1958) also claim that once patterns of communication are established they will have an important influence on the decision-making process. For example, communication could determine the relative frequency with which members will encounter particular stimuli and this could either assist or hinder decision-making.

#### Informal Organization

Communications can flow along the channels of the informal, as well as the formal, organization. The former type refer to those set up in the informal organization, which is the part of the organization that copes with deviations from the formal system. In an organization, personal relationships form among individuals and they form into informal groups in terms of which each person receives a certain position or status (Roethlisberger and Dickson, 1939). These groups have their own communication channels, institutionalized rules and modes of informal cooperation by which they attempt to influence the decision-making environment. These informal patterns, according to Selznick (1948), arise spontaneously and are based on personal relationships. He also claims they can cause a modification of formal goals and they can buttress the work of the formal organization. It is also recognized that they can hinder the accomplishment of the organization's goals. However, the informal organization is a

necessary part of the formal organization (Roethlisberger and Dickson, 1939) since it provides a means of satisfying the motivational needs of the organization's members.

### Organization Types

The manner in which the above-mentioned organizational dimensions are combined and interact largely determines the type of total organization that exists and numerous writers have identified various types. For example, Likert (1961) classifies organizations on the basis of authority and control. At one end of a continuum he places the authoritative organization, where decisions are made at the top. On the other end he places the participative organization, where decisions are made more widely throughout the organization. On a control continuum, he sees some organizations as laissez-faire where there is no influence exercised and others as having a large amount of control exercised.

Etzioni (1961) also classifies organizations on the basis of authority. Thus, he identifies four types. Those exercising:

1. coercive authority e.g. prisons;
  2. utilitarian authority, where economic rewards are emphasized e.g. most businesses;
  3. normative authority, where membership is regarded as desirable e.g. voluntary associations, universities;
  4. mixed structures combining the above three
- e.g. normative-coercive: combat units; utilitarian-normative: labour unions; utilitarian-coercive: ship's company.

Weber (1946) has written extensively on the type of

organization identified as a bureaucracy. The essential features of this type are that it has a clearly defined hierarchy, where the office holders have very specific functions and they apply universalistic rules that are nonpersonal. There is a general orientation to the rational and an efficient implementation of specific goals.

Regardless of the type of organization, organization change and growth can be a factor in ensuring the organization's survival in its environment. Barnard (1938) implies this when he claims that initial existence depends on a combination of organizational elements that are appropriate to the external conditions at the moment and, since these conditions are constantly changing, change is required in the organization. The next section therefore contains a review of the literature on organizational change.

## II ORGANIZATIONAL CHANGE

Most writers on organizations see them as expanding and growing from the time of their inception. Tsouderos (1955) identifies a formalization process which occurs during the early period of an organization's existence. It is a period when statuses and roles are assigned; patterns of behavior stabilize; individuals take on particular roles and operating procedures are developed.

As growth continues certain adaptations occur as required by changes in the organization's environment and because of internal changes. For example Sofer (1961) claims that certain policies and procedures are not appropriate throughout an organization's life and

different kinds of people are needed at different times. As the optimum adaptation level is reached, growth may stabilize for a while until more changes require further adaptation.

The development process is not always smooth and continuous and Starbuck (1965) points out that there are behavior strategies motivated by such factors as the desire to maintain the status quo or to decrease organizational size. Naturally these will conflict with strategies motivated by a desire to expand and grow. The latter are aided by certain organization goals that either depend on organization growth or produce it as a by-product. Some of these goals, as identified by various writers, include:

1. organizational self-realization (Katona, 1951);
2. adventure and risk, especially at executive level (Gordon, 1945);
3. prestige, power and job security (Gordon, 1945);
4. stability in terms of the environment; i.e., the organization striving to catch up with environmental demands;
5. survival (Drucker, 1958).

Levin and Simon (1973) attempted to devise a theory of developing settings which could be applied to an organization undergoing a change phase as part of its development process. The theory involves accounting for development. This requires a systematic analysis of the development setting which includes the sequential tasks necessary for growth. The first step involves the delineation of each phase. Then the conditions related to each phase are analysed and finally the overall process is examined for evidence of

a unifying structure. This "theory" and the metamorphosis model which is described in a later section, appear to be compatible and could probably be used together to analyze the developmental process of an organization. Closely allied to this growth is change and many writers endeavour to describe and explain this aspect of the developmental process. Some change may be planned and this type of change is treated quite fully in later sections, since this study involves this type of change. On the other hand, not all organizational change is planned. In certain situations it may occur without any planning and such change may be derived from different sources. One writer who classifies such theories of change is Friedmann (1973).

His classification relates to social change and, in the writer's opinion, one or more of these sources could account for unplanned change in organizations:

1. The great man theory: an individual with superior endowments is born; he has escaped the socialization powers of his environment and develops into a charismatic leader.
2. Theory of insufficient socialization: some are unaffected by the socialization process and remain marginal to the dominant cultural pattern. Change originates in them and fans out to the main body.
3. Dialectical theory: society is structured vertically with superior-inferior relationships. Each class has its own mode of behavior, lifestyle and views and changes occur when each tries to impose their lifestyle on the other.
4. Diffusion theory: change occurs when ideas and customs

from diverse cultures spread across existing boundaries.

5. Idealistic theory: no constraints can be applied to ideas and change occurs if these are put into practice.

6. Theory of the hiding hand: all actions produce unforeseen consequences which can result in change.

7. Theory of experimental evolution: man learns from experience and new discoveries and change occurs.

It is possible that unplanned change could occur in organizations as a result of one or more of these sources. However, the theory of experimental evolution could also result in planned organizational change.

Bennis (1969) describes eight traditional approaches to change in organizations:

1. exposition and propogation;
2. elite corps-strategic role needed to bring about change;
3. human relations training programs;
4. staff programs, involving observation, analysis and rational programs;
5. scholarly consultation;
6. circulations of ideas to those with power;
7. developmental research; and
8. action research.

He also claimed "that our social institutions cannot withstand, let alone cope with the devastating rate of change without fundamental alterations in the way they negotiate their environments and the way they conduct the main operations of their enterprise " (1969: 18).

Since such alterations are usually aimed at improved functioning of the organization, their analysis is an important part of the study of organizations.

In the past, organizational change usually involved an evolutionary type of change, which assumed that change was the "product of one minor adjustment after another, fuelled by time and subtle environmental forces largely outside the direct control of management " (Greiner, 1967: 213). With the present rate of environmental change, evolutionary change is not keeping pace with environmental demands made on the organization. Alternatively, a characteristic type of change is one stimulated as a response to certain crises that arise in the organization. Such a change is usually referred to as "reactive" change. A more appropriate type of change, in terms of a better organizational change, might be a "proactive" one, in which there is the anticipation of future pressures. This type of change involves an attempt to change the organizational environment as well as the organization itself (Greiner and Barnes, 1970).

Pressures for change in education are applied by both internal and external forces. According to Pellegrin (1969) the internal ones come from a recognition among educators of the deficiencies and limitations in the content, organization and administration of the curriculum. The external forces arise from such social forces and trends as automation, the development of a highly differentiated and specialized division of labour, urbanization, the explosion of knowledge and the emergence of disadvantaged and

alienated segments of the population.

Westley (1969) identifies three processes of change at work in education:

1. through accretion of small changes such as the introduction of a new text book;
2. 'grass roots' theory — the system is receiving new ideas from the lower levels of the organization all the time and transforming those it is ready to assimilate;
3. change through policy decision.

Such changes often involve either 'hardware' such as additions to school equipment, or 'software' which is usually in the content and range of curriculum or in the methods of its delivery and reception, or interpersonal relations. The last mentioned involves changes in roles and relationships between teachers/students; teacher/teacher or teacher/administrator (Huberman, 1973). Griffiths (1964) has found that changes made in response to insiders in education are concerned more with clarification of rules and internal procedures, while those made in response to outsiders are concerned with new rules and procedures. This would seem to indicate that innovations are more frequently introduced by outsiders to the schools.

Finally, in line with the general literature on organizational change, it is recognized that the school system is composed of interlocking positions and interacting roles. Each position requires a role performance in relation to other positions and, therefore, key relationships must be examined to gauge the direction and effects of change (Huberman, 1973).

### Conditions For Successful Planned Organizational Change

Bennis (1969) sees planned organizational change as being the link between theory and practice and the outcome, in terms of achievement of change goals, as being dependent on the relationship between the change agent and the client system. Bennis, Chin and Benne (1969) claim that an essential component of this relationship is collaboration, involving a joint effort with mutual determination of goals; a spirit of inquiry; a relationship growing out of the present encounter; a voluntary relationship between the change agent and the client; power distribution where the client and change agent have an equal or near-equal opportunity to influence each other and an emphasis on methodological, rather than on specific, substantive goals.

Watson (1967) advocates five pre-conditions that are necessary for a successful attempt at institutional change. He claims that participants must feel that the change plan is their own; it must be supported by senior officials of the system; it must be in reasonable accordance with the values and ideals of the participants; there should be support, trust, acceptance and confidence in the relationships among the participants and they must not feel that their autonomy or security is threatened. In addition to these pre-conditions, for the change to be effective, there is need for a change advocate, time for the change and collaboration and cooperation to make the change more permanent. Further to these elements Lippitt (1973) recommends a systems approach and the interrelationship of change programs to other aspects of system

behavior, since a single change effort cannot stand alone but must be phased into other aspects of the system.

Change is often seen as occurring when an imbalance occurs between the sum of restraining forces maintaining the equilibrium and the sum of driving forces. If the change is to be at all permanent, complementary and reinforcing changes must be made in organization levels above and below the change level and relevant aspects of the environment and organization must also be changed. The place to begin change is at those points in the system where some stress and strain exist, since stress may give rise to dissatisfaction with the status quo and thus become a motivating factor for change in the system. The effectiveness of a planned change is often directly related to the degree to which members at all levels of the hierarchy take part in the fact-finding and diagnosing of needed changes in the formulation of the goals and programs of change (Benne and Birnbaum, 1969).

### Change Models

Various models of organizational change have been described in the literature. Some of them are included here for the purposes of later comparison with the findings of this research.

Three models are summarized in Table 4 (Bennis, 1963) and it can be seen that all three focus on the human element of organizations. The first is aimed at keeping the organization free from conflict. In the organic model the change goal is to develop team management so that more effective problem-solving can take place throughout the organization. Whilst the major goal of the developmental approach

Table 4  
Change Models ##

Model	Selected aspects of change induction						
Change model	Mechanism for change*	Target of change	Normative goals	Functions of management	Roles of change agent //	Instrumentation or programs #	Means of change **
Equilibrium model (Sofer, Jaques, Menzies, and others)	Tension release through anxiety reduction	Defensive social structures	Conflict-free, social structures	Reality testers	Consultant, researcher, trainer, counselor	Data collection, feedback, group discussion, "situational confrontations," reconceptualization	Role model: identification
Organic model (Blake, Shepard and others)	Power redistribution, conflict resolution	Problem-solving activities	Team management	Adaptation, collaboration	Trainer, teacher, consultant researcher	Problem-solving exercises, T-groups, theory (managerial grid), 6-phase approach	"Cognitive map," acquiring new concepts
Developmental model (Argyris and others)	Transformation of values	Interpersonal competence	Authentic relationships	Develop and maintain authentic relationships	Researcher, trainer consultant, counselor	T-groups, problem-solving activities	Valid communication, new symbolic devices

\*Refers to ways client system unfreezes.

Refers to locus, the effect of mechanisms for change.

Refer to action imperatives of change agent.

Refer to some key elements in the manager's role as viewed by change agent.

//Listed in order of priority very roughly.

#Refers to programs and techniques employed by change agent.

\*\*Refers primarily to the ways instrumentation is employed in order to manipulate mechanism for change.

## Bennis, 1963: 144

is to develop authentic relationships as a means of improving the interpersonal competence of the organization's members.

Three models of change, which were developed by Chin (1969), are summarized in Table 5. His developmental model centres on the concept of directional change toward a particular state of affairs aimed at a major goal of the organization. In this way it is similar to the one previously described. The system model recognizes the existence of the interrelationships among organizational factors, without necessarily focussing exclusively on the human element. It also establishes boundaries within which the interrelationships can occur. Chin's intersystem model involves two open systems that are in some way connected to each other by such features as communication channels, leadership or branch units of a large organization. In this model the system model is extended so that each subsystem can be treated as an autonomous unit.

Lippitt (1973) sees such models as an aid to planners and professional change agents and as a means of illustrating the interrelationships of various parts of the system. He also sees them as useful in predicting the effects of change in one part of the system when change occurs in another. In addition to these models, writers on organizations also highlight certain important aspects related to organizational change and these are discussed in the next section.

### III IMPORTANT ASPECTS OF ORGANIZATIONAL CHANGE

#### The Use of Power in Organizational Change

Kelman (1969) identifies three types of social influence .

TABLE 5

## MODELS OF CHANGE\*

Assumptions and Approaches to:	System Model	Developmental Model	Model for Changing: Intersystem
<b>1. <u>Content</u></b>			
Stability	Structural integration	Phases, stages	Unfreezing parts
Change	Derived from structure	Constant and unique	Induced, controlled
<b>2. <u>Causation</u></b>			
Source of change	Structural stress	Nature of organisms	Self and change-agent
Causal force	Tension reduction (creation?)		Rational choice
<b>3. <u>Goals</u></b>			
Direction	Emergent	Ontological	Deliberate selection
Set by	"Vested interests"		Collaborative process
<b>4. <u>Intervention</u></b>			
Confronting symptoms	Stresses, strains, and tensions	Discrepancy between actuality and potentiality	Perceived need
Goal of intervening	Adjustment, adaptation	Removal of blockages	Improvement
<b>5. <u>Change-Agent</u></b>			
Place	Outside the "target" system	Outside	Part of situation
Role	External diagnoser and actor	External diagnoser and actor	Participant in here and now

\* Chin, 1969: 310

involved in change:

1. compliance;
2. identification; and
3. internalization.

If the first type is used he sees the influence as being successful only in so far as there is observable compliant behavior. In the case of the second type, the influence is accepted because the new behavior is associated with a satisfying, self-defining relationship to the person or group. In the case of internalization, the influence is accepted because the new behavior is congruent with the individual's value system.

Closely associated with acceptance of influence attempts at bringing about change is the satisfaction of needs. According to Maslow (1943), as basic needs such as physiological, safety and security, social acceptance and belonging, are satisfied, higher needs of the ego and self-actualization type arise. Thus if the planned change moves in the direction of satisfaction of these needs, the influence attempts have a greater chance of acceptance.

Related to Kelman's types of social influence, Greiner (1967) identifies three uses of power as witnessed in various organizational change efforts. The first he describes as unilateral power which can involve the decree approach (a one-way announcement) or the replacement approach (replacement of personnel) or the structural approach. The last mentioned brings about a change in the relationships of subordinates working in a situation. Secondly he identifies shared power which involves the group decision or problem-

solving approach. Finally there is delegated power which employs the data discussion or sensitivity training approaches.

An interesting variation on the use of power to bring about change in organizations is described as "protest absorption" by Leeds (1964). She believes it is most likely to occur in normative organizations, such as schools, where there is a high degree of commitment. When this phenomenon occurs a new subunit is gradually formed from the nonconforming enclave as it is able to meet criteria specified by the top hierarchy; i.e., protest absorption checks the nonconforming enclave by turning it into a legitimate subunit. Thus the organization copes with nonconformity and implements change from the bottom up. Leeds (1964) describes the following steps in the process:

1. The nonconforming enclave gains some power within the organization;
2. A new administrative unit is formed to absorb the enclave;
3. The enclave demands and gets more autonomy and resources and some innovation is permitted;
4. The innovative activity subsides when the enclave gains legitimization.

### Resistance to Change

In most cases of organizational change, some resistance to the change will be displayed by some members. The literature points to a number of factors as possible causes for this. For example, Watson (1967) identifies eight possible forces of resistance:

1. homeostasis: the organic desire to maintain the steady state;
2. habit;
3. primacy: the way an organism first successfully copes with a situation sets the pattern which tends to persist;
4. selective perception and retention: admitting only new ideas that fit the established outlook;
5. dependence: on peers and superiors;
6. superego: the enforcement of moral standards acquired in childhood from authoritative adults;
7. self-distrust: hesitation to correct existing malpractices;
8. insecurity and regression.

In addition to these forces, Havelock (1971) claims that schools have certain characteristics which are not conducive to change. For example, among input factors, there is resistance to change from the community; overcentralization, with power concentrated in the hands of a small number of senior officials; teacher defensiveness — the outside agent is seen as a threat to his/her integrity, and the absence of a change agent. Among output factors there is the fact that the school operates as a monopoly; the focus is on present commitments and a uniformity of approach whereby methods used are those applicable to the largest number. Finally, among throughput factors, he sees as resistive forces: a lack of procedures and training for change; the separation of members and units, so that changes occurring in one part are not transmitted, and the hierarchy with its differential status.

Mann and Neff (1964: 68) claim that:

An individual's reaction to a change appears to be directly related to the clarity of his perception of the meaning of the change and his evaluation of the effect that the change will have on him as an individual with certain aspirations and expectations.

Therefore resistance to change can possibly be reduced if the organization's members can see the implications of the change for the benefit of their own needs and aspirations.

Bennis (1969) sees further problems in implementing change which probably increase resistance if they are not satisfactorily resolved. These include the problems of how to integrate individual needs and management goals; the distribution of power and sources of authority and power and the problem of managing and resolving conflicts that arise. Many of these can be resolved or alleviated by the change agent and the role of this person is examined in the next section.

#### Role and Characteristics of the Change Agent

Table 6 (Lippitt and Nadler, 1967: 8) summarizes the approaches that can be taken by the change agent but no matter which approach is taken the role of the change agent requires a diagnostic ability, knowledge of the theories and methods of organizational change and an orientation to the ethical and evaluative functions of the role. He/she needs to have the ability to form relationships based on trust and a high degree of behavioral flexibility (Bennis, 1969).

For the change to have any chance of success, the change agent should have knowledge of both the formal and informal aspects

Table 6

CONSULTING APPROACHES TO CHANGE AGENT\*

Directive Consultation

Position 1	Position 2	Position 3	Position 4	Position 5	Position 6	Position 7	Position 8
Advocate	Expert	Trainer	Alternative Identifier	Collaborator	Process Specialist	Fact-Finder	Reflector
Persuades client as to Proper Approach	Gives Expert Advice to Client	Develops Training Experiences To Aid Client	Provides Alternative to Client	Joins in Problem Solving	Assists Client in Problem Solving Process	Serves to help client collect data	Serves as Catalytic Agent for client in Solving the Problem

∨  
Non-Directive Consultation

\*Lippitt and Nadler, 1967: 8.

of the target system. He/she should also attempt to involve the client system in planning and goal setting for the change program and legitimacy for the change must be gained through obtaining the support of top levels of the hierarchy. In fact, where top management undertakes a change program, because of the positional power available and the enthusiasm and personal commitment from the top, resistance can be reduced (Beckhard, 1969).

Lippitt (1973) sees four major roles for the change agent:

1. as a coordinator of change efforts and programs;
2. as a change specialist;
3. as a fact finder and information link; and
4. as an internal or external consultant.

Such roles are necessary as it is now recognized by many writers on organizational change that the role of change agent needs to be a relatively specialized one if the change effort is to be successful (e.g. Bennis, 1969; Beckhard, 1969).

Lippitt (1973) also claims that the role of the change agent undergoes a metamorphosis. In the early stages of the initiation the change agent is an individual and, in the early part of the regulation stage, the change agent evolves into a group. Before the end of this stage, the group has become institutionalized as an organizational unit in the client system. This is one aspect of organizational change which, he claims, needs further study and an attempt was made to examine it in this study.

Gallaher (1969) points out that one of the more crucial variables in the success or failure of attempt to direct change is

the way the change agent plays his/her role. He also claims that the success of the change agent may not necessarily be related to dissatisfaction with the existing situation but it is more important for the change agent to have prestige and/or that the organization's members depend upon his/her authority in matters of change.

Many writers on organizational change have concentrated on how such change should be undertaken and most of the main ideas proposed have been reviewed in this section. However, it is useful to examine what has happened in actual cases of organizational change and, to provide a basis for comparison with the present study, such a review is contained in the following section.

#### IV RESEARCH ON ORGANIZATIONAL CHANGE

##### Resistance to Change

A phenomenon of organizational change has long been the resistance to change on the part of members of the organization. Hence many studies have highlighted this aspect. Both Tannenbaum (1954) and Vroom (1960) have found that individual differences in attitudes cause differences in the degree of participation in the change and they have both shown that authoritarians and persons without a strong need to be independent are not favourably affected by participation. According to Tannenbaum, the last mentioned group totalled about one-sixth of the employees involved in the participative program of an experiment. In fact they reacted adversely to a sudden substantial increase in participation in decisions about their work. Although these findings result from



an experiment, they appear to be valid since much of the artificiality of a pure experiment was removed by its being conducted on clerical workers in the natural setting of a corporation. The implications of these findings are that no matter what preparation for change is undertaken, there will always be a few who resist it.

In studying the decentralization of a supermarket chain, Lawrence (1958) revealed some interesting findings related to the phenomenon of resistance to change. In this case, to introduce change, top management had made its choice of district managers for the new system more on the basis of past performances than on the basis of anticipated difficulty in fitting in with the newly required roles. Therefore, those with profitable results and good reputations were retained, and others were demoted even though the former were of the "old school" and it was judged that transition to the new pattern would be difficult for them. It should be added at this point that the change was deemed successful.

A source of resistance to change revealed by Lawrence's study was that changes in the organization's structure will put many people into conflict positions as regards their established self-concepts. When this occurred, Lawrence found that the answer of one district manager to this was to pull back and withdraw. Lawrence also found evidence to show that clarifying the new expectations and the conflict was not by itself sufficient to induce the desired change in behavior. He concluded:

The making of the formal changes seems therefore to be a necessary but not sufficient (in all

instances) influence to effect the desired changes in actual behavior (Lawrence, 1958: 195).

### Change in the Multi-unit Organization

Some organizations consist of a number of sub-parts or branches, which, together make up the total organization, as is the case in the study described in this thesis. A number of writers have reported interesting findings from research conducted in such organizations. For example, in the study previously cited (Lawrence, 1958), it was found that, although the change was initiated by top management and most influence consequently stemmed from that source, the peer and subordinate groups also exerted influence in the direction of the change.

A three-year study of organizational change in a factory revealed a similar finding (Guest, 1962). On the basis of his findings Guest hypothesized that "the process" of successful change in a hierarchical organization will start and continue to the extent that members perceive the behaviour of superiors, peers and subordinates to be more in keeping with the norms of behaviour in the larger culture" (Guest, 1962: 117). By "the larger culture" he was referring to all the plants and top management making up the total organization and the change largely centred on a change of manager in one particular plant.

Lippitt (1973) reports on a change in a hierarchical organization that is more closely related to the present study in that it involved professional personnel and a change in decision-making responsibility. The findings of this study, conducted in

the departmental headquarters of one of the military services, revealed that professional personnel will not oppose change if it is perceived as increasing, or at least not lessening, their professional status and if there is no apparent diminution of their power-authority relationship. Further to these findings, it was clear that to change behaviour on any specific level of hierarchical organization, it was necessary to accomplish complementary and reinforcing changes in organization levels above and below that level. Relevant aspects of the environment must also be changed. This last-mentioned result demonstrates the importance of external factors in maintaining change.

#### The Change Agent

In the research involving a change of leadership at a factory, Guest (1962) noticed that once a pattern of relationships was found to be rewarding and productive, the organization did not have to depend on any unique actions of its leader to sustain its success. The manager's successful tactics involved institutionalizing new interactions. This was made possible by the regular scheduling of meetings between himself and those in the upper echelons. Thus a new form of lateral or peer interaction was introduced among those in higher echelons by the new manager, and his role as a leader in the change process could be reduced.

In an attempt to shed some light on the position of change agent Jones (1968) analyzed numerous case studies of organizational change. From these analyses he discovered that, of 190 cases, 106 had an internal change agent (i.e., to the organization) and 84

had an external change agent. He also found that in the initial phases of the change, the change agent took an overwhelmingly influential part in the change but this was gradually played down until the organizational part being changed gravitated into a position of more control. One final interesting finding was that, of all cases analyzed, the change agent was the predominate figure in the setting of the change goals in 75 per cent of the cases. This was particularly so if the change agent was an internal one. Since this position of change agent is so important, it is examined further in the educational research section.

#### Change Involving Decentralization

Although such a change has been mentioned previously (Lawrence, 1958), Baum's (1961) study brought to light some interesting findings about a decentralization change. Hence it is examined separately. Baum's study involved the Federal Civil Service of the United States, which underwent a program of decentralization of authority. His research focussed on a regional office of the Commission and the Federal agencies under its jurisdiction. The study lasted for two years and data were collected by interview, observation and document analysis, as is the case in this study. However, in Baum's study, interviews were recorded only after they had taken place, perhaps leading to some inaccuracies and the objectivity of the study could be open to question, since Baum worked in the regional office before and during the study. Nevertheless these points do not detract from the validity of the general findings.

In assessing the decentralization program, all officials highlighted the "speed" and "realism" brought about in operations by the program. However, only one respondent saw the program as an opportunity for greater individual participation and development. This tends to support the findings of Vroom and Tannenbaum concerning attitudes about desire for independence.

Problems revealed by the study were that there was a lack of sufficient training in personnel administration and for the acceptance of the responsibilities and philosophy of decentralization of authority. The method of applying a blanket decentralization was another problem, which, Baum suggests, could be alleviated by a careful selection of people to be involved and by training these people. In addition to these problems as with any hierarchical organization, there was a role conflict problem, which resulted from the ambivalence of the Commission's conception of its role. On the one hand, it had decentralized authority to its agencies, yet it was still accountable to Congress. Thus, there was a problem in the delegation of authority. Finally, an interesting comment by Baum states that the crucial thing is not the objective existence of the articulated program of decentralization of authority but how the persons involved in it, and thus affected by it, perceive it that determines and explains actual behavior. This is an important point and is discussed more fully in Chapter III.

## V RESEARCH ON CHANGE IN EDUCATIONAL ORGANIZATIONS

### The Change Agent

As mentioned in the previous section, the role of change

agent is a crucial one in organizational change and, in education, there has been some research conducted in this area. It has been found that those holding administrative positions in education dominate in the introduction of change (Hage and Aiken, 1970). This finding resulted from a study of twenty randomly selected schools in seven districts of the San Francisco Bay Area and 264 schools from 1,227 Illinois school districts. This sample included both elementary and secondary school districts. Thus, from the size and nature of the sample, generalizations about the results would seem to be valid. More specific findings of this research were the roles taken by administrators in the change process. Department chairman were seen as particularly important communication links between teachers carrying out the changes and administrators supporting those changes with resources. On the other hand, administrators were seen as being extremely important "boundary people", serving as links between the demands and ideas from outside and the innovations occurring inside. Their support was also seen as being critical to the change process. These findings were supported by Riggs (1968) in a study involving 121 junior high, intermediate and middle schools, covering thirty-five States in the United States. From his questionnaire responses, he found that the department head was the most dominant organizational position and it was used extensively by principals to upgrade instruction.

Research has also been conducted in education in an attempt to isolate the characteristics of the change agent. Hoy and Aho

(1973) have found that principals who are "outsiders" to the system or district in which they serve as principal are more often perceived as change agents. While Wiens (1970) has found that principals influential in promoting change tend to (1) be older, (2) have more education and, (3) have held more than one principalship.

Despite the importance of the administrative position in the introduction of change, there have been studies showing that there are factors working against such importance and influence and some of these are reviewed in the next section.

#### Resistance to Change

Research similar to the present study, in that it involved a structural change (differentiated staffing), was reported by Charters and Pellegrin (1973). This research involved four case studies which highlighted certain barriers to change. These barriers have a relatively general applicability in education since they included the competing time demands of normal teaching duties and uncertainty regarding the new task at hand. The last-mentioned implied that little had been done to overcome teachers' perceived lack of expertise -- a situation that happens in education in the case of the introduction of innovations. On a more specific level, in these cases there was a heavy reliance on the actual structural change. Hence, job descriptions were drawn up, titles were changed and organizational units were changed in the mistaken (in these cases) belief that appropriate behaviour changes would automatically follow.

Many organizational changes in education involved moves towards increased decision-making power for teachers. However, research has been conducted in this area that supports the findings of general organizational research such as that conducted by Vroom and Tannenbaum referred to in an earlier section. Alutto and Belasco (1972) gathered questionnaire data from teachers in rural and urban areas of Western New York State. Their results pointed to the fact that shared decision-making may not be a viable administrative strategy for all segments of the school population. Some teachers did not welcome increased decision-making power. In fact they indicated they would have preferred less. Many teachers in this category were older, female, elementary teachers. From the point of view of the present study, the interesting point of the Alutto and Belasco research was the fact that among the twelve decisional situations presented to the teachers was the planning of school budgets and instructional programs.

Research involving methods similar to those used in the present study (observation, document analysis and interview) revealed interesting findings related to resistance to change in a case study of an elementary school (Gross, Giacquinta and Bernstein, 1975). In this change, teachers were expected to take on a new role as required to fit the concept of individualized instruction. Although teachers accepted the idea of the innovation, it was never implemented. As in the case reported by Charters and Pellegrin (1973), teachers experienced a lack of clarity in regard to expectations for their new role and some teachers perceived a lack

of expertise in carrying out the new role. In addition to these factors working against the implementation of the change, the organizational conditions existing prior to and during the introduction of the change were incompatible with it. The change required a flexible educational environment but it had to operate in a rigid one and a new system of evaluation was required. However, the old system was retained. Thus there was a lack of foresight in anticipating other changes necessary to accommodate the major change.

When the school is viewed as a unit within the framework of the school district, it is set within a larger hierarchical organization which then can create resistance to change. This is highlighted by the study of a new high school (Wacaster, 1973). He found that an attempt to start off the school with differentiated staffing failed because of the incompatibility of the expectations of the school staff and the district personnel. For example, the staff members were expected to develop their own differentiated staffing model, yet the district personnel wanted the power of veto over whatever the staff developed. This demonstrated a reluctance on the part of the district personnel to either share or delegate authority to the next lower level in the hierarchy.

Although the findings of the educational research reviewed to date have general applicability in education by virtue of either their sample representativeness or their general nature, they were not directly related to budgeting. Since this formed the central focus of the present study, it is useful to review the findings of

some research in this area.

### Research on Changes in Budgeting in Educational Systems

Most research in this area has involved the implementation of the program, planning, budgeting system (PPBS) on a district wide level. However, since this usually involved individual schools, it is relevant for this study. In a study of the implementation of PPBS in Greenburgh Central Seven School District in the United States, Miller (1974) found that such a change in budgeting placed the principals in a new collaborative role with staffs since priorities had to be established at the building level. Teachers complained of the extra workload because of the need to state objectives, the resources and activities necessary to attain them and, finally the evaluation of the attainment. The major obstacles in the implementation of this system were seen by Miller to be the lack of orientation and training of the teachers in this budgeting system. However, these were apparently allayed after staff discussion.

Similar findings resulted from a study of the system in the public schools of Fargo, North Dakota (1974), where it was first introduced in the vocational subject area. However, in addition, this study highlights the fact that it provided a means of improving staff communication and increasing their involvement in problem solving and planning. It also provided an opportunity for basing the educational system on local needs and resources and the better coordination of activities reduced overlap.

An interesting adaptation of PPBS has been adopted in the Newark Unified School District of California (1972). It is called unit budgeting and is seen as a prelude to PPBS. Each school building is seen as a 'unit' with separate budgets managed by principals or division heads. In this district, the budget included pupil personnel, Humanities, Career Education, Mathematics/ Science, Health, Physical Education and Safety. Under this system individual schools experienced autonomy, within certain limitations; there was flexibility in budgeting and the budget allowed response to the needs of the individual school.

In this district, the effects of bringing teachers into the decision-making process were reported to be that it made them more aware of cost budget limitations, since they knew the budget was a composite of their expenditure plans; it made them feel they had more control over the instructional process and it eliminated complaints about materials they did not want and could not use. However, in any application of these findings, it should be remembered that they resulted from an informal type of research conducted without the application of any rigid research parameters.

A Canadian study (Riffel, Watts and Hudson, 1972) on Program Accounting and Budgeting (PAB) in Alberta presents an interesting conclusion that is implied rather than actually stated. The findings of this study appear to point to the conclusion that budgeting systems such as PAB and PPBS that are introduced in school districts involve technological change which, if they are to be successfully implemented, require commensurate organizational change

to accommodate them. This is demonstrated by the fact that districts where the PAB had made less than substantial progress, in terms of its introduction and operation, had changed their formal organization very little to accommodate the new system. For example, the program accounting staff did not work closely with local project coordinators; there was no provision made for the integration of the new system with the old and no communication network was established to allow feedback to the program accounting staff. In districts where substantial progress had been made, the reverse was true and there had been changes in the formal organization.

All of the research reviewed here in the area of budgeting focusses on the implementation of different budgeting systems on a district wide basis and this is typical of most budgeting research. However, the study described in this research is relatively unique in that it examines a similar change at the level of a single organizational unit -- the school. Before the methods used to conduct such research are described, it is necessary to develop a conceptual framework for the study and this is described in the next section.

## VI CONCEPTUAL FRAMEWORK

The overall conceptual framework for this study views change as a developmental process where each change is just one stage in the process of the organization's development. Such change may be planned or unplanned and an appropriate model for conceptualizing this development process is the metamorphosis model (Starbuck, 1965). This model takes the view that development is not smooth and

continuous but is marked by abrupt and discrete changes in the organization's characteristics. It focusses on patterns of size and structure of the organization as it grows. With this developmental concept in mind, it is necessary now to examine the 'organism' on which this process operates.

It can probably be assumed that organization models are at the core of all organizational change work (Tichy, Hornstein and Nisberg, 1974). The organization model provides guidelines for selecting diagnostic information and for arranging collected information into meaningful patterns. This forms the basis for evaluating dysfunctional aspects of the system. Hence the earlier part of the developmental process will be viewed on the basis of the model shown in Figure 3.

Although this is a structurally-oriented model, in that it focusses on structural elements such as the authority structure and control systems, this seemed appropriate since this was the orientation of the study. The model views the organization as an open system which obtains inputs from its environment, exports outputs to its environment and operates the conversion process in between. In such a situation, factors in the environment, over which the organization has no control, may interact to cause significant changes in the system (Emery and Trist, 1973). Similarly changes within the organization will affect subsystems within the larger system of the organization and beyond it.

As conceptualized in this study the control systems refer to control over finance, human and material resources. The authority

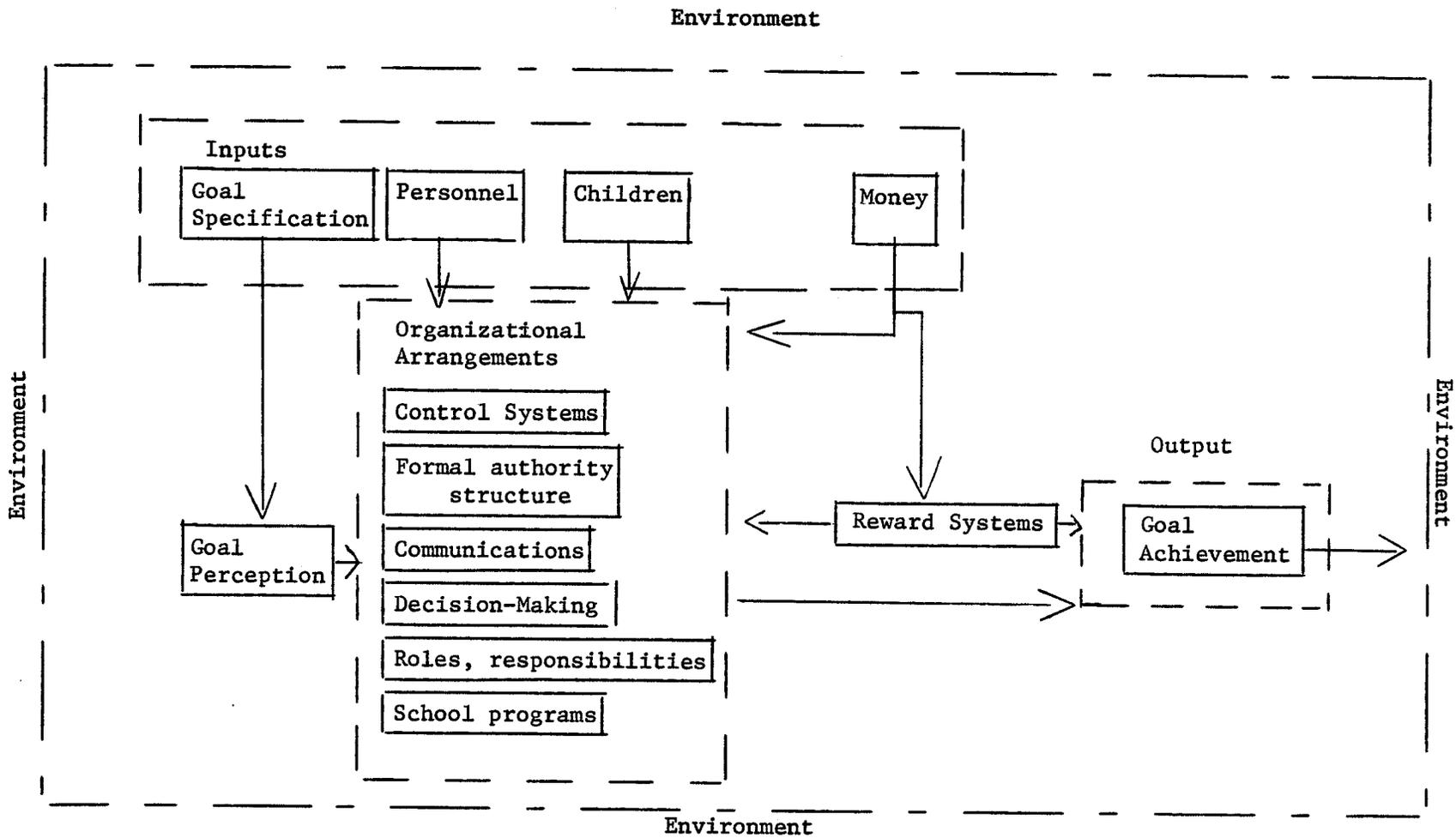


Figure 3. Systems Model of the Organization\*

\*Adapted from Miles, M. (1969)

structure, roles and responsibilities refer to the hierarchical positions in the organization and the responsibilities associated with each of these roles, while decision-making refers to the type and kind of decisions made at each level of the hierarchy. The communications aspect involves both internal and external information channels and 'programs' refers to the programs and courses offered by the School being used in this study.

Using this conceptual base, the change process as it affected the system is described in Chapter IV. The analytic description in Chapter IV is confined to the conversion process; i.e., the organizational arrangements listed in Figure 3 and the organization's goals.

The present part of the developmental process was observed on the basis of a taxonomic model. The reason for the use of two different models is explained in Chapter III. Such a model allows the classification of variables to be observed in the study. The variables selected correspond with the organizational arrangements used in the systems model. This is to facilitate later comparison. Hence the variables are: goals, control, authority, communications and programs. Using this model as a conceptual base, the characteristics of each aspect of these variables are described and analyzed.

The major organizational change examined in this study can probably best be described and analyzed in terms of phases, which are part of the developmental process conceptualized earlier. Lewin (1947) identifies three main phases. Firstly, there is the

unfreezing stage when the need for change is developed. Then there is the actual change and finally the refreezing phase, during which there is the generalization and stabilization of change. Such an approach examines the "steady state" of the organization, before the change, the planning and implementation of the change and the description of the organization in its new "steady state", after stabilization. However, in using this conceptualization of organizational change, it is recognized that there is no clearcut beginning and ending to each phase. Thus, this concept is used in the study for the sake of convenience and clarity in the analytic description and it is used to provide a conceptual model for the examination of the major change that occurred in the School.

## VII SUMMARY

This review of the literature has revealed that organizations are continually growing and changing, either by planned or unplanned changes. Those not usually planned may be evolutionary changes so that they are slow and gradual or they may be reactive and, as such, are usually in response to crises. In education, three main processes of change were identified and they included change through policy decision, the 'grass roots' theory or change through the accretion of small changes.

However, the major focus of this review was proactive or planned change, since this was the type researched in this study. As revealed by the literature review, various writers have paid attention to the conditions they feel are necessary for successful

change and their findings and suggestions were often very similar. It appears that the main conditions required include collaboration, a voluntary relationship between the change agent and the client (the target for change), an equal or near-equal power distribution between client and change agent, participants' feeling of 'ownership' of the change plan, a supportive atmosphere and the interrelationship of the change program with other aspects of the organization's normal program. There is also considered to be a greater chance of success if the change begins at points in the organization where stress and strain exist. Successful change also involves a well thought out plan, often based on change models. Some of the change models developed by different writers were also presented in this review.

It was apparent from the literature review that all change involves the use of power, which is used in different ways, according to various writers. This power ranges from that which is used unilaterally to that which is delegated and Leeds' "protest absorption" (1964) provided a different explanation of coping with power derived from lower levels of the organization.

Many writers on organizational change have tried to solve the question of: "What causes resistance to change?" and this review revealed a number of possible causes such as habit, inertia, dependence and homeostasis. More directly associated with the change program itself, rather than purely personal factors, were factors such as the problem of integrating the change goals with existing organizational goals, the distribution of power and the

resolution of conflict. In education, particular factors were identified and these related to the presence of the community, overcentralization in educational organizations, teacher defensiveness, a lack of procedures for change and the lack of a change agent.

The last-mentioned factor was a major concern of writers in this sphere, since the change agent plays such an important role in any change effort. The experts on organizational change believe that the change agent needs diagnostic ability and a knowledge of the theories and methods of organizational change. However, the role was probably best summarized by Lippitt (1973) who claimed that this person needed to be the coordinator of change efforts, a change specialist, an information link and a consultant.

The review of research on organizational change revealed either support for the above-mentioned theories and suggestions of writers or added further to this knowledge. Thus, it was found that differing attitudes and needs were factors in the acceptance or rejection of change; change efforts, to be successful, required attention to the organization's environment and the effects of the change on other parts of the organization.

Research on change in hierarchical organizations revealed the need for complementary and reinforcing changes at all levels of the organization. This was so especially in change involving decentralization as evidenced by Baum's study (1961).

The review of research literature revealed that the change agent was more often an outsider to the organization and he took a

predominant part in the setting of change goals. To summarize research on this role in education, it appears that the change agent is more likely to hold an administrative position, be well educated and older than other personnel in the system.

The review revealed that in education, research has pinpointed some possible causes of resistance to change. Some of these included lack of expertise, lack of desire for increased involvement in decision-making on the part of teachers, a lack of clarity on the new role expectations required and lack of a suitable environment. On a more specific level and more directly related to this study, research on budgeting was reviewed. This revealed that such a change required new roles of school personnel. It involved an increased workload but it did improve communications, satisfied local needs more satisfactorily and it meant a reduction in wastage of materials.

To summarize, from the review of the literature it appears that no matter what approach to organizational change is involved there are certain common denominators. These include a plan for change, which may be structured or unstructured; power which ranges between unilateral and delegated; relationships, ranging from impersonal to personal and the tempo of the change, revolutionary or evolutionary. It would also appear that, although there is a difference between the human, technical and structural approaches to organizational tasks, a change in one must also deal with the resultant changes in the others.

This review of the literature on organizational change has revealed how change should be implemented according to the experts

on this phenomenon and the review of relevant research in the area has pin-pointed some reasons for the success or failure of actual attempts at organizational change. However, it has led to further questions and some aspects have only been filled in sketchily. Consequently, the research described in the next chapter attempts to contribute to present knowledge on organizational change.

## CHAPTER III

### STATEMENT OF THE PROBLEM AND RESEARCH METHODOLOGY

In this chapter the problem which was outlined in general terms in Chapter I, is described more specifically. The research parameters, within which the research was conducted, are outlined and, finally, the actual research methodology is described. This includes the rationale underlying the data collection methods and the data collection and analysis methods used.

#### I STATEMENT OF THE PROBLEM

The High School, described in Chapter I, formed the subject of the research. At the beginning of the 1973 financial year, control of the budget was decentralized and, as a result of this change, the School staff became responsible for the development of the School budget. Hence this study involved an analytic description of this organizational change in the structure of the School.

The study includes a description of the budgeting process in the School from the beginning of the financial year (January) 1971 up to the time of final approval of the 1976 budget for the School. This change in control is described and analyzed in relation to the following organizational variables, which have been elaborated in Chapter II:

1. Control systems:
  - a. finance;
  - b. resources.
2. Formal authority structure:
  - a. communications;
  - b. decision-making;
  - c. roles and the responsibilities associated with them.
3. School programs;
4. Organizational goals.

In terms of the above-mentioned variables, the study traces:

- i) the origin of the change and aspects relating to the origin such as sources influencing change;
- ii) the implementation of the change including such features as planning and organization for the change;
- iii) the impact of the change on the School and its survival in it encompassing a description of its present organizational structure and functioning as related to budgeting.

The study was viewed from three perspectives: sociological, technical and organizational and, for the purposes of data collection, it consisted of two time periods:

1. January, 1971 to September, 1975;
2. September, 1975 to March, 1976.

Using these three different perspectives, the study sought to elucidate how the School operates in relation to decentralized budgeting in terms of:

1. human behavior and relationships;

2. the School functioning as an organization;
3. the techniques involved in program budgeting at the School level.

Finally, propositions regarding planned organizational change were generated, and the following questions were answered:

#### Questions

1. How did the change come about?
2. How was it implemented?
3. What role did the Principal play in the change process?
4. What change has occurred in the organizational aspects of the School, e.g. teacher's role, communications, authority structure, student's role?
5. What problems were created by the change?
6. What are the present relations between the School's administrative personnel and the personnel in the Superintendent's and Secretary-Treasurer's departments of the School Division office?
7. Was there any effect felt from the four problems associated with decentralization in the course of this change; i.e., tradition, exigencies of central control, influence of local pressure groups on the decentralized unit(s) and coordination of the decentralized function (Baum, 1961)?
8. How does the program of budget decentralization operate?
9. What factors should be taken into account in determining the organizational structure for a school developing and operating its own budget?
10. Are expenditure patterns of the School different as a

result of decentralized budget control?

11. If there is to be more decentralization, what other areas would be appropriate?

## II SIGNIFICANCE OF THE PROBLEM

Two basic factors underlie the significance of a study such as that described in the last section. One is that, as pointed out in Chapter I, much of the literature on organizational change in education has focussed on Organization Development and, as Bennis comments (1969: 80):

Organization Development literature is filled with vague promises about "restructuring" or "organizational design" but with some exceptions, few outcomes are actually demonstrated.

This research attempts to demonstrate one such outcome. Research that has involved organizational change in structure in education has more often focussed on differentiated staffing or multi-unit organization. Hence, by undertaking this research, some contribution can be made to an area previously only covered to a limited extent.

The other factor is related to the methodology used. As described later in this chapter, a phenomenological approach was taken to the present part of the study (September, 1975 - March, 1976). This allowed account to be taken of the perceived world of the individuals in the organization and, of course, for them this is the real world. Such an approach allows the research to strike at the crucial point brought out by Baum's research (1961) and referred to in Chapter II. The point is that the individual's

perceptions of any change program are crucial in determining and explaining actual behaviour in that program, rather than the objective existence of the program itself.

A further point of significance comes from the fact that the study examined the budgeting process at the school level. This was of value since most budgeting and budgeting innovations such as program, planning, and budgeting system (PPBS) operate at the district level in much of Canada in the case of public schools. The process examined in this study represents an attempt at achieving "grass roots" participation in the financial decision-making procedure. Thus it also provides an opportunity for the study of the decision-making process in the school, at least in one area. The budgeting aspect of the study makes it particularly important in view of the increasing concern for the expenditure of the tax dollar on education and the resulting need for accountability in education.

In addition to the points of significance already raised, Huberman (1973: 4) comments on the "near absence of non-American literature on change in education". Consequently, it would appear that since the research focusses on organizational change in a Canadian high school, it becomes more significant. The research was conducted within certain parameters and they are outlined in the following section.

## III RESEARCH PARAMETERS

Assumption

In this study, the assumption was made that the School operated as an open, social system. Therefore it was assumed that the School receives inputs from its environment (e.g. pupils, personnel, material resources, finance, decisions from the School Division) and it affects its environment with its output (e.g. goal achievement-academic, socialization). As an open system it has a number of dynamically interdependent subsystems, changes in any of which are likely to affect other subsystems and, in the same way, the School itself is a subsystem in the environment which consists of many more parts all dynamically interdependent (Roeber, 1973). The system also strives to maintain its equilibrium or steady state which is a condition existing when "various parts of the system function without persistent conflicts that can be neither resolved nor regulated" (Griffiths, 1964: 117). Thus organizational change causes disequilibrium, with a consequent readjustment of parts in an attempt to return to a steady state.

Limitations

In this study the following limitations were recognized:

1. Much of the study was conducted 'ex post facto'. Hence data were collected during the one time period and patterns of change had to be inferred subsequently.

2. The budget development process for the 1976 financial year began before the end of the 1974-75 school year so that there had to be a greater reliance on interview and document search rather than observation for data collection of this aspect of the study.

3. The general applicability of the findings was limited by the nature of the study; i.e., a study of one school.

4. The data collection method of observation introduced some observer bias.

### Delimitations

Since the study was 'ex post facto', the following delimitations applied:

1. Examination of the change was on a macro-level. Thus there was a higher level of generalization.

2. The sociological perspective applied mainly to the present functioning of the School, from September, 1975 to March, 1976.

3. The description of the process of change was limited to certain organizational aspects, as described in the problem statement and as they related to budgeting.

4. Limited time available for the study meant the research had to be restricted largely to changes related to budgeting.

### Definitions

Terms used in this study were defined as follows:

1. The school as an open system means that it operates as "a bounded collection of interdependent parts, devoted to the accomplishment of some goal or goals, with the parts maintained in a steady state in relation to each other and the environment by

means of (a) standard modes of operation and (b) feedback from the environment about the consequences of system actions " (Miles, 1964: 15). Underlying this definition is the premise that a state of social equilibrium can be reached for the proper functioning of the client system. This occurs when all the significant elements in the system are in support of each other.

2. Structural organizational change refers to a change in the status quo of any of the structural subsystems of the organization such as control over personnel, finance and resources, communications, authority, work flow, roles.

3. Structure of an organization refers to the way in which the role relationships are arranged within the organization. Closely related to these positions are the authority, responsibilities and decision-making power attributed to each position and their structure is often depicted by an organization chart.

4. Change agent is a person who assists in the development and implementation of a plan aimed at achieving improved organizational performance. According to Jones the concept of change agent includes the property of professionalism. Thus, the change agent has the skills and techniques required to improve the performance of the client system (Jones, 1968).

5. Decentralization in this study refers to delegation of control of the budget from the Divisional Office to the individual School. However it must be noted that this delegation does not involve complete control. The School staff has control over finance for supplies and equipment necessary for the implementation of their programs. Financial control over such items as teachers' salaries

and capital expenditure still rests with the Divisional office. Nevertheless the School's staff is responsible for approximately 60 per cent of the School's total discretionary money.

6. Resources refers to the supplies and equipment in the School.

The next section describes the research methodology and the rationale underlying the use of such a method.

#### IV RESEARCH RATIONALE

##### Scientific Method

Scientific research spells out a problem in definite form and breaks it down to specific questions for which answers are sought. When the answers are integrated into a descriptive, explanatory, and predictive system of concepts, some understanding of the initial problem is achieved (Rummel, 1958). The methodology involved in such research is usually referred to as the scientific method. In this method the researcher often uses theory as the basis for the development of hypotheses or questions to be answered by the research. Then follows an observation or data collection period so that the hypotheses may be tested or the questions answered. Such a method provides more control over a situation. Consequently, replication of the study is facilitated; predictions can be refined and bias reduced (Lawless, 1972). There is usually great concern for the validity and reliability of the methods used to collect and analyze the data. Since the method is often based on theory, models frequently are developed to isolate critical variables and to facilitate replication of the research (Lawless, 1972).

Set in the context of the historical approach which is

described in the next section, application of this method means that, since the main purpose of the approach is to collect information about the past, a sound framework must be established to guide the search for the information. Then, according to Fox (1969), at the writing stage of the research, the material is integrated within the framework that guided its collection. However, it is recognized that the framework is only a guideline. Thus flexibility is one of the characteristics of this method, so that any set of pre-existing notions can be broken to accommodate any new relationship, explanation or finding if it exists in the data.

This method, with some modifications, was used for research about the past in this study. It was used because working from the model described in Chapter II provided some guidelines for researching the past. In the researcher's opinion such a method was necessary when confronted with a mass of material which could be used as data and when memory had to be relied upon to amass data. The modifications were in deference to the phenomenological school of thought which identifies a real danger in the scientific method as described here. Hence the modifications, which are discussed at the end of a later section, are aimed at avoiding the danger.

### Approaches to Research

Traditionally, several different approaches may be taken to scientific research. Fox (1969) classifies these approaches according to two dimensions. Firstly, there is the time decision. Congruent with this dimension there are three approaches:

1. historical;
2. survey; and
3. experimental.

Consequently, if it is believed that answers to a research problem are to be found in the past, an historical approach is taken. With this approach an effort is made to cast light on current conditions and problems through a deeper and fuller understanding of what has already occurred. The second approach is used to shed light on current problems by further description and understanding of current conditions. Thus it is oriented to the present. The third approach is directed at the future and seeks to establish a new situation on a trial basis.

The second dimension is that of intent. Thus the approach taken will be determined by what is required of the completed research. Fox (1969) identifies three different intents:

1. description;
2. comparison; and
3. evaluation.

If description is the aim of the research, Fox claims that there will be no attempt to judge, evaluate or make statements of quality. It will simply describe a limited set of conditions in terms of measures applied to the constituent elements of these conditions. In the case of comparison, the intent is to obtain information about more than one condition or group of subjects and then to compare multiple sets of data. If the object of the research is evaluation, some criterion or standard must be applied to make an evaluative judgement possible. The last-mentioned is often used in conjunction

with comparative research.

### Historical/Survey Approach

The present study used a combination of the historical and survey approaches and the rationale for such a combination is now described. Basically the reason for this approach was the time dimension. Part of the research focussed on the past and part on the present. The survey approach provided the best means for researching the present since it allowed the natural situation to be observed as it unfolded. Hence the researcher could monitor it directly and data about the more intangible aspects such as attitudes, interests and beliefs could also be obtained. Since data about the past could not be observed or monitored the historical approach was preferred for this aspect of the study. In addition to this fact, since the focus of the past dimension of the study was an example of planned organizational change, the historical approach was preferable since it sought causes, explanations and interpretations as much as facts or data (Fox, 1969).

With regard to the intent dimension, as described by Fox (1969), the approach taken is further determined by the fact that description is the main intent of the research. Hence, in relation to the present phase of this study, the approach taken was that of a descriptive survey. This allowed for the description of a specific set of phenomena at a particular point in time. In this study, the specific set of phenomena were those related to the budgeting process. The rationale for this approach was that the information provided was in itself at least part of the answer to the research

questions posed. It also allowed the focus to be on a single unit so that there could be examined processes and interactions such as aspects of personality and social functioning, which could not be studied except as they interacted and operated within the individual. To justify this approach Fox (1969) describes two conditions which make it feasible and both are fulfilled by the present study. The conditions are that:

1. there is an absence of information about the problem; and
2. the situation, which could generate such information, does exist and is accessible.

Part of the survey approach included a retrospective survey. Such a survey revealed information about the antecedents of a current situation by illuminating aspects of the past. It differed from the historical approach in that the retrospective was based on the premise that no data were known to exist. Therefore, data were obtained by surveying persons who actually experienced the event being researched. The historical approach was based on the premise that data already existed and the researcher had to find them. The use of both approaches in the present study provided a cross check on the validity of data collected.

#### Phenomenologically-Based Research

The danger referred to in an earlier section was that, in the words of Berger and Luckmann (1966: 128):

Definitions of reality have self-fulfilling potency. Theories can be 'realized' in history, even theories that were highly abstruse when they were first conceived by their inventors.

Thus the researcher, starting off on the basis of some

pre-conceived notion or theory, is constrained by this fact and tends to find the theory exemplified no matter what data are collected.

On the other hand the phenomenological school of thought implies a less structured method, in that the researcher does not commence with a pre-conceived notion of what he/she is looking for. Thus, research along these lines becomes less a set of procedures to be followed and more a set of experiences (Riffel, 1975).

This school of thought implies that to date social science research has uncovered structural data but the human factor underlying the structure of organizations has been neglected (Berger and Luckmann, 1966). Therefore there needs to be an integration of the structural realities and the human enterprise of constructing reality. This appears necessary in the light of the phenomenological philosophy which claims that "man is biologically predestined to construct and to inhabit a world with others" (Berger and Luckmann, 1966: 183) and this world becomes reality for him. Thus the world becomes, for man, a combination of that which nature provides and a socially constructed world, and what man perceives becomes reality for him. This then has implications for phenomenologically-based research. If due regard is paid to this philosophy, the research must attempt not only to uncover structural data but it must also bring to light man's perceptions of his world.

In line with this thinking, for the phenomenologist, "beliefs are of greater consequence than facts in shaping behavior", (Greenfield, 1974: 4) and individuals act on their interpretation of reality. Therefore there is a need to explore the doctrines, beliefs and ideas which provide the motivation for action on the part

of the organization's members. While the aim of the phenomenological approach is to represent perceived reality as a means of understanding organizations, in the researcher's opinion, the value of such an approach lies in being able to observe the actions produced by the beliefs and perceptions of the organization's members. Since this was not possible in the past dimension of this study, the phenomenological approach was restricted to the description and analysis of the organization's present functioning. This analytic description may also have been enhanced by the knowledge gained about the organization's past.

Another reason for restricting the phenomenological approach to the present dimension of the study is the fact that there are problems involved in applying the phenomenological perspective to research (Greenfield, 1974). In an earlier article, Greenfield (1973) suggests that open-ended inquiry methods are best suited to this perspective. This, in the researcher's opinion, refers more to such methods as participant and non-participant observation and some forms of interview-methods which are more appropriate to an examination of the present.

Since the researcher can see the value of the phenomenological perspective, as mentioned earlier, some modifications were included in the methods involved in the past dimension of the study. These were:

1. To ensure that documentary data did not conform unrealistically to the conceptual model, it was checked with data collected from open-ended interviews;
2. Open-ended interviews were conducted to collect data on

the perceptions of individuals involved in the change experience;

3. The interviews were only moderately scheduled to allow for flexibility;

4. While the conceptual model (Figure 3, p. 56) shows relationships between organizational arrangements, no attempt was made to predict how they were related.

The application of these methods are summarized in Figure 4 and their details are elaborated in the next section.

## V RESEARCH DESIGN

The research design developed for this study incorporated the collection of data about the change to decentralized budgeting in the School and, because of the developmental conceptual perspective of the study, data were also collected on any other changes that affected the change in budgeting. In order to avoid rigid preconceptions forming about aspects of the School that may have changed, no definite list was compiled. However, data were collected in the areas forming the focus of the study. These included: goals; control systems; formal authority structure and School programs. Changes revealed by the data in other areas, were also added to those already included in the study.

To obtain permission and support for the research, the Superintendent of the School Division and the School Principal were consulted. The School's Administrative Assistant was identified as a key figure in budgeting and she became the contact person for the researcher, notifying her about impending meetings related to

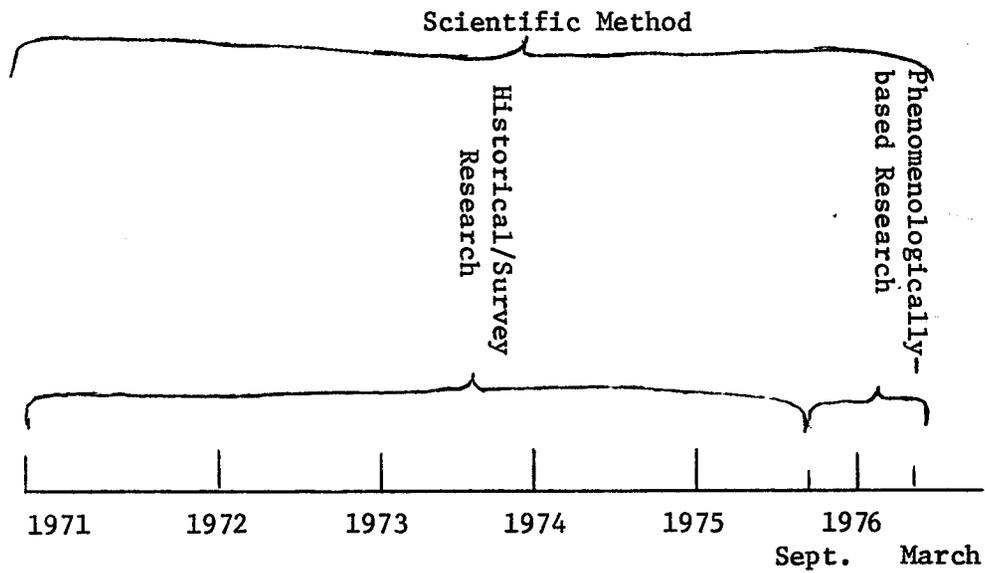


Figure 4. Research Methods as Applied to the Present Study

budgeting.

### Data Collection Methods

Three data collection methods were used:

1. interview;
2. documentary analysis;
3. observation.

These methods were chosen since, in the researcher's opinion, they were the most appropriate for the data to be collected.

### Interview

The interview was an appropriate technique in this research for two reasons:

1. Data were required about past events and all necessary data were not documented;
2. Data were required about individual's perceptions, feelings, and beliefs, and other factors related to the cognate area for the phenomenological perspective.

The strengths of this particular method lie in the fact that it can provide information that supplements other methods of collecting data; it allows flexibility so that questions may be repeated or clarified or followed up; the personal interaction assures a high proportion of responses (Rummel, 1958); it allows the interviewer to form some impression of the interviewee in relation to the truth of answers, and occurrences and feelings that may have been left unsaid (Good, 1963). There are also obvious weaknesses since it is open to certain biases and prejudices. McCall and Simmons (1969)

identify some of these. They claim that the interviewee could have ulterior motives and a desire to please the interviewer. There could also be bars to spontaneity and certain idiosyncratic factors such as mood of the interviewee or the wording of the questions. However, steps can be taken by the researcher to reduce the effect of such bias and hence improve reliability and validity. In the first place many of these effects can be lessened by the researcher being aware of possible bias and prejudice and steps being taken to reduce their effect. The particular steps taken in this study are described in the next section.

Validity of the interview data was checked by pre-testing the interview schedule before it was used and the pre-testing of the schedule is also described in the next section. Reliability was checked by interviewing all who were present during the period included in the study, so that cross checks and comparisons could be made. The interview data were also checked against data collected by the use of the other techniques.

One final advantage in using the interview technique in this study was that it allowed collection of two different types of data, as mentioned in the earlier part of this section. The interviewees were able to take on the roles of both informants and respondents. In the case of the former, they were able to provide useful data about the past and their credibility in this sphere was relatively high since they had actually experienced the events. In the case of the latter, they were able to provide information about their perceptions of reality, their thoughts and feelings.

### Documentary analysis

The second technique used was documentary analysis. This method deals with records already existing. Hence it was most appropriate for collecting data on the past in this study. Its reliability can be increased if categories used during the data collection are defined in the study so that the research can be repeated. The categories used in this study are described in the next section.

Some of the disadvantages of this technique are that, since the data already exists, it cannot be controlled. Consequently the researcher can only examine what actually exists, nor can aspects such as attitudes, interest and feelings be directly assessed. However, these disadvantages must be weighed against the facts that the researcher is free to try different ways of collecting the data and individuals who experienced the events were, in this case, able to be interviewed.

In using this technique there are two possible sources (Fox, 1969):

1. deliberate; and
2. inadvertant.

The first provides a subjective view of events, since there has been a deliberate attempt to record the events and this may produce some bias. However, it does provide an actual record so there is no need for inference on the part of the researcher. The second source is more objective, since it is being used for something other than its intended purpose. However, inference must play a large part in

the interpretation and understanding of it.

In addition to these sources, there may be primary and secondary sources. The primary sources refer to direct reports which may be animate, such as a person reporting an experience that actually happened to him or it may be inanimate as in the case of a mechanically reproduced direct record of events. The secondary source is always at least two steps removed from the event. Thus accuracy may be in question here.

No matter from which source the data are derived, the use of this technique avoids distortions caused by lapse of time, as occurs in reliance on memory. It is also possible to assess the reliability of data gathered in this manner. This can be achieved by attempting to determine the reputability of the source, by examining the data for internal and external consistency thereby establishing the extent to which the information is consistent with other information about the same event. According to Fox (1969), if two independent primary sources agree on the same point of information, it may be regarded as a solid historical fact. Such a test of reliability is possible by checking records both at the School and at the School Division office. Fox (1969) also suggests three criteria for evaluating the reliability of data collected by this means:

1. corroboration from two independent sources;
2. corroboration from one independent source and a primary one; and
3. no reputable sources holding a contradictory view of the events.

Further checks on data collected from documents in this study were possible by comparing this data with that collected by interview.

### Observation

The final method used was that of observation. This method was chosen because it is congruent with the phenomenological line of thought, in that it does not require pre-conceived notions or theories to be useful; it has flexibility and it allows observation of the researcher's reality, which can then be compared with the perceived world of individuals in the organization.

The use of this method provides a number of advantages. If the observer is known, as was the case in this study, she can move about, observe, ask questions and be freer to take notes (Lofland, 1971). It also provides a means of gathering data about the unspoken aspects of organizational life such as communication patterns and relationships between members. This is what Fox (1969) describes as the latent level, where interpretation is made of phenomena beneath the surface. As he points out, such data are less reliable than that collected at the manifest level, which refers to the record of actual words and events. However, some check on the reliability of the observer's interpretations was possible by checking this data with that collected by interview.

As with the other methods discussed here, observation techniques have some inherent weaknesses. Basically these are as follows:

1. reactive effect of observer on the observed;
2. distortions in observations from selective perception

and interpretation on the part of the observer; and

3. limitations on what the observer can witness

(McCall and Simmons, 1969).

However, these can be counteracted to some extent and in this study such action was as follows:

1. the observer took as unobtrusive a role as possible and subjects were assured of anonymity and confidentiality;
2. repetition of observations;
3. checking of observation data with interview data;
4. use of interviews and document analysis to supplement observation data; and
5. reporting of actual events as well as their interpretation.

The application of the methods discussed here is described in the next section.

### Data Collection

The description of this process can best be described in two parts. The first applies to data collection for the past dimension of the study: January, 1971 - September, 1975, and the second part deals with the present time dimension: September, 1975 - March, 1976.

#### Past period of study: (January, 1971 - September, 1975)

For data collection pertaining to this period two methods were used:

1. documentary analysis; and
2. interview.

The documentary sources were:

- a. School policy manuals, Public Schools Act, Manitoba Teachers' Society (M.T.S.) handbook;
- b. budget request forms and budget sheets;
- c. memos - within School, and between School personnel and Central Office staff; letters between School personnel and Central Office staff;
- d. School records;
- e. change proposal;
- f. Division Office records;
- g. minutes of Finance Committee meetings, Department Heads' meetings and staff meetings;
- h. notices to parents;
- i. staff bulletins from 1971-1976;
- j. student information handbooks.

The examination of both School and the Division Office records allowed a check on the reliability of the data obtained.

Those interviewed to collect data about the past as well as the present included:

- i) The former Principal, who was also the Change Agent;
- ii) the present and former administrative assistants;
- iii) the department heads;
- iv) the forty-three teachers who were members of the School staff during the whole period of the study (January, 1971 - March, 1976);
- v) a small random sample of students.

The sample of students consisted of five Grade XII students and, although their selection was random, their school backgrounds were checked to ensure that, together, they provided a wide range of course experience in the School and that they had been enrolled at the School for the whole period of the study.

The type of interview used for the majority of staff members was a moderately scheduled one to allow for comparisons and to determine the nature of the School's past budgeting process. Hence questions were suggestive but left open-ended. The questions were semi-structured and of the type that were stimulus structured but response free. They focussed mainly on structural elements and, to a lesser extent, on feelings. They also had a retrospective focus. In an attempt to facilitate depth and curb stereotyped reports, they were flexible and oriented to the stimulus situation rather than to the interviewer (Appendix A).

Part C of this schedule (Appendix A) formed a vital part of the phenomenological approach to the data collection as it revealed the feelings and beliefs underlying the observed actions of staff members. The probing questions included in this section are also shown in Appendix A.

Since the interviews were topic controlled, notes were taken, rather than a tape recorder being used (Gorden, 1975). As mentioned in an earlier section the interview schedule was pre-tested on two randomly selected teachers from the School who had been staff members there for the whole time period of the study. These teachers were then excluded from the study.

Present period of study (September, 1975 - March, 1976)

For this period, all three techniques discussed previously were used:

1. observation;
2. interview; and
3. documentary analysis.

In collecting data by observation, the researcher took the role of the known observer. Thus notes were taken during observations. Observations were made of any event or situation related to budgeting, since the phenomenological approach "deals with the direct experience of people in specific situations" (Greenfield, 1974: 8). Hence observations of the following were made:

- a. meetings: Finance Committee; Principal and department head meetings; departmental meetings; Area meetings;
- b. courses, programs: observations of their implementation and use of resources; and
- c. informal discussions with staff members.

Observation of resources and their use was mainly done by walking around the School during the school day and talking to teachers in their classrooms. Informal discussions were made possible by the researcher eating lunch in the staff room each day.

No apparent bias entered the research from the point of view of the observer's participation, since any participation that did occur, such as skiing with students and helping another with a student-initiated-course, was not related to budgeting. Hence, objectivity was at a premium, despite being identified with the School at Area meetings.

In observing meetings, an attempt was made to record all events and discussion at each meeting. As no meetings lasted for more than one hour, such a concentrated effort was possible. The types of occurrences noted included informal interactions that occurred during meetings, the formal discussion and interest shown in proceedings by participants. The last-mentioned was recorded by noting such features as who came without notes, pen or paper to the meetings, who rarely spoke, who left early, facial expressions and mannerisms.

For this part of the study interviews were conducted with those previously named, with the addition of the following:

- i) the present Principal;
- ii) both Vice-Principals;
- iii) a random sample of twelve teachers.

All of these staff members joined the staff after the change in budgeting. The interview schedules used for these extra staff members are shown in Appendix B.

Documents analyzed for this section of the study were present documents:

1. budget request forms for 1976;
2. letters between School and Central Office; and
3. memos between School and Central Office and within school.

### Interviewing

Since the interviewing formed an important part of the data collection for both periods of the study, a more detailed report of it is included here. To allay any suspicions that might have arisen

by having a stranger walking around the School, the researcher addressed the School staff at a staff meeting. At this meeting, staff members were told that the researcher was interested in finding out about their new system of budgeting. Chances of cooperation were enhanced by identifying with them as a classroom teacher from Australia. Resulting from this, there was a definite willingness on the part of teachers to have the researcher visit them in their classrooms.

Interviews were conducted in January/February so that some observation was possible after gaining knowledge of teachers' perceptions of the budgeting process. The interviews were scheduled in teachers' preparation periods and teachers were notified a few days in advance by a personalized letter placed in their mail box (Appendix C). Most of the interviews took place in the teachers' own classrooms or else in the staff room over a cup of coffee. This was designed to set the teacher at ease and it seemed to be effective.

In the introduction to the interview steps were taken to reduce possible bias. Teachers were asked not to discuss the interview with their colleagues until all interviews were completed and it was the impression that no discussion did occur. Confidentiality of the interview was stressed and then the purpose of the interview was explained in terms that made it clear that the researcher was interested in the budgeting process from the wider perspective of organizational change.

Interviews ranged in time from two and a half hours with one

department head to about twenty minutes, with most averaging approximately an hour. It would seem that this flexibility was valid in view of the researcher's ability to assess the interviewee's knowledge and feelings about the budgeting change. For example, in the only case the interviewer felt that the respondent was deliberately being unresponsive, a later documentary search revealed that, at the time of the change, three years earlier, the same teacher had made comments at a staff meeting that seemed to indicate he was against decentralization. Such comments included: "Why the change toward decentralization?" As soon as possible after each interview, notes taken during the course of the interview were checked for clarity and any detail that may have been omitted was filled in while it was still fresh in the researcher's memory.

The major change after pre-testing the teachers' interview schedule was removal of a question aimed at getting the teachers' perceptions of the type of budgeting change that had occurred. References to the form or type of budgeting were found to be confusing terms, since the term 'decentralized budgeting' had been in use at the School since the initiation of the change.

After analysis of some of the early interviews some modifications and additions were made. The additions included questions relating to the effect of the leadership change on the budgeting process; other organizational changes and the sharing of resources (Questions 12, 29 and 32 in Appendix A). The modification was an alteration to Questions 15 and 20. From just asking about teachers' past and present duties or tasks, budgeting

was not being mentioned as it was not regarded as an extra task by teachers. Hence, these questions were made more specific and related directly to budgeting (Appendix A). Also included in Appendix A is the interview schedule used for the former Administrative Assistant. He was interviewed in his new office.

The interview schedule used for teachers who joined the staff after the budgeting change was largely taken from the schedule used for teachers who had experienced the change (Appendix B). This was to provide a check on the reliability of answers obtained from the older members of the staff and to see if different perceptions were given by newcomers to the staff. The Principal and vice-principals were also newcomers to the staff and their interview schedules are included in Appendix B.

The former Principal, who was the Change Agent, was interviewed in his present office and the schedule used for this interview is shown in Appendix D. He was also able to give his interpretation of comments he himself had written on some of the original documents associated with the change.

In the case of the students, to put them at ease, an informal interview was held. During these interviews they were asked about supplies and equipment in each of their subject areas and if there had been any change in these since they were in Grade IX - the time of the budgeting change. They were also asked if teachers ever discussed budgeting (for the School) with them.

A final relevant comment pertains to the time division of the schedule. This division was included to provide a more objective means of assessing whatever change occurred. In all but a

minority of cases teachers' replies were appropriate for the time divisions. This was probably aided by prefacing each question about the past by a phrase such as "In the past". In cases where the interviewer felt they were not appropriate a double check was made by the interviewer asking: "That was what happened under the old system of budgeting, was it?" In most cases then teachers realized their lapse and corrected their reply. As the data were collected by the above-mentioned methods, the analysis began and the methods used for this are described in the next section.

### Data Analysis

Beginning the data analysis before data collection was complete revealed the need to explore further the effect of the change on influence patterns. However, the general design was based on the conceptual design. Hence, analysis moved from the general to the specific; i.e., from the metamorphosis model of organizational development to the details of the major planned change studied. Thus the first step was to identify major and minor changes that occurred preceding and following budget decentralization. The analysis of these changes and related aspects was based on a time sequence to preserve the developmental perspective of the study. Thus, data pertaining to 1971-72 were analyzed together, followed by data pertaining to the later years of the study up to the present period. Within this time sequence further subdivisions were made and the main categories were goals, control systems, authority structure and School programs as described in the problem statement. The suitability of these categories for the data collected was

found to be adequate after testing them on the data obtained from the pre-testing of the interview schedule, which were excluded from the results. Therefore, in terms of the budgeting change, relationships between goals and School programs during the period of the study were examined. Aspects of the formal authority structure such as roles and responsibilities were analyzed in terms of the change in budget control and, of course, this led to an analysis of control systems within the School and of control of the School by the Division in regard to both finance and resources.

Feelings of individuals about the change were analyzed.

In the case of present feelings about school budgeting, an attempt was made to link descriptions of actual behaviour in the areas of decision-making, communications and so on, as they related to budgeting, to feelings about budgeting at the school level and organizational aspects related to it. However, as mentioned in one of the limitations (p. 69), the budget development process had begun before the study had commenced. Hence, this was one area where the research was limited.

Although these main categories formed the basis of the analysis, they did not limit it as changes in it were made where necessary. This is apparent in the more detailed account of the analysis given next.

On a more specific level, documents were analyzed as follows:

1. School policy manuals, Public Schools Act, M.T.S. handbook for roles and responsibilities of each position incumbent and evidence of control of finance and/or resources;

2. budget request forms and budget sheets for expenditure patterns, within departments, over time, in terms of supplies and equipment and between departments in terms of actual dollar figures;
3. memos and letters for communication patterns;
4. School records for hierarchical structure and programs and courses offered;
5. change proposal for control patterns, roles, responsibilities, techniques of budgeting, and the implementation of the change including planning and participation;
6. Division Office records for control patterns and techniques of budgeting;
7. minutes of meetings for policy formulation or changes, control patterns, roles responsibilities and techniques of budgeting;
8. notices to parents for evidence of parental involvement in the budgeting change;
9. student information hand books for courses and student involvement;
10. staff bulletins for communication patterns, control patterns and evidence of individual responsibilities in relation to budgeting.

Observation data were analyzed to ascertain information regarding decision-making, roles and responsibilities, communications and control systems in operation, the actual budgeting procedure, evidence of continued change as exemplified by such occurrences as the formulation of new policy or the changing of old and expression of feelings about the budgeting system. For analysis, these data

were grouped according to the type of observation involved. Therefore, notes from observations were grouped as follows:

1. resources in the School;
2. Finance Committee meetings;
3. department meetings;
4. Principal and department head meetings;
5. staff meetings;
6. Area meetings;
7. informal situations.

These notes were then examined for the above-mentioned features.

The interview data were grouped by department to facilitate analysis of such aspects as within and between department communications. They were also labelled by position so that the same aspects could be examined in relation to hierarchical level in the organization. Then they were examined for information about the origins of the change, feelings about it, its implementation and individual perceptions of its present functioning, communication patterns, decision-making, programs, goals and resources.

When all sets of data had been analyzed, cross-checks were made to test the validity and reliability of the results. These results are described in the next chapter and the questions posed earlier are answered. As a result of the data analysis, the following question was also posed:

What happened to influence patterns between different levels of the hierarchy as a result of the change?

## CHAPTER IV

### FROM CENTRALIZED TO DECENTRALIZED BUDGETING

The data analysis revealed the pattern of change that emerged at the School during the period of the study. An overview of this pattern is given in this chapter and there is also an analytic description of the move to decentralized budgeting, which formed the major focus of the research. The description is set within the framework of the conceptual models outlined in Chapter II. To help visualize the process, the changes are described in a time sequence wherever possible. The description of this change reveals details of the origin, implementation and functioning of POB from three points of view:

1. technical;
2. organizational; and
3. sociological.

Most of the analysis of this organizational change is undertaken in Chapter V. However, the description incorporates the factors outlined in Chapter III and their relationship to budgeting in the School. The factors include the formal authority structure, which involves communications between positions, decision-making and the roles and responsibilities associated with them; programs; goals and control systems.

In the course of the description many of the research questions posed in Chapter III are answered. In that chapter the questions were ordered on an 'a priori' basis according to a time

sequence. However, as a result of the data analysis, it was apparent that the ordering should be slightly changed.

## I OVERVIEW OF ORGANIZATIONAL CHANGES BETWEEN 1971 AND 1976

The study of organizational change at the High School which formed the focus of this research seemed to verify Starbuck's (1965) belief that development in organizations is not smooth and continuous but is marked by abrupt and discrete changes. The changes that occurred during the period of the study were neither smooth nor continuous. However some were relatively minor and therefore did not generate far-reaching effects. Figure 5 summarizes the major changes that occurred at the School during the period of the study. They are mentioned here because the analysis of data showed that they either affected the move to decentralized budgeting or were affected by it.

The single most important change was probably the first one, since the newly appointed Principal instigated the changes that followed, at least up to the time of his departure from the School. Although no change is shown during 1972, a tremendous amount of planning for the introduction of the new budgeting system occurred. It therefore appears as though 1972 was a period of relative stability. The introduction of a committee system in 1973 allowed for greater teacher participation in the decision-making process in certain areas of the School. However, many teachers felt that this was not a successful change, because decisions were rarely put into effect. Nevertheless, the establishment of this system created the

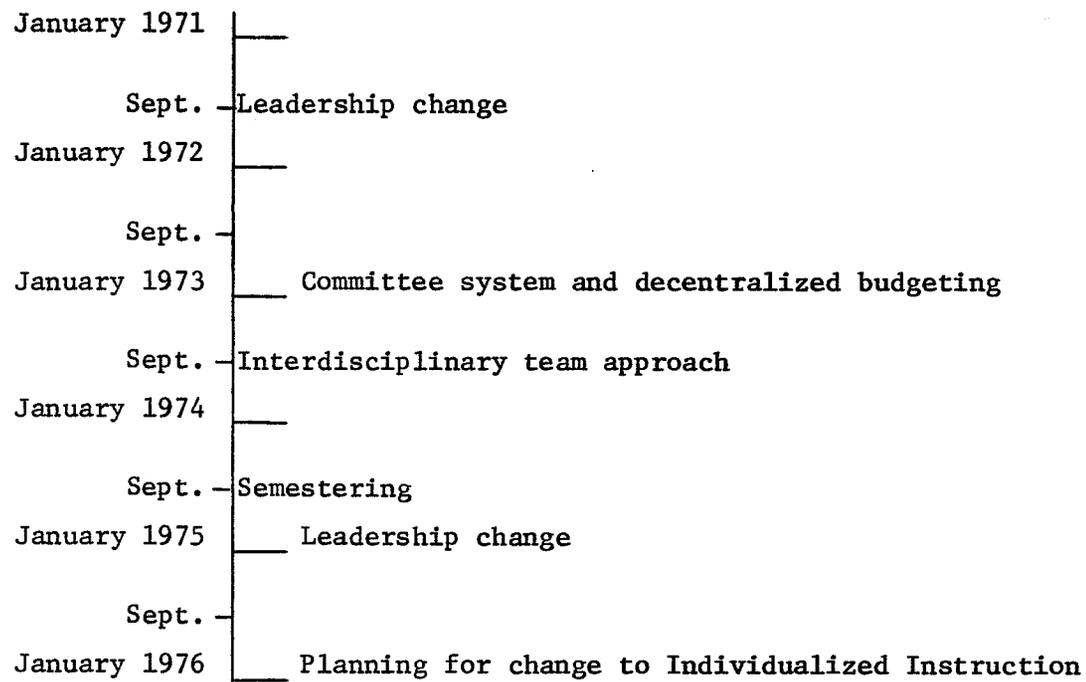


Figure 5. Time Line Showing Major Organizational Changes

organizational structure necessary to accommodate the change to decentralized budgeting.

The interdisciplinary team approach involved an integrated Mathematics, Science, English and Social Science program for a pilot group of Grade VII students. It meant a structural change, to the extent that a "school within a school" was created. The change continued into the next school year with the same group and will be expanded eventually stage by stage to include the complete program in the junior high section. This was one departure from traditional procedures that was slightly affected by the budgeting change. The relationship will be examined later on in the study.

The next two major alterations, involved the introduction of a semester system in the senior high and the appointment of a new Principal. Both had a slight effect on the budgeting process. It would seem reasonable to expect that Individualized Instruction would have a considerable effect on the budget in terms of the resources needed. However, the effects of these changes are brought out in the analytic description of the major change studied and this description begins in the next section.

## II CENTRALIZED BUDGETING

### Technical Aspects of the Budgeting System

When the budgeting process was centralized the following procedure was followed. The School was sent budget request forms in September of each year. These were special forms for:

1. general supplies and equipment;

2. library equipment and furnishings;
3. Special Education Department.

The forms were in triplicate, with the original to be forwarded, signed by the Principal, to the Purchasing Department and the triplicate was to be retained for the School records. The forms listed the items that could be ordered in the left hand column and School personnel had only to complete the quantity required, whether the item was replacement or additional and list the make, serial number and School Department for which it was required. Only a small section of the forms was left open for School personnel to list items needed. No prices were shown anywhere on the forms (Appendix E).

The requisition forms described above were used to order equipment and supplies other than printed materials such as books and filmstrips. These supplies came from the Manitoba Textbook Bureau. In 1971 the Provincial Government offered a Print and Non-Print Grant of twelve dollars per pupil per annum to finance these supplies. At this stage the Division decentralized the Grant so that the School operated about 70 per cent of the allotment per student. The Grant covered textbooks, library books, reference books, workbooks, film strips, slides, charts, maps, motion pictures, phono discs, audio tapes, recordings and other instructional materials. The School's Administrative Assistant ordered these materials through the Division's Purchasing Agent, who then passed the order on to the Provincial Department of Education's supplies outlet. In this area the School staff were provided with approximate costs, because they had to keep within the amount allocated to the School. The invoices

sent to the School with the supplies contained actual costs.

Organizational Aspects in Relation to Centralized Budgeting:

Formal roles and responsibilities

While the School operated under this centralized form of budgeting, its organization structure was as shown in Figure 6. Thus the Principal was the ultimate authority in the School and the teachers were at the lowest level in the organization.

As far as budgeting, or matters related to it, were concerned, the formal responsibility required of those fulfilling the teacher's role (Public Schools Act, 1970, R.S.M.c. 215, s. 265) was to:

283 j) keep an accurate record of the receipt and distribution of all textbooks furnished by the minister and of all library books; and see that pupils take proper care of such books, and see that every regulation with regard to such books is properly enforced.

The Teacher's Manual at the School advised teachers to see their department head, if they had any requests or questions concerning equipment and supplies.

The responsibility of the department heads, in relation to budgeting, was not mentioned at all in the Public Schools Act. However, according to the Division's Code of Rules and Regulations, which were revised in 1967, the Department Head (Section 3.3 - Duties of Department Head):

f) ...shall prepare for the principal an annual statement for budget purposes of the supplies and equipment required for his department.

g) ...shall requisition, through the principal, equipment and supplies for his department.

h) ...shall maintain a current inventory of the equipment in his department.

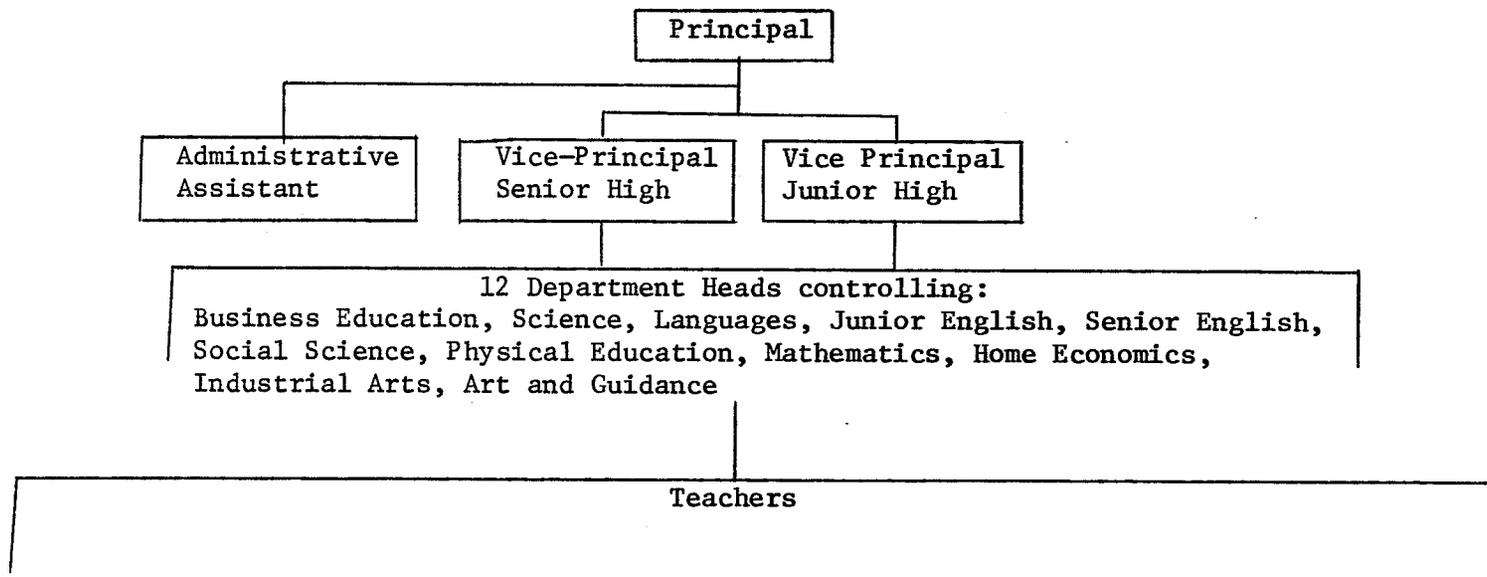


Figure 6. Organizational Structure of School Prior to 1973

The same document also informed that the administration of a system of accounting for all moneys from such sources as student activities, fees, gifts, entertainments or student groups was the responsibility of the Principal. The Principal was also responsible for the safe-keeping of school moneys (Section 3.1 (18) ). It was the Vice-Principal's task to assist the Principal in carrying out duties such as these, although nothing specific relating to budgeting was mentioned for this role.

Section 3.17 of this Code required that the Division's Purchasing Agent, and, if necessary, the Superintendent, be notified of all details of any item that was to be purchased freely from school funds.

Of all positions shown in Figure 6, the Administrative Assistant appeared to accumulate additional budgeting tasks. However, there was little real responsibility attached to the tasks as they mainly involved the completion of routine forms and the checking of supplies. According to the job description for the position when it was first established in 1967, budgeting responsibilities included the maintenance of school accounts, the receiving and banking of all school money, the preparation of an annual financial statement, and the requisitioning, receiving and distributing of supplies and equipment. Except for a slight increase in tasks, with a subsequent increase in responsibility, an independent Divisional survey of the position in 1971 revealed that the responsibilities of the position were still similar. The most important of these tasks was that the assistant was to assist the Principal in the setting up of the

school budget to cover school funds such as those previously mentioned. In addition, he was to account for and prepare statements for the Division for grants dealing with curriculum, field trips, perishable Science items and Physical Education transportation.

Under the former system, then, the teacher had virtually nothing to do with budgeting and the department head's tasks were mainly concerned with orders and inventories, with no dollar figures being necessary. Only the Principal and Administrative Assistant had some involvement in actual budgeting. Even so, the latter's responsibilities were mainly of a clerical nature and the Principal only had control over the School funds, which were comparable to about 6 1/4 per cent of the School's supplies and equipment budget.

Teachers' comments during interviews indicated that all they had to do was submit their orders annually, except in the case of Science and Home Economics teachers who ordered more frequently (twice per year). In addition to providing an extra link in the communications channel by passing on the requisition forms, department heads, as mentioned, had to keep an inventory of the supplies and equipment in their department. The forms were signed by the Principal or Administrative Assistant and sent onto the Division's Purchasing Department. The interview data showed that there was no School control over the actual quantities received by the School; nor was there any departmental control of any money or knowledge of the amount either available or actually spent in most of the School's departments. The only exceptions were in cases such as Music where the teacher in charge had control over locally-raised funds.

Communications

Under such a system, it was not surprising that an analysis of the data showed little communication which was related to budgeting at any level. Of written budgeting communication between the School Division and the School's administration which had been kept in the School's files between 1969 and 1972, a large percentage (94%) indicated it was downward from the School Division. Most of these letters and memos were either giving directions or information such as dates for orders to be placed. The letter accompanying requisition forms informed the Principal that he would know which items had not been approved by the red line drawn through them. If an explanation of these decisions, or of those concerning quantities that had been changed at the Division level, was required, principals were asked to phone a certain number. This often meant that the teacher, at the bottom level of the organization, had no knowledge of approval or disapproval of items ordered until the time of delivery.

From the interview data there appeared to be little intra-school written communication. What did exist in fact consisted mainly of reminders about ordering -- the staff bulletin, memos from department heads or the Administrative Assistant to teachers requesting their orders. Such communications were more on an annual basis and often, for the teacher, meant filling in spaces on a requisition form, without even having to list items. The other written communications seen by teachers came from outside sources in the form of catalogues. They were received from:

1. Department of Education;

2. School Division; and
3. Publishers.

Interviews with staff members revealed a similar finding as far as oral communications were concerned. In matters relating to budgeting, the following pattern emerged:

1. All teachers interviewed claimed they never communicated with students about matters related to budgeting;

2. Of the teachers interviewed, 68 per cent claimed that budgeting never or rarely<sup>1</sup> was an item for discussion at department meetings;

3. Of the teachers interviewed, 89 per cent claimed they never or rarely communicated with the School administration about budget-related matters;

4. Of the teachers interviewed, 92 per cent claimed it was never or rarely mentioned at staff meetings;

5. Of the teachers interviewed, 50 per cent claimed it was never or rarely discussed with department heads.

The last finding suggested that 50 per cent did discuss it either occasionally<sup>2</sup> or frequently each year. This is understandable in light of the fact that most ordering was done through the department head. The same trend of little communication concerning budgeting was evident at each level of the hierarchy. Analysis of the minutes of Department Heads' meetings in the period 1971 to 1972 (inclusive)

- 
1. Rarely meant once or twice per year.
  2. Occasionally meant three or four times per year.

showed that budget-related matters were discussed at only 15 per cent of the meetings held. Responses obtained in department head interviews showed that all but one almost never communicated with the Principal or Vice-Principals of the School about budgeting. This is probably explained by the fact that simply handing in requisition forms was not considered to be communication. In the cases of Science, Physical Education, Industrial Arts, Home Economics, Music and Art, orders were placed directly with the subject coordinators who were part of the Division Office staff.

Despite this communication pattern regarding budgeting, communications in some cases were a vital part of the budgeting process. In at least three cases related to subject areas where resources were provided through the coordinators, for example, a "favourable" supply of resources depended on the rapport established between the department head and the coordinator.

With the exception of the cases mentioned above, few of the School communications involved decisions of any importance, since any decisions made at the School level were often overruled at the Divisional level. The decision-making process under this system of budgeting is described in the next section.

#### Decision-making

The interview data revealed that in the area of budgeting, not even the Principal had decision-making power, nor were School staff members consulted prior to decisions being made. All decisions were made either in the Secretary-Treasurer's Department or by the subject coordinators or by the Superintendent and his

assistants. Only in the area of school-raised funds did the staff have any say in spending. This result was supported by documentary evidence in the form of letters from the Division to the Principal informing him which items ordered, had been approved. Under this system of budgeting it was even possible for the Purchasing Department of the Division to initiate purchases. This occurred regularly in cases of replacement of equipment such as typewriters in the School office and in some areas of Industrial Arts and Home Economics. Thus, not even some decisions about ordering originated at the School level.

#### Resources

Both the interview data and the documentary evidence again supported the finding that, under this system, a particular trend emerged with regard to resources. Analysis of invoices dating from January, 1969 to December, 1972 for print and non-print material showed that orders were confined almost entirely to books, often in multiple copies, as high as 450 copies of one book in one case, and working papers. These orders were mostly in the areas of Mathematics, Social Science, Science, Languages and English. One record ("O Canada") and some maps were ordered during this period but, apart from these, there was no documentary evidence in this source showing that resource material such as posters, charts and other teaching aids were supplied to the School.

The analysis of requisition forms during the period 1971-72 showed that standard items such as record players, tape recorders, projectors, desks, chairs, wall screens and maps were

ordered. However in 1972, for example, 46 per cent of the items ordered, were either cancelled or had quantities reduced by the Division personnel.

According to responses made during interviews, the majority of the staff members found there was a long delay after ordering before the supplies and equipment arrived. In some cases, where items were put up for tender by the Division, teachers received the wrong type of equipment. Purchasing, in areas such as Physical Education, had to be in line with the Division's ideas about what equipment should be in the School. This meant that the system of budgeting influenced the programs offered by the School.

### Programs

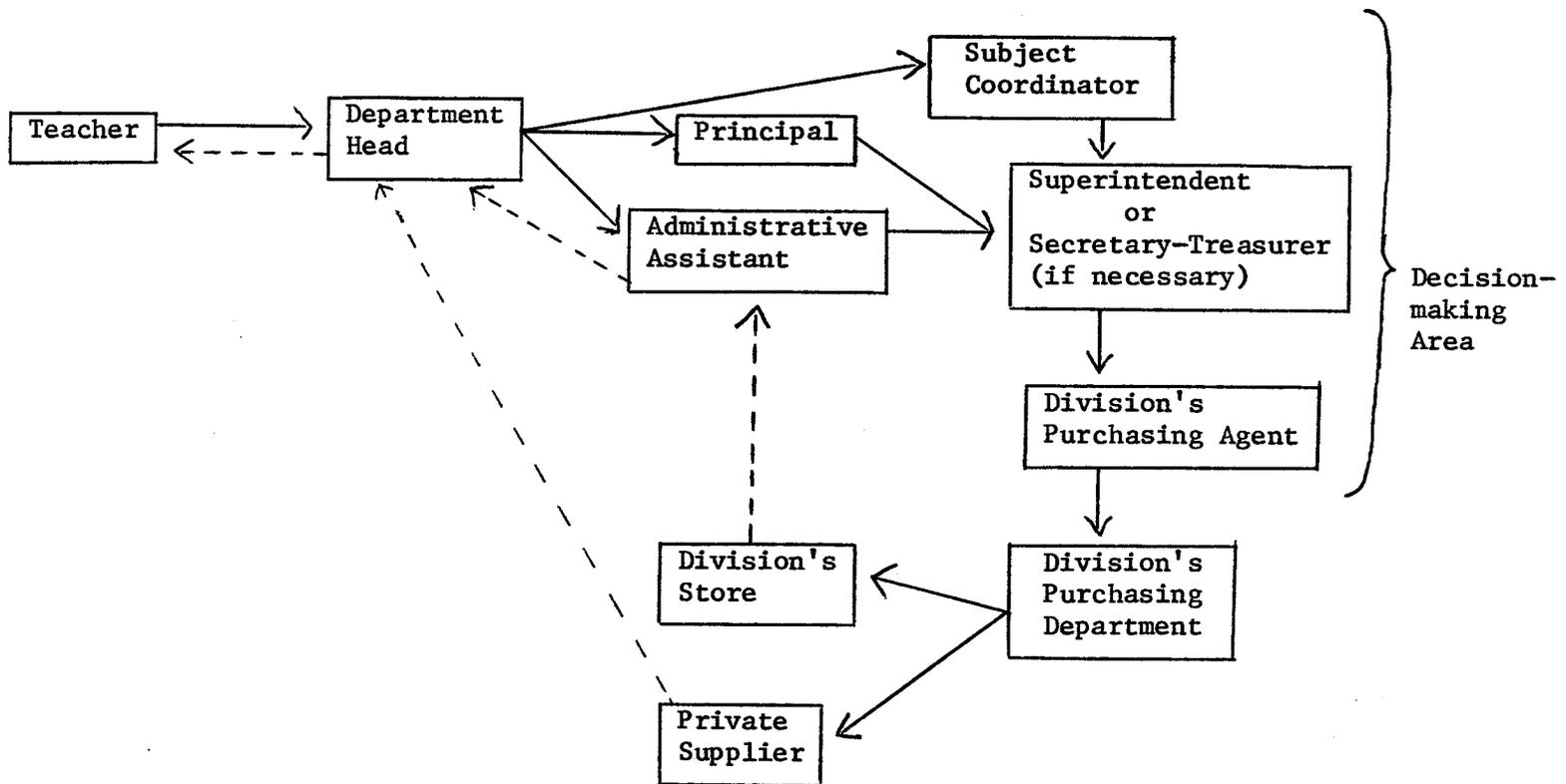
The Divisional influence was more noticeable in special areas: Physical Education, where, at this time, the emphasis was almost entirely on team sports; Industrial Arts, where there were programs in woodwork, auto mechanics and metalwork; Art and Business Education. This influence of course, was due to the materials provided by the Division for these subjects.

An interesting development in the area of programs in terms of the future budgeting change was that, in 1971-72, the Principal asked department heads to evaluate their departments' work in terms of program reports. This direction requiring staff members to think in terms of programs rather than individual courses, provided some foundation for the introduction of the budget change in the following school year.

Control systems and authority structure

Unquestionably, then, control of Divisional funds and purchasing lay firmly with the School Division. Ironically, carefully staged procedures led to a lack of control in some respects. With the lack of communications between departments, duplication of resources could occur, despite the coordinating efforts of the Administrative Assistant. Because he was not a professional teaching staff member, he was not really in a position to question requests. The fact that staff members were never informed about actual costs meant a few used costly ways of overcoming certain disadvantages of the system. Some of these strategies are described in a later section.

As the findings to date have indicated, the authority structure with regard to budgeting was really an authoritarian one. All decisions were made at the upper levels of the hierarchy beyond the School and passed down without consultation with School staff members. Communications were largely prescriptive and downward; the only upward ones being the submission of orders from the School. Staff members were not voluntarily offered any explanations for decisions made outside the School. The budgeting process during the period January, 1971 to December 1972 is summarized in Figure 7. As shown in Figure 7, the teacher is both the starting and finishing point in the budgeting process. However, his/her orders must pass through at least three different levels of the hierarchy before arriving at the supplier and the orders can be altered, cancelled or confused at any one of these levels. Then the supplies and equipment pass through at least one other level of the hierarchy before they reach the



\_\_\_\_\_ Requisition

- - - - - Supplies and Equipment

Figure 7. Budgeting Process Under Centralized System

teacher. With so many links in the communication channel, and the lowly position of the teacher in the decision-making process, it was no wonder that there were delays and confusion in the ordering and supply process.

### Conceptual Framework

In terms of the conceptual framework used for this part of the study, taking the School as a complete organizational unit, as far as budgeting was concerned, there were some organizational dimensions which became inputs into the system rather than being integral parts of the system as would normally have been the case. This was true of decisions and the control of resources. It was also true of communications to the extent that they were stimulated by factors located in the School's environment; viz. the Division's requests for requisitions to be submitted. This, in turn, meant that the School's output was to some degree influenced by a part of the School's environment (the School Division). For example, students completing the Physical Education program, unless affected by outside variables, which was quite possible, were oriented towards an interest in, or a dislike for, team sports as a result of their school experiences.

### Informal Adaptations of the Formal Organization

The interview data revealed some informal adaptations that staff members had adopted to overcome some of the inefficiencies of the formal budgeting procedure, such as delays in delivery of supplies. There were a few cases where teachers would make direct

contact with the coordinator concerning supplies. In these cases, the individual teachers knew the coordinators personally and were able to influence them. One department head would order by telephone to reduce delays caused by completion of forms in triplicate. Some more costly adaptations included one teacher who used the School purchasing number as a "credit card" and bought some of his supplies directly from private suppliers. A few other teachers would over-order so that, if there were delays in delivery the next year, they had enough supplies to tide them over.

### III ORGANIZATIONAL CHANGE

#### Origins of the Change

The first research question posed in Chapter III referred to the origins of the change and the perceptions of staff members about this provided some interesting findings. Of the fifty-five staff members interviewed about the change, the most frequently given responses (32) indicated that it was believed to have originated in the School Board Office and it represented further moves towards decentralization. Consequently it began as a pilot project. Since this question dealt with perceptions of an event, in which teachers were not heavily involved at the time, it is the researcher's opinion that the passage of time has had an effect on their memories. As mentioned in Chapter I, decentralization moves only began in the Division at about the same time as final preparations were being made for the implementation of this change in the School. Hence, there has been some confusion in the minds of teachers. However

the interesting point in these results was that, taken proportionately, more members of the School's administration had more accurate perceptions about the origin of the change than did teachers at the bottom level of the organization. Letters from the Division personnel to the Principal, concerning the latter's change proposal, indicated that the Principal's interest in program-oriented budgeting was the prime stimulus for change. This finding about the origin of the change was also supported by interview data, since twelve staff members and the Principal himself perceived that the change came about because of this interest. Before leaving staff members' perceptions of the change, it is interesting to note that two of the teachers, who had negative reactions to the change, saw the origins of it as being related to "change for the sake of change" and as "another fad from the United States". The six staff members who had no idea where the idea originated were all teachers -- the bottom level of the organization.

To balance these perceptions of the origins of the change, the actual facts surrounding its initiation must be examined. This examination partly answers the third research question posed about the Principal's role in the change. In September, 1971 a Principal who had recently spent his sabbatical leave at the Centre for the Advanced Study of Educational Administration, in the United States, was appointed. During his leave, he had completed some field work on budget implementation and program budgeting. He held discussions with the Superintendent and the Secretary-Treasurer on program budgeting in May 1972 and he circulated literature on the topic among

these school officials. At the same time, the Secretary-Treasurer had acquired a knowledge of PPBS and good reports about its use in the United States had been published in professional journals. In addition to these facts, budgeting methods similar to those proposed by the Principal had successfully been introduced in neighbouring school divisions. There was also some staff dissatisfaction with the existing system, even though staff members had learned to live with it. These events probably assumed greater significance, in terms of the change, because the School Division was entering an inflationary period.

Although instigated at the School level by the Principal, it appears as though the "unfreezing" phase of the change began in the School Division (Lewin, 1947). This perhaps is an important point in viewing organizational change, since this was the area where the control lay and it was impossible for the School to change until the Division's personnel both saw the need for it and allowed it to occur. Under these conditions, the Principal was given permission to draw up plans for the implementation of the change. In June, 1972, he began his planning.

#### Planning for the Change

The object of the plans was to develop a program-oriented budgeting system (POB) which could be introduced successfully to the School and would be a system that ensured School level control over finance for supplies and equipment. By way of introduction to the staff, the Principal first "sold the idea" to the department heads. He did this by pointing out the advantages and problems of

such a system. His main selling points were that it would not require too much of their time; they could obtain items they wanted for their departments and there would be no vetoing by the School Division. With this approach he gained their commitment and he managed to actively involve those who were:

- a) vital communication links within the School; and
- b) close to their department members (in most cases) and yet were part of the School's administration.

However, the Principal and the Administrative Assistant together did the developmental work and designed a budget model, which is shown in Appendix F. The developmental work included:

1. discussions with the Secretary-Treasurer and members of his Department;
2. discussions with the staff members of a high school in a neighbouring school division where decentralized budgeting was already operative; and
3. the collection of data concerning 1971 and 1972 cost allocations for the School from the School Division.

The policy that was formulated meant that control over spending lay with the School staff. This control point proved to be a vital factor in the changed procedure, since the success of the change depended, to a large extent, on the School staff being able to exercise their control. The importance placed on this point by the Change Agent (the Principal) can be seen in the implementation procedures that were drawn up (Appendix G). A number of checks on spending at the School level were built into the proposed procedures.

For example, the second point ensured that ordering could only be initiated at the School; the fourth ensured that the School budget would only be charged with items purchased by the School and the thirteenth defined the School's responsibility in terms of financial accountability. The fourteenth point showed the attempt to cover all eventualities concerning budgeting. In addition to these plans, another necessary dimension of control was established. In any organization, if control is to be exercised, areas of responsibility must be defined and this was done in the case of each of the key positions involved in the proposed budget procedure (pp. 262-3, Appendix G).

#### Division's Role

The proposal for the new budgeting procedure was presented to the Superintendent and this meant the formal involvement of the Division. The Superintendent recommended that the Board accept the proposal. Given this top management support, the proposal was accepted. Further key points in ensuring the success of the change were revealed in a letter sent by the Secretary-Treasurer to the Principal on December 12th, 1972. These points were that:

1. Final details of the project were to be determined by the Superintendent and the School Principal;
2. There would be modifications made in the School Division Budget document and in the application of the governing regulations (Appendix H);
3. The Principal had the assurance of the cooperation of the members of the Secretary-Treasurer's Department.

The importance of these points in relation to the success of the

change is that they highlight the involvement of the most powerful individuals at the Division and School levels. They show that changes were made in the School's environment to accommodate the changes being made at the School and the last point makes it evident that the Principal had the support of those who stood to lose some power as a result of the new system.

### Implementation of the Change

The second research question focussed on the implementation of the change and this section describes how it was implemented. In the planning for the change the following change goals had been developed:

1. that there would be "grass roots" participation in the financial decision-making process;
2. an opportunity to maximize the local School financial position;
3. local School control over budget priorities;
4. possible financial savings.

These goals appear to have guided the implementation process and, as mentioned earlier, the structure set up to allow "grass roots participation" was the committee system. One of these committees was to be a finance committee to study and approve the Program Budget Requests from each subject area in the School. Originally the Committee was to have been elected and to have included a representative of each subject area. However, it was decided to form the Committee from the department heads, with the Vice-Principal as chairman and the Administrative Assistant as secretary to the

Committee.

As implied in the earlier description of the origins of the change, the Principal was also the Change Agent and the part played by the person in this position is vital to many organizational changes. Thus, to finish answering the question about the role played by the person in this position, it was found that definite roles were assumed during the implementation stage. The Vice-Principal, Administrative Assistant and department heads were given the task of the actual implementation by the Principal, who deliberately adopted a policy of non-involvement during this stage. His reason being that in the event that issues could not be resolved satisfactorily by the Committee, he provided a last resort within the School — a kind of "neutral judge". In this way, the School could remain independent of the organization from which it was wresting control — the Division.

During this time, the Principal took on a role that involved the use of his position power. He negotiated the final budget figure with the Superintendent. Finally, the following formula was agreed upon: 1971 school spending + 8 per cent (of that figure) + allowance for (i) enrollment increase (ii) Phys. Ed. equipment (iii) Science (The allowances were specified allocations made by the School Division for Physical Education and Science in each school). In addition to this task, he interviewed each department head to discuss the needs assessment of their department. He also pared some programs which he considered to be "way off base". For example, he cut Business Education from twenty-four thousand to twelve thousand dollars.

The tasks of department heads during this stage were to conduct a needs assessment within their departments and, on the basis of this, develop a Program Budget Request (PBR) for their department. They also had to develop a PBR planning document (Appendix I). In each of these tasks, the staff of the departments were to be involved. However, the interviews with staff members revealed that in at least two departments, the department heads took it upon themselves to complete all these tasks, allowing little or no staff involvement. Department heads were also involved in discussions with the Principal to develop operating guidelines.

Briefly summarized, the activity steps of the actual implementation of the POB were as follows:

1. Finance Committee was selected;
2. Department heads did a needs assessment of their area;
3. The Principal interviewed each department head on the basis of the assessment and he also analyzed the needs assessments with the Superintendent. Some initial paring was done during this step;
4. The pared PBR's were submitted to the Finance Committee for negotiation and approval;
5. There was agreement between the Principal and the Superintendent on \$79,300 as a reasonable total estimate;
6. All PBR's were submitted to the Secretary-Treasurer for costing;
7. The departmental budgets were agreed upon.

At this point it should be noted that the School's budget responsibilities only included supplies and equipment. At the time of implementation Home Economics was excluded from the School budget because of problems that could have resulted from having to cope with replacement of heavy equipment and the depreciation of these items. It was only in 1976, when the School staff had become more familiar with the new system, that Home Economics became part of the School budget. The maintenance budget was also left under Divisional control, mainly because the Division employed its own maintenance staff for the schools of the Division.

When staff members were questioned about the possible use of pressure in the change process, not one teacher replied that they had been subjected to pressure. However, one of the most frequent responses when questioned about the reasons for this was that it had been imposed on them. Obviously, position power had been used by the Principal but the staff did not perceive this as pressure. This may be explained by the fact that most of them saw the change as being advantageous, improving efficiency and giving them more control. There was also the experimental nature of the change which did not necessarily mean it was permanent. One teacher saw the Principal's "selling talks" as subtle pressure and another experienced pressure from his environment in the form of questioning about the change by the coordinator of his subject area. The reaction of this coordinator was understandable in view of the fact that the budgeting change meant the loss of considerable power for the coordinators where this School was concerned. They were now to take

on more of a consultant's role with the staff of the School, particularly during the implementation stage.

When questioned on their feelings about the change; twenty-one staff members claimed they were happy about it and welcomed it. Fourteen had no definite feelings about it and six were apprehensive because of a belief that the School staff lacked the expertise necessary to control their own budget. Only three felt unhappy about it because of the possibility of an increased workload.

An analysis of these figures showed that, of the twenty-one who felt "good" about the change in the beginning, four found later that they had been "deluded", were under a "misconception" and had "innocently" been led to believe they would have more control. None of those who had been directly involved in planning for the change (department heads, Administrative Assistant) were among the group who felt neutral about it. Of the six who were apprehensive about it, one did not let this interfere with his acceptance of it, since he realized he could not weigh its advantages until he had been confronted with the situation. The others were not against it, again, because of its experimental nature, which removed some of the sense of permanency.

Among the department heads, who had such a large part to play in the change, only two were unhappy about it because of the "fear of the unknown" and the possibility of an increased workload and a third had mixed feelings about it. The rest of the heads felt the change would be advantageous for the School. The Home Economics Department Head provided data on present feelings about the

initiation of change because, as mentioned earlier, 1976 was the first year that this department was included in the School budget. She was apprehensive because of concern about having to replace costly heavy equipment in the future. In the past, items such as stoves were replaced every two years. She saw little chance of this practice being continued under POB.

Questioning on involvement in the planning revealed the different perceptions which could be attributed to different levels in the organization's hierarchy. Thirty-nine teachers replied that they were not involved in planning for the change. Thus, in their view, involvement in the development of a departmental budget based on a needs assessment did not constitute a part of the planning process. It was also apparent, as previously mentioned, that some teachers were not even involved in this aspect. All members of the School's administration at the time indicated that they were involved in the planning.

An analysis of this part of the data revealed that the change was actually implemented amidst the forces shown in Figure 8. In this figure the bottom line allows a comparison of the estimated strength of forces both assisting and resisting the change. Such a comparison shows that the strongest force for the change was the appointment of a principal interested in POB. It also shows that none of the resisting forces were very strong and they were outnumbered by forces pushing for the change.

### Initial Problems

Another research question posed in Chapter III was related

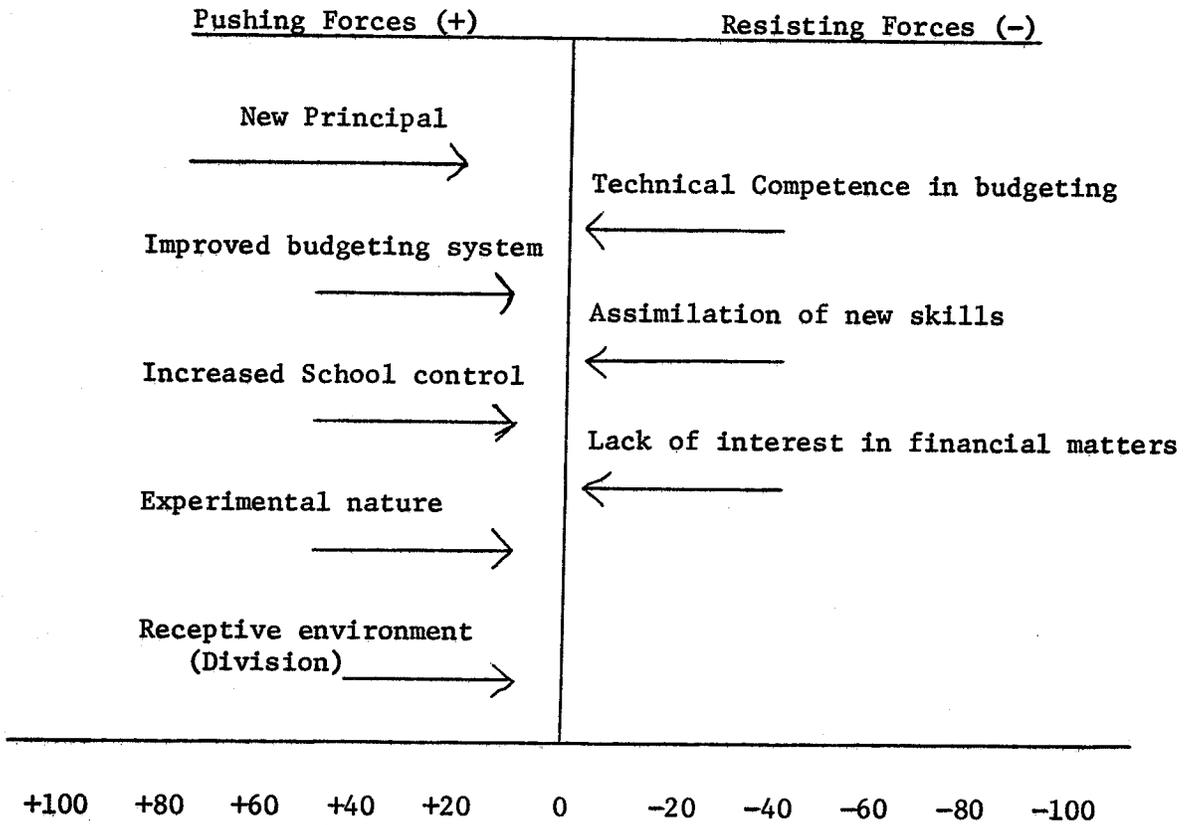


Figure 8. Force Field Analysis of Factors Assisting and Resisting the Change

to the problems created by the change. The answer to this is divided into two parts which deal firstly with initial problems, and secondly with problems that developed later. The former are described in this section.

The implementation of the change in the budgeting system could be regarded as successful. This finding is based mainly on the fact that the Change Agent's efforts to ensure that control of the budget was actually transferred to the School level were successful. However, despite the successful implementation, some initial problems were experienced, although none were of a serious nature. Perhaps the main one was caused by the Division's accounting procedure, which meant it was virtually impossible for the Administrative Assistant to establish the actual cost of each program in the School under the centralized system. This was largely because the accounting system had not allowed for a breakdown of expenses by individual school. Since School staff members, under the old system, never saw figures showing costs involved, such figures were necessary as a guideline for future spending. This made it difficult to determine the initial departmental allocations. Another problem for some was a lack of clarification regarding technical aspects of the system. For example, for some it was not clear what type of items came under the Print and Non-Print Account. One initial problem, which threatened the School's objective of maintaining control over the budget, involved one of the subject coordinators. He could not accept the change and his loss of power where the School was concerned. Consequently,

he continued to initiate orders for the School. This resulted in the School's budget being charged with items that had not been ordered by the School's personnel. The problem was resolved by confronting the coordinator who was initiating the orders. Other than these, there were only minor problems experienced by individuals and, with the assistance of other staff members, they were also resolved.

#### IV DECENTRALIZED BUDGETING

##### Technical Aspects of Program-oriented Budgeting

One of the research questions posed in the last chapter, referred to the operation of the new budgeting system. The description contained in this section provides the answer to this question.

For the financial year of 1973, the change in control was made and the new system began operating. Under this system, the School's budget is developed on a departmental basis. Consequently, each department submits the total estimate necessary for the continuation and/or expansion of its programs. The manner in which this estimate is arrived at appears to vary from one department to another, depending on the individual department head, and the process begins in April or May of the preceding financial year. In some cases, such as Business Education and Physical Education the process is more program-oriented; in others it is more like item-budgeting. In the case of the former, there are department meetings held to discuss the program, plan new courses and to develop the budget necessary for the operation of the program. In departments where a form of line-item budgeting operates, it is often a case of

individual teachers submitting a list of their requirements to the department head. He then compiles the department's budget request from these lists. Thus there is little or no discussion of the budget, within the context of the program being offered. It was in cases such as these that there was some staff dissatisfaction expressed about the system to the researcher.

The observation data collected during departmental budget meetings did not fully support the interview data which pointed to a line-item type budgeting procedure. However, it should be re-emphasized that this was one of the study's limitations. Since the budget development process had begun in June, 1975, only a limited number of meetings were observed. At these meetings discussion did focus on items but it was within the context of the programs being offered and there was some discussion of future plans. The researcher felt that this was one area where a routine process had been affected by the presence of the observer and an effort was being made, at least in one case, to keep discussion within the framework of the program. To overcome this aspect, each interviewee was carefully questioned on procedure followed at departmental budget meetings and responses consistently pointed to the fact that, in some cases, there was little or no program-oriented budgeting.

When the program budget requests are complete, they go before the Finance Committee for approval. In the majority of cases they are accepted as presented because, as some department heads pointed out in interviews, they lack the expertise in other subject areas to make decisions about reducing estimates. In observing the budgeting

process this year, it was noticed that the next step was for the Principal to meet with heads individually, mainly to familiarize herself with their requests. Some of the department heads saw the meetings as allowing the Principal an opportunity to exert pressure on them in an effort to have them reduce their requests. This came about because they were asked to write a more complete rationale for their requests.

Following this, the Principal, with the Finance Committee Chairman and the Administrative Assistant, met with the Area Superintendent to negotiate their request. The Superintendent, who had to keep within an area budget, wanted the budget reduced by twenty thousand dollars. He discussed each department's budget with the School's representatives, trying to influence cuts in different places. Then, using his position power, he postponed the School's defence of the budget until they had re-examined it.

Consequently, the PBR's were returned to the departments so that members could determine priorities and where possible cuts could be made. Again the methods used for this process varied, depending on the department head and his or her attitude to the budgeting procedure. In some cases, it was a democratic process where decisions were made on the basis of group involvement and discussion; in others it was done on an item basis; i.e., "Which items can we do without?"; and, in still others, department heads approached individuals concerning the necessity of certain items.

When a total figure meeting the approval of the Superintendent and the School was reached, it still had to be approved by the School

Board. Consequently the final decision on the total budget figure was the Board's and this decision could result in further cuts. While this School was the only one on POB, no further cuts had to be made after this stage.

#### Budgeting Procedure

With the approval of the budget, purchasing can now officially begin. The teacher has three alternatives with regard to purchasing. After obtaining the department head's approval, so that he or she can keep an accurate record of departmental spending, the teacher can either obtain a purchase order number from the Administrative Assistant and order directly through the supplier or make cash purchases of small items and receive reimbursement later. In the third alternative, the Administrative Assistant sends a requisition form to the Purchasing Department of the Division and the Purchasing Agent either orders the items through the Division's stores or obtains them from a private supplier or tenders for them if costly items are involved. The new requisition form (Appendix J) is similar to the old, except that now approximate cost is shown and an extra page is left so that School staff members may enter items of their choice. Thus under this system there is increased flexibility in ordering and buying. In line with the delegation of authority, the department head's signature is required on this form now instead of the Principal's. The teacher who orders through the Division can stipulate the brand and supplier of the items concerned. For reimbursement of purchases made directly by teachers, the Administrative Assistant claims on the Division on the appropriate

form (Appendix K) in May and November or whenever necessary. Under this system, the School staff can speed up delivery of supplies and take advantage of local prices, yet they can still obtain reductions due to bulk buying or tendering by the Division. Some teachers are involved in "shopping around" for the best price and item. However, officially they are not supposed to, since this part of the change proposal was ruled out by the Division (No. 1. f, Appendix G).

Under this system, the budget includes the supplies and equipment for each subject area in the School, transportation for Physical Education and field trips undertaken by any group within the School and print and non-print material. Any surplus or deficit is carried on to the next year's budget. However, about one thousand dollars are held back by the School from the Print and Non-print Account as an emergency fund. School records maintained under this system include:

1. purchase orders;
2. Print and non-print expenditures;
3. accounts for supplies and equipment other than those included in #2;
4. record of expenditures which is kept by the Administrative Assistant and some of the department heads (all are encouraged to keep a record);
5. the triplicate copies of requisition forms and duplicate copies of reimbursement claim forms;
6. monthly print-outs from the Division showing the School's name and account number, the previous year's expenditures for each

account, the amount expended in the month-to-date and in the year-to-date, the committed amount and the balance, as of the month in question.

A twelve digit code is used by the computer to identify the School's accounts. The first three numbers identify the School; the next three the department within the School; the next three are not in use and the last three identify the type of item; i.e., supplies or equipment. This was one of the changes made at the Divisional level at the time the system was introduced. The accounting procedure was revised so that accounts could be identified by program.

#### Organizational Aspects of the Budgeting System:

##### Formal roles and responsibilities

In the documents drawn up at the time of the change, teachers are not directly referred to but it is indicated that they are to assist the department head in planning and preparing the PBR. In consultation with their staff, department heads are responsible for developing the PBR, a hierarchy of priorities and submitting and negotiating the PBR with the Finance Committee. The preparation of the actual PBR document involves a description of the program, the objectives of the program and the resources required. At year's end two more budget-related documents have to be completed (Appendix L) and these provide for an evaluation of the program, with the costs involved. The department head is also expected to keep check of the approved budget moneys against actual expenditures. Further to these responsibilities, as members of the Finance Committee, department heads are responsible for studying and

approving the Program Budget Requests.

The Vice-Principal as a member of the Finance Committee is also responsible for studying and approving the requests. He/she also has the power to call meetings of the Committee when necessary and by virtue of the position, is expected to provide leadership. Until 1975-76, the Vice-Principal had always been Chairman of the Committee.

In relation to budgeting, the Principal's role is not referred to in the original documents. However, on the basis of observation and interview, it appears that this role is a multi-faceted one, incorporating the roles of general overseer, coordinator and trouble-shooter. Thus, it involves tasks such as reviewing the final budget document and examining the monthly print-outs so that he/she can monitor the system.

The Administrative Assistant is responsible for processing and recording the approved PBR's in terms of the requisitions that are sent to the Division's Purchasing office. He/she also advises and aids in compiling the School budget and acts as a liaison person with the School Division so that the efficient operation of the budget can be maintained. With the new system, the Administrative Assistant has to:

1. check and submit the budget and regular requisitions to be charged to the purchasing budget of the School;
2. code the requisitions with the appropriate accounting information where necessary;
3. check the accuracy of copies of the purchase orders

received from the Purchasing Department;

4. maintain accounting records as necessary for the School budget;

5. report to and advise the Finance Committee and Principal of relevant financial information concerning the School purchasing budget and School funds; and

6. draw to the attention of the Principal any extraordinary requisitions and relevant matters.

In addition to these tasks, there are also those described on page 104. Thus the former Administrative Assistant now saw the position requiring someone who could be a problem-solver, and who was flexible and analytically oriented, especially with respect to finances.

As far as budgeting is concerned, these roles now form an organizational structure that is depicted in Figure 9.

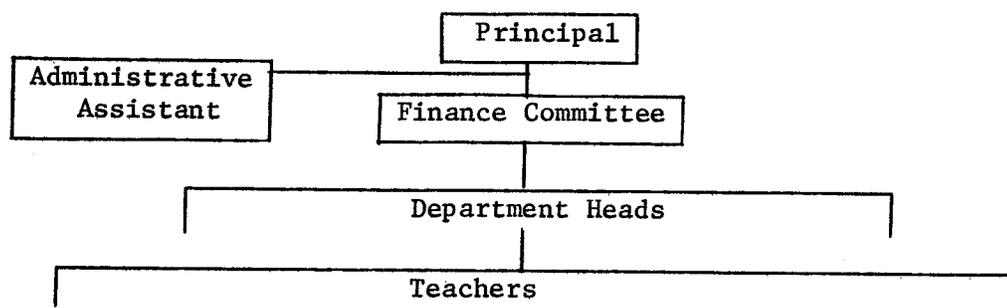


Figure 9. School's Organizational Structure With Decentralized Budgeting

### Communications

Concerning written communications between the School and the Division, the data showed that, following 1973, there was less down-

ward communication from the Division. During this period 62 per cent was downward, the remainder of the written communications concerning budgeting in the School's records was upward. It was usually either requesting information; making a request or giving the Division information such as informing the Secretary-Treasurer's Department of errors found in the print-outs. The letter accompanying the supply of requisition forms from the Purchasing Department did not indicate that any decisions concerning alteration of the School's orders would be made at the Divisional level.

Concerning intra-school written communications, it was found that, under POB, each staff member received a copy of the minutes of the Finance Committee meetings and a monthly statement showing each department's financial position. There were now intra-school memos moving both up and down the organization, often between the Administrative Assistant and the department heads. These memos frequently gave information or requested clarification on budgeting matters. Catalogues were still received from the same sources but now staff showed more interest in them.

From the analysis of the interview data, the following verbal communications pattern emerged:

1. Of the teachers interviewed, 24 per cent occasionally communicated with students about budget-related matters; while 67 per cent never did and 9 per cent rarely did;

2. Of the teachers interviewed, 49 per cent claimed budgeting was occasionally discussed with their department head; while 32 per cent mentioned it frequently and only 19 per cent rarely discussed it;

3. Of the teachers interviewed, 40 per cent claimed budgeting was frequently an item discussed at department meetings; while 53 per cent claimed it was occasionally discussed and 7 per cent claimed it was rarely raised;

4. Of the teachers interviewed, 51 per cent never communicated with the School administration about budget-related matters; while 19 per cent rarely communicated about it, 7 per cent occasionally did and 23 per cent frequently did;

5. Of the teachers interviewed, 16 per cent claimed it was never mentioned in staff meetings; while 22 per cent claimed it was rarely mentioned; 60 per cent claimed it was occasionally mentioned and 2 per cent heard it mentioned frequently.

The high percentage (51 per cent) not communicating with the administration is explained by the fact that, under the new system, teachers still communicate through department heads where budgeting is concerned. In cases where teachers communicated with the School administration, it was most frequently over the ordering of expensive items. In some cases, the present Principal had attended some department meetings when budgeting was an item on the agenda. Meetings between those occupying different positions in the organization were initiated by both teachers and those in supervisory positions. In departments such as Art, Industrial Arts and Physical Education, communications were more frequently on a one-to-one basis because of small numbers in the departments and sometimes because each teacher was working in isolation in a specialized area.

Communications with students usually involved either

discussions about resources required or actually being used rather than monetary issues. The only occasions on which finance was discussed with them was in the case of teachers who were members of the Staff-Student Finance Committee and the Junior High Finance Committee. These were developments of the 1975 financial year. The first-mentioned committee had three student members, at the direction of the Division, and its purpose was to allocate the allotment made by the Division to the School, in lieu of student fees. This money was used to subsidize such aspects of school life as field trips, the Student Council and student social activities. The latter committee had a similar function, except that the money allocated was the proceeds of the annual Junior High Tea and it was spent in the junior high section.

At the department head level, formal communications between department heads about budgeting occurred in Finance Committee meetings which were held in lieu of department head meetings. The analysis of the frequency of these meetings showed that, on the average, in the three years since the change, 50 per cent of the meetings were Finance Committee meetings. The role of the Finance Committee is analyzed more fully in a later section.

As far as staff meetings were concerned, analysis of minutes of staff meetings showed that budgeting or budget-related matters, such as clarification of School finance sources and balances in certain accounts were mentioned. Yet 16 per cent of those interviewed claimed that this was not the case. The observation of one of these meetings provided a possible explanation. At this meeting many

teachers showed a lack of interest in any budget discussion. This was evidenced by discussion held "in opposition" to budget discussion. Hence, those teachers not interested in budgeting probably do not listen to, or remember, any such discussions.

#### Decision-making

Interview data revealed that decisions concerning spending, within the total figure approved by the Division, were made within the School. With regard to priorities, the decision-making process was made more effective by the requirements of the new budgeting system, since each budget request had to be accompanied by a description of the program, the program's objectives and the resources required for it. A cross check with documents such as department records and invoices supported the finding that decisions were made within the School. However the level within the School, at which the decisions were made, varied according to the department. This again was related to the individual department head's policy. In some cases such as Business Education, decisions were made democratically with each member having an equal vote on any decision. A similar decision-making process occurred in some other departments. However, most department heads saw themselves as making the final decision, especially if cuts had to be made or a major item was concerned. In a minority of cases, teachers still have no real decision-making power in budgeting. They are consulted but have no part in the actual decision. Within some departments, it seemed that decision-making power depended on the individual's teaching experience and status within the department and, in a few cases,

individual personalities. Consequently there was the possibility that a relatively inexperienced teacher either would not have much decision-making power or would not use what he had. Despite the fact that teachers are now more involved in decision-making, their power in this sphere does not extend beyond their own department. Thus, there has not been a complete sharing of decision-making to date.

In the case of the School administration, the former Principal did exercise the power to veto, while the new system was still in its infancy. However, this has not been done to date by the present Principal. Perhaps, now, there is less need for it as staff members develop more expertise in budgeting.

### Resources

The analysis of invoices kept for the Print and Non-Print Account from 1973 to the present time showed that, in addition to book orders, there were now orders for magazine subscriptions, games in French and Mathematics games, records, posters, cassettes, slides, charts, flash cards, practical aids for Business Education, filmstrip sets, reading kits, a writing skills laboratory and sound slide programs. As far as books were concerned, there were orders in areas new to the School such as Psychology and Computer Science. There were also orders for current materials such as Canadian News books and books on topics related to today's world e.g. "Human Values in an Age of Technology". More individual copies, which were to be used as resource books, were ordered and, in 1973, one set of fifty books was returned for credit.

In addition to the standard items ordered on requisition forms after the implementation of POB in 1973, between 1973 and 1976, there were also orders for such items as twenty-five electric typewriters, electric printing calculating machines, transcribing machines and electronic calculators for Business Education; guitars for Music; an air track, a single stage blower and transistorized photocell gates for Physics; cassettes, test materials and controlled readers for the Resource area; supplies such as vinyls, styrene polyesters for plastics courses; a distributor analyser and an engine analyser for the auto shop; cross-country skis, boots and poles and snow-shoes for Physical Education; an off-set printing machine and an air conditioner for the School office; supplies for an Arts and Crafts Program and listening stations, controlled readers and a tachistoscope for the Junior High English Department. There was also equipment such as a video tape recording unit for general use within the School.

The interview data indicated a possible future change in the area of resources. Staff were now being requested to reduce their orders for multiple copies of books, which provided each student with a copy. Preferably, they were to order class sets so they could develop sets of multi-level books more appropriate for the individualization of instruction. Such a change would also have the effect of reducing costs.

To obtain these resources, it was evident that a wide range of suppliers had been tapped since orders had been filled in the United States in places such as Washington, D.C., New York,

California and Ohio. In Canada suppliers were located in such cities as Montreal, Toronto and Victoria. Resources now showed less of a Divisional influence and more staff influence in purchasing.

### Programs

As reflected in the resources described above, between 1973 and 1976, there had been an expansion in the programs offered. An analysis of courses offered during the period of the study revealed the following course additions:

1. Prior to 1973:
  - a) German;
  - b) Crafts program;
2. Between 1973 and 1976:
  - a) Basic English;
  - b) Canadian Physics Program;
  - c) Child Development and Nursery School;
  - d) Computer Science;
  - e) Drama (Junior High);
  - f) Elementary School Practicum;
  - g) Exploring Business;
  - h) Geography - a course in urban studies;
  - i) Journalism (Junior High);
  - j) Lifetime Sports;
  - k) Life Today;
  - l) Mathematics - a new terminal course in Senior High;
  - m) Outdoor Education;

- n) Plastics in Industrial Arts;
- o) Psychology.

In addition to these, courses in Marketing, Data Processing and a new Travel course have been proposed for September, 1976. The Marketing course requires some expensive equipment and the Division had not approved a total figure including this. However, the course was still to start in September, 1976 on a modified basis. Such developments show evidence of long range planning at the School level and flexibility within the area of budgeting.

Since 1973 there has also been developed at the School a Science Resource and Motivational Centre and a Social Science Research Tutorial Centre. With the development of the Interdisciplinary Team Approach, there has also been a new approach taken to existing programs. Initially in this program, a team of four teachers was responsible for teaching the basic subjects: Mathematics, Science, English and Social Science, to a group of 150 Grade VII students. These teachers were also responsible for the development of part of their own timetable and their teaching was not rigidly confined to the four areas. There was an inter-mixing of the subject areas, so that an interdisciplinary program was developed. This program has gradually been expanding to include more students in the junior high section.

In the 1974-75 school year, the assessment of program needs found that in Grade VII and VIII, 30 per cent of the population had reading scores two grades below their grade level. In Mathematics 23 per cent were two grades below their level. Materials

bought for English included controlled readers, filmstrips, S.R.A. reading kits, a Tachistoscope, vocabulary filmstrips, listening stations, a writing skills laboratory and paperback series. In Mathematics, spending was on teaching aids such as games, construction material, S.R.A. kits and resource books. Corresponding to this, between 1974 and 1976, \$13,910 was spent in English and \$10,299 in Mathematics. Such purchasing indicated at least an attempt to respond to local needs in the School's programs.

#### Control systems and authority structure

As stated in one of the change goals, the new system was aimed at obtaining local school control over budget priorities. In order to do this, the Change Agent apparently convinced Division personnel that there were effective controls built into the system at the School level. Such control is seen in the fact that any person presenting a budget request to the Finance Committee had also to present an oral justification for the request. In addition to this, the Finance Committee acts as a type of coordinating body and can identify any duplication of requests for particular items. Further controls are in evidence at the School level, firstly because teachers have to gain approval from department heads before purchasing. Secondly, most department heads and the Administrative Assistant keep a record of actual expenditures. The monthly print-outs from the Division provide a means of checking School records with the Division's records. The control system of the School, in relation to the budgeting change, has had an evolutionary type of development in some ways. Only in 1975-76 was it decided that

expenditure through the Print and Non-Print Account must have the approval of the Finance Committee and a decision still has to be made concerning the matter of a surplus or deficit at year's end. Some members of the Committee are in favour of it being put into a "general pot"; others favour the method of the departments responsible for either the surplus or deficit carrying it forward in their own budget.

As far as resources are concerned, there is one aspect in this area that lacks effective control. Although, officially, budget requests to the Finance Committee are to be itemized, in some cases, this is no longer done. Then, once the actual expenditure has occurred, there is no check within the School to see if the resources actually purchased were those indicated in the budget requests.

The system also has controls built into it at the Divisional level. Such control applies to spending over one thousand dollars, since any item costing between one and five thousand dollars needs the Superintendent's approval. If the item costs over five thousand dollars, the School Board's approval is necessary and for items costing up to one thousand dollars no approval at the Divisional level is needed.

These Divisional controls have provided problems for the School, in two of the three years of the POB's operation. These problems have arisen because of the desire of the School administration to maintain control at the School level. In 1973, the School staff decided to buy off-set printing equipment for the

School office. However, the School Board objected to such a purchase. Realizing that this problem of school control was a crucial factor in the success of the new system, the Change Agent eventually gained the Board's approval for the purchase by suggesting that the School's feeder schools should also use the equipment. In 1974, a similar problem arose over the purchase of some modern electric typewriters and, again, in 1976 over the purchase of a scope for the auto shop. The scope could introduce students to the cathode ray-tube and give them an indepth knowledge of the auto electrical system. The same desire to maintain control is seen in the efforts of members of the Finance Committee to make cuts in areas they have decided upon, and not necessarily in areas suggested by the Superintendent.

Under this system with an authority structure where decisions are made by committee after consultation with staff members, and controls are exercised within the School, the organization has moved more towards what Likert (1961) describes as the participative organization. Communications from the School Division are therefore less prescriptive and the budgeting process has taken on different dimensions as is shown in Figure 10. This figure shows that, although the teacher is still at the bottom level of the budgeting process, the decision-making area has moved down to include the teacher, since decisions are now made within the School. It also shows that now the teacher has the option of being closer to the supplier. However, although the individual teacher may go straight to the supplier, the department head's approval must first be

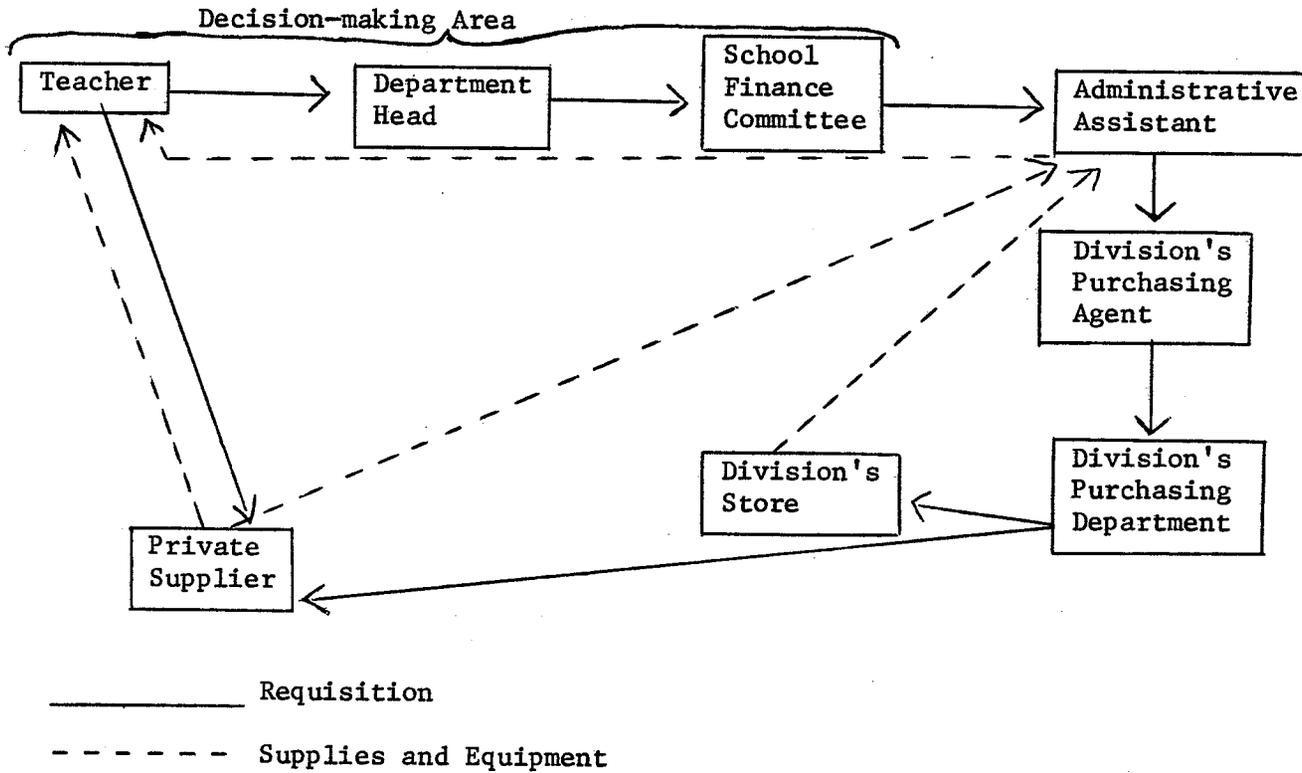


Figure 10. Budgeting Process Under Decentralized Budgeting

obtained. The approval requirement is largely so that School records can be kept accurate as well as to ensure that the department's budget is not overspent.

#### Sociological Aspects of the Budgeting System: Pressure

With budgetary decisions now being made in the School, the observation and interview data provided evidence of variables not present under the former budgeting system. The application of varying degrees of pressure was observed at each level in the School's organization.

At the top level, there is the negotiation process involving the Superintendent and the Principal. During the present part of the study, this meeting was observed and the Superintendent exerted pressure on the Principal in his efforts to reduce the School budget by twenty thousand dollars. This was done to a large degree by focussing on departments proposing heavy expenditures; asking if cuts could be made there, and pointing out that their requests were more than other schools in the area.

Within the School, department heads had gone through a similar process in individual meetings with the Principal. However the main intent of these meetings, as far as the Principal was concerned, was not to apply pressure to bring about a change either in the form of an increase or a decrease in their requests but to familiarize herself with departmental requests. However, some department heads interpreted this as pressure; one being asked to make three submissions before the third was finally accepted. Other department heads felt that pressure was applied to them in

Finance Committee meetings when other members questioned them on proposed heavy expenditures. In committee meetings, it was observed that the older, more experienced members of the Committee, with influential status both in the Committee and in the School were not subjected to this pressure with regard to their own budget requests. Apparently, there was almost an unspoken agreement among them that there should be no questioning of their requests. At the teacher level, pressure was exerted in some cases by department heads who questioned teachers individually about the necessity of items they had requested. In some departments, group discussions were held during department meetings to determine which members should reduce their requests, while in other departments, it appeared that the department head had already made the decision about who should cut. Then he would approach the individual concerned. In one case a teacher was told by the department head that her order for eighty books had been halved.

However, taken overall, the data analysis revealed that pressure associated with this system was probably minimal. Although it should also be pointed out that, for each year the new system has been in operation, the School carried a surplus in its budget and the need to cut spending was not great. In all cases where pressure was concerned, its application was associated with attempts to reduce the budget requests. It was only in one case, where the frugality of the department head was known to the Principal, that there was some pressure exerted in an attempt to increase spending.

Now that all schools in the Division have adopted this

method of budgeting and costs continue to increase, it is quite possible that demands to cut costs will be increased. Before budget decentralization, it was the Division that experienced this pressure from the community's taxpayers. It is now highly possible that some of this pressure will also be directed at the schools, since the schools' personnel now control some of the Division's expenditures.

### Conflict

Conflict associated with this system appeared to be restricted to informal staff room complaints, which were sometimes described as "petty jealousies" or "bickering". Perceptions of the question of conflict varied according to different individuals. The majority of those interviewed claimed it did exist and often the Science Department was the target of complaints and jealousies, particularly the senior high section. Complaints had been heard that Senior High Science, an elective subject, was getting too large a share of the School budget. On the other hand, the junior high section received a much smaller share, despite the fact that it was a compulsory subject there. On the question of conflict over the Science budget, it should be pointed out that the Junior High Science staff consists of many of the young, male, less traditional teachers referred to in Chapter I, so it is possible that any conflict that does exist goes much beyond budgeting. A few teachers perceived rivalry between the "frills" (e.g. Physical Education) and the "more important" (e.g. Science).

As in the case of pressure, however, taken overall the

system has not led to much conflict at either the inter- or intra-department levels. This was partly due to procedures deliberately designed to reduce conflict at the time the change was implemented. For example, equipment such as projectors and record players, which are shared by all departments, are financed by the Audio-Visual section of the School budget. This action eliminated the possibility of ownership problems arising. The conclusion that the system has led to little conflict is drawn from the fact that teachers used mild terms such as "bickering" to describe the conflict and, in some cases, teachers based their perceptions about the existence of conflict on hearsay rather than actual fact. A survey conducted, among the staff, by the Principal within two years of the introduction of POB supported this finding.

### Influence

A relationship between influence and the two variables mentioned above (pressure and conflict) was found, in that, the 7 per cent of teachers who responded that they had no influence in budgeting, were some of the young Junior High Science staff who felt that both conflict and pressure existed. Pressure was exerted, to the extent that they were told what amount they could spend. (Only one of this group was not aware of any conflict.) Others in this group were those in departments where the department heads made decisions after little or no consultation with staff members. Of staff members interviewed, 48 per cent felt they had overall influence where the School's budget was concerned, while 24 per cent felt that their influence was

restricted to being effective only within their department. A further 21 per cent were not sure whether they had any influence or not. One teacher, whose attempts to purchase some costly items was frustrated, felt that her influence had been reduced.

At the department head level, one of the more junior members felt that his influence did not extend beyond his own department. Consequently he felt that he had no influence in the Finance Committee. The Home Economics Head had not had a chance to assess her influence, since her department had only become part of the School budget in 1976. Another felt his influence only lasted while the Principal was supportive of his requests and a fourth felt he had no influence at all. This person was one who had not attempted to learn the techniques involved in the budgeting process because he felt it was an encroachment on the time he needed for matters "more directly" related to his department's program. In the meetings that were observed he was constantly being told what procedures he should follow. The remainder of the department heads felt that they had influence where budgeting was concerned.

### Strategy

With the establishment of a new formal structure (the Finance Committee) within the School and new procedures associated with it, analysis of the data showed that there was the gradual development of strategies to cope with these new features. These occurred at two levels:

1. within the School; and
2. between the School and the Division.

At the first level, some departments found ways of coping with problems produced by the change in the budgeting process. For example, in one department which had to use much equipment and many expendable supplies, staff members found it difficult to cope with inflationary price increases and therefore to budget accurately. Consequently, they developed the strategy of budgeting for a costly item. Then, towards the end of the financial year, if unestimated price increases had not expended the amount allowed for that item, it was purchased. Otherwise, it was not and in this way the department avoided incurring a deficit. In most cases, departments budgeted only for supplies and equipment that were absolutely essential for their program in the coming year. This was then their defence of their budget requests.

As with any formal organization, there is a co-existing informal one and this was found to exist where budgeting was concerned in this study. For example, observational and interview data revealed that part of the budget strategy involved informal discussions between key budget personnel at the School. These discussions saw the development of future plans; the determination of which department budgets may have been over- or under-estimated, and strategy to be employed in negotiations with the Superintendent. In the discussions which were observed, there was also an assessment of previous events.

The strategy developed for presenting the 1976 School budget to the Area Superintendent included presentations of:

1. the rationale underlying each department's budget

proposal;

2. the results of a search of School Board Meeting minutes showing precedents set by the Board which supported particular requests;

3. information showing spending by other schools in the Area to be used as comparisons; and

4. a negotiating team familiar with the needs of each department.

#### The Functions of the Finance Committee

The Finance Committee, which was often the target of some of the strategies discussed in the previous section, played an important part in the budgeting process. Therefore findings about it are presented separately in this section. Observations of the Committee at work showed that its functions were multi-faceted. In addition to its main function of budget approval, other functions performed by it were problem-solving, clarification of procedures, reviewing the present state of the School budget, information-giving, policy formulation and policy changing.

During these meetings it was observed that people holding different positions in the School's organization assumed different roles within the Committee. The Principal and the Senior High Vice-Principal seemed to form a team in the Committee. This was probably unintentional as, at least in the case of the Principal, her role was consistent with the one she took in all budget-related matters. The Principal took on a role that was supportive of department heads making their requests, while the Vice-Principal

took on more of a "devil's advocate" role, challenging proposed expenditures. The department heads often took on a defensive role, being quick to defend their own actions or to correct any inaccuracies relating to their individual budget.

A total school program approach to budgeting was questionable judging by the fact that, in a few cases, department heads would send representatives to meetings instead of coming themselves, despite the fact that special time for such meetings was allowed within the school day. Supporting this contention, was the fact that, at the meeting held to review the total School budget proposal for 1976, in many cases department heads left as soon as their budget estimate had been approved.

Observations of meetings also suggested that the development of the Committee was and still is an evolutionary process. Certain ground rules had been laid at the time of the Committee's establishment. Then more were developed at appropriate times. For example, it was only decided in 1975 that print and non-print expenditures should be channeled through the Committee. Factors outside the School also caused further developments. In 1976, all schools in the Division adopted the same budgeting system and this meant that the Division's directions caused some minor changes such as a re-categorization of some accounts and the opening of a separate Transportation Account, in the budgeting procedure. Another recent change in policy was the decision to elect the chairman, rather than to appoint the vice-principal. The developmental process has probably been aided by the fact that there has been a different

chairman in each of the three years of the Committee's existence. With each one incorporating his or her ideas into the functioning of the Committee, there have been changes each year. Since the Committee is still relatively new, new situations are still arising. Thus policy is still being formulated to cope with them as they arise. However, policy formulation has not occurred smoothly in all cases, mainly because a clear decision-making process has not developed. This is largely due to the fact that no formal written record of meetings was kept until March, 1976. Consequently, when memory had to be relied on to provide procedural information, no lasting decisions were made and no clear policy was developed.

#### Problems Associated with Program-Oriented Budgeting

As mentioned earlier, one of the research questions dealt with problems created by the change. This section completes the answer to this question.

Apart from the problems described above, which existed within the Finance Committee, the POB system brought with it other problems as revealed by both the interview data and the documentary evidence. For departments such as Art and Industrial Arts, which are constantly using expendable supplies, there is the problem of coping with inflationary prices in trying to budget a year ahead of the actual expenditures. Another timing problem is related to the fact that the School budget is not approved by the Division until about April of the financial year in which it is supposed to be operating. Thus, there can be no major expenditure until April.

With the School budget being so departmentalized, some staff

members feel this creates a problem for activities or programs that do not fall within any of the departments. For example, teachers involved in the Interdisciplinary Program fall under no particular department when it comes to budgeting. A possible solution to this problem might be to divide the budget into junior high and senior high components. This would be particularly appropriate when all of the junior high section has adopted an interdisciplinary approach. However, such a move would serve to intensify the existing gap between the two sections, although it would overcome another problem. This problem is that a number of junior high staff members feel that the Finance Committee is dominated by senior high members.

Another problem associated with POB is related to the decentralization aspect. Some department heads find that some decisions, which are still made centrally, affect their budget plans. For example, proposed course changes in Science for September, 1976 mean possible increased expenditure for textbooks. However, until a definite decision is made, it is not known whether to budget for it or not. Under conditions of a tight budget, this becomes an important question. Having to operate on such a budget also meant that expenditures on furniture were at the expense of their program, according to some staff members. Apparently, staff members who feel this way about the inclusion of furniture in their budget fail to recognize the advantages to be gained from having this choice. When such decisions are left to school staff members, they can purchase furniture that is more appropriate to the individual needs

of their students.

An important problem came to light in the case of one department head. It was one of role conflict. He regarded POB as a "hell of a procedure" and, feeling that control of finance was not an educational matter, he saw it as taking valuable time from his educational program. Since budgeting was therefore very low on his list of priorities, he did not attempt to understand the system. Consequently he would frustrate members of the Finance Committee when they had to stop and explain routine procedures because he had not budgeted correctly. This person was the Department Head who simply used to phone in his orders under the old system, without having to complete any forms.

None of these problems were considered serious by the staff and, as has been pointed out in the course of this description, ways around them are being found. For example, where inflationary prices affect a department's budget, one department budgets for a costly item, the purchase of which can be delayed for a year if necessary.

With this description of the past and present budgeting systems, and of the origin and implementation of the change, it is now possible to assess both the change itself and the reasons for its survival. This is done in the next chapter, where the research questions that remain unanswered are also answered and the findings are discussed in relation to points raised in the literature review.

## CHAPTER V

### ANALYSIS OF CHANGE

The identification and analysis of the change that occurred is undertaken in this chapter. The methodology used for the research revealed two dimensions of the organizational change. Firstly, there was evidence of change provided by the analyses of both documentary and observation data. Then, there were different perceptions of the degree of change as revealed by analysis of the interview data. Both sets of findings are analyzed here. Reasons for the survival of the change in the School are examined; the research questions are answered and all the major findings are discussed. Finally, the propositions generated by these findings are stated.

#### I ASSESSMENT OF CHANGE IN ORGANIZATIONAL DIMENSIONS

One of the research questions posed in Chapter III was concerned with the assessment of any change that may have occurred in the organizational dimensions of the School. The analysis of data showed that there was a change in many of these dimensions and they are discussed in this section.

##### Roles and Responsibilities

Although the department head had always been responsible for ensuring that the teachers in the department had all necessary supplies and equipment, he was now in a decision-making position with regard to budgeting. He also had control over the finances

of his department, which was not the case under the old system. He no longer requisitioned through the Principal or subject coordinator because, when the department's budget had been approved, he had control over spending. Such changes meant an increase in the responsibilities for the person in this position.

Four department heads did not consider that the new system involved any extra tasks. Two of these, Science and Physical Education, had this perception of their work because they had always had to perform similar tasks. Interviews with staff members of the other two departments, indicated that methods used in the department to develop the budget were not really related to POB and, in the case of one of these heads, there was non-involvement in the junior high section of the program. Consequently, there was no change in these areas, because the heads had retained existing habits.

The remainder of the department heads found there had been a change in their tasks, since they were now involved in developing a department budget; in monitoring spending and in keeping aware of prices and equipment on the market. Staff members at all other levels of the organization perceived that the department head's role had been enlarged with the introduction of POB.

The role of administrative assistant now took on a strong financial emphasis and, according to the person who formerly held the position, the change had two effects on this role. Firstly, it increased the workload and responsibility of the position and secondly it changed the structure of the required duties in terms of priorities. Consequently, budgeting now had top priority among

the tasks of the administrative assistant.

There was no real change in the vice-principal's role especially after the change in policy, which meant that the vice-principal no longer automatically assumed the position of chairman of the Finance Committee. The principal's tasks were increased under this system since he/she took on the role of monitor of the system and responsibility was increased in terms of the budget over which the School now had control.

The role of teachers, together with the vice-principal's had probably changed least. However, perceptions about this varied according to the individual. Some teachers had always been in the habit of "shopping around" for resource materials and teaching aids. Therefore they found that nothing had changed for them, except that there were more departmental meetings related to budgeting. Others found that they now had the incentive to shop around. Therefore their workload had increased slightly and still others had not let the change affect them in any way. Despite the different perceptions, none felt that their tasks had really changed. This finding was supported by the School survey mentioned earlier, in which 73 per cent of the staff felt there had been no change in the teacher's role.

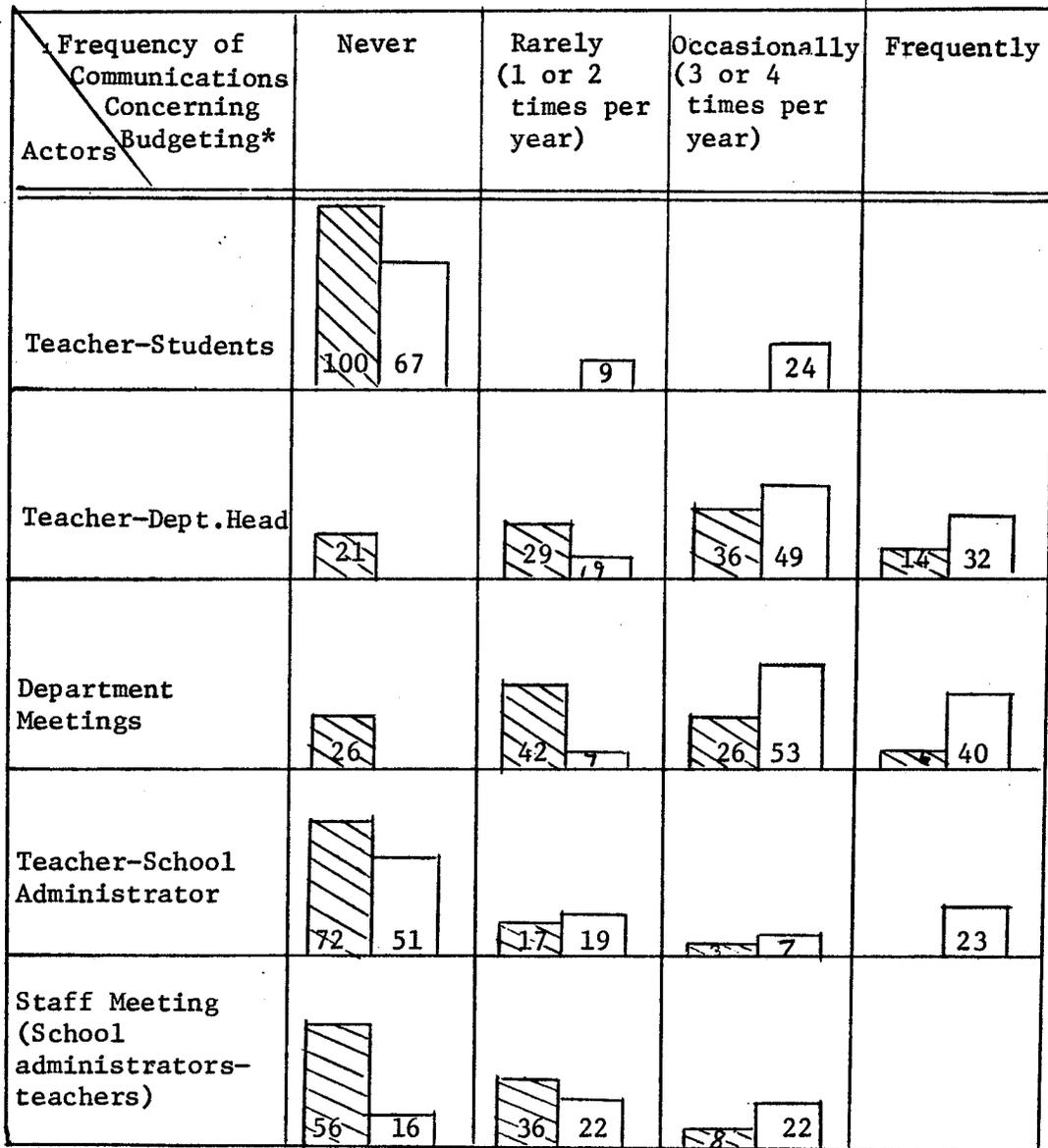
Possible reasons explaining the lack of interest in budgeting on the part of some teachers were revealed during interviews. For quite a number of teachers, their main interests lay in their own classroom and what occurred on a broader program perspective beyond that was of little or no concern to them. A minority of teachers felt that department heads were being paid for performing

the task of budgeting and were allowed time during the school week for it. Therefore they should manage all budgeting matters. Some other teachers felt that it was no use becoming involved because, with their department head's attitude, it would lead to nothing. Based on these findings, it appears that the degree of change that occurs in the role of the individual member is dependent on that individual's perception of the change and on the effort he or she is prepared to put into the tasks associated with the role.

To date, students had not been involved in POB. Consequently their role had not been affected. However, there were signs that this was changing, since student representatives attended the March, 1976 staff meeting at which budgeting was discussed. There are also student members on the Staff-Student Finance Committee which is responsible for the allocation of an allotment given to the School by the Division in lieu of student fees. It was also found that parents and other members of the community were not involved in development of the School budget.

#### Communications

Despite little change in the role of teachers, more than half of those interviewed claimed there had been an increase in communications within departments. This had been brought about by departments now meeting to discuss budgeting and budget-related matters. Figure 11 summarizes communications concerning budgeting between teachers and students, teachers and their department heads on a one-to-one basis, teachers and their colleagues in department meetings, teachers and School administrators and School administrators



 Pre - POB     
  Post - POB

\* All figures shown are percentages

Figure 11. Communications Pattern Pre- and Post-POB

and teachers in formal staff meetings. The results are recorded in percentages, showing the percentage of the total number interviewed who responded as shown. An examination of Figure 11 shows that, while most staff members still did not communicate with students about budgeting, there were now some who did. POB had also meant that now all teachers discussed budgeting or budget-related matters with their department heads at least once a year. Although, in some departments, the number of department meetings held did not increase, there was definitely an increase in the frequency of discussions about budget-related matters, as shown in Figure 11, and the change did mean an increase in the number of actual meetings in the case of at least one department. From Figure 11 it can also be seen that teachers perceived only a slight increase in the number of times the budget or related matters were brought up for discussion in staff meetings. The fact that only a slight increase had occurred at this level (the total organization) was in keeping with the general finding that the new system was very fragmented and that few staff members' perceptions of the budget system included the total program of the School. The results summarized in Figure 11 show that there was an overall increase in communications. However, this increase was largely confined to communications among staff members within each department and did not extend to communications between departments, except at the department head level.

The changed budgeting system had some individual effects which were not apparent in the overall analysis. A few teachers found that

they communicated less with their department head on a one-to-one basis and more in meetings under the new system, while others found they communicated less with School administrators in relation to budgeting and more with department heads (see Figure 11).

Communications between different levels within the School were initiated by both those at upper and lower levels. These intra-departmental increases in communications have had the effect of stimulating more professional discussion; inducing long-range planning at the School level and increasing teacher awareness of costs. The increase in written communications, which was mainly in the form of monthly financial statements, helped develop this awareness. It also had the effect of making teachers more aware of what was happening in other programs, since questions were asked about departments with heavy expenditures. In turn, there had been a carry-over to the School-Superintendent level, and now there was more discussion of the School's program at this level, as witnessed by the researcher in a meeting between the Superintendent and the School's negotiating team.

Despite these increases in communications most staff members felt the change had done little, if anything, to close the gap between the senior and junior high sections. However, feelings on this subject were mixed, since the existence of the communications gap was more disturbing to some members than it was to others. A minority of staff members felt the change had closed the gap slightly. For example one Department Head commented that she now had "to go over" to the junior high section more frequently. A small number

of teachers felt the communications gap had been intensified because of feelings that the senior high section was favoured by the Finance Committee, whose membership was dominated by department heads from that section.

An obvious change, which can be seen by comparing Figures 7 and 10, was that the communications channel, where budgeting was concerned, had been shortened. This meant the classroom teacher was closer to the purchasing process and, of course, this led to a marked effect on supplies and equipment as will be seen in a later section.

#### Decision-making

The finding that there had been an increase in communications was supported by the fact that the majority of teachers interviewed felt there had been an increase in decision-making power. At least in most cases they were now being consulted. Observations of the Finance Committee meetings showed that its members definitely had decision-making power. It appeared as though the teacher's power in this area meant they were responsible for decisions about resources, until there had to be cuts made. Then their power was removed. In fact one teacher commented that there was only increased decision-making power for the department heads. However, in the School survey, conducted within two years of the introduction of POB, 62 per cent of staff members felt priorities were established by negotiation among teachers and 89 per cent of staff felt that teachers held the primary responsibility for selecting materials to be ordered. Since the principal is the ultimate authority in a

school, any increase in teachers' decision-making power means a similar increase in the case of the principal if he or she chooses to use it. In this case, staff members now had increased decision-making power in relation to budgeting. Therefore a similar increase occurred for the Principal.

Under any system, decisions can be influenced and, in this study, some interesting changes in influence patterns occurred. The change meant that some staff members found their influence reduced. One teacher who could persuade his Subject Coordinator to supply him with the resources he needed in the past, now found himself without the books he needed to start a new course. He was in a department where the Head was observed to speak very little in Finance Committee meetings and was obviously quiet, non-aggressive and not used to pressuring for resources. In some cases, department heads who had enjoyed an influential relationship with their coordinator, now found they did not have the same influence with the Committee. Thus the change caused a reversal of influence patterns for them.

Regarding the Committee itself, some interesting influence patterns developed. It was obviously dominated by the core of older, more experienced department heads, who had high status and influence within the School. Their budget requests were rarely questioned and one had developed the informal practice of gaining approval for requests from his friends on the Committee before presenting them at meetings. One of the vice-principals tried to introduce the practice of putting the School's total

budget request to the entire staff for approval. This would also have meant a focus on the total program of the School, thus reducing the present fragmentation caused by the departmentalized approach. However, the idea was strongly rejected, mainly by these older members, who, having gained increased power with the change, did not want to have it challenged by the staff.

### Authority Structure

The change in both communications and decision-making power in relation to budgeting indicated there had been a change in the authority structure. Now, instead of the School Division personnel playing an authoritarian role, communicating decisions and directions downwards, decisions were being made by the School staff. The increased communications showed that, even if teachers were not responsible for final decisions, they were at least being consulted. Thus there had been a change from an authoritarian type of organization to a participative one, with major decisions being made by the newly formed structure — the Finance Committee composed of subject representatives.

### Control Systems

There was a definite change in control over resources, since School staff members were now the ones who decided on actual purchases. In the School survey mentioned earlier, 63 per cent of the staff members felt they were now able to select more appropriate materials. It was only in very costly items that their control was challenged by the School Division.

Concerning control over spending, under the old system, there had been none at the School level. Consequently teachers did not consider costs when ordering. In addition to the formal controls that were set up, there were in-built controls, since teachers were now more aware of costs, and they knew that careless buying meant that other areas would suffer.

New controls over finance established at the School level included the need for Finance Committee approval of a department's budget and the department head's approval for individual expenditures. There was still the need for Division approval on major expenditures on single items. In addition to these, there were the records kept by the Administrative Assistant and the department heads which provided a means of checking and controlling expenditures.

### Resources

Now that School staff members had control over their supplies and equipment budget, a change in the type of resources occurred from 1973 onwards. The effects were that, in some areas, there was an up-dating of equipment as exemplified by the purchase of modern electric typewriters for Business Education and an off-set printing machine for the office. In other areas there was an expansion in the purchasing of supplies and equipment. For example, Industrial Arts now included plastics supplies and Physical Education equipment included cross-country skis and snow-shoes for leisure-type sporting activities. These changes had also been noticed at the student level.

Teachers now found that in most cases there was a reduction

in the delay on delivery of supplies; they could obtain the type and quality of item that was appropriate for their needs and some felt there had been an increase in the supply of resources. However there was evidence of tighter control of resources. An example of this control was seen in the fact that the teacher, who used to find the old system similar to purchasing with a credit card, felt there had been a reduction in supply.

The analysis of supplies and equipment purchased after the change showed a definite attempt on the part of the School's staff to respond to the needs of the student population. This was apparent from the facts that:

1. The School had purchased remedial reading, writing and Mathematics kits, listening stations, controlled readers, diagnostic tests and other aids in these areas;
2. There had been an up-dating and expansion of supplies and equipment in the Business Education and Industrial Arts areas;
3. Resource centres in Science and Social Science had been established.

It should be pointed out that, while the budget change was a big factor in these improvements, it was not solely responsible, since the total figure allowed by the School Division did not ever cover all the School's supplies and equipment needs. Some of the finance came directly from students, some from fund-raising activities and some from Provincial and Division grants such as the Program Development Grant. In fact, this was another effect of the change. Staff members were now kept more aware of alternative

sources of finance by the School's administrators.

### Programs

The analysis of the School's programs over the period of the study showed there had been a definite increase in the number of courses offered. However, it appeared that the new budget system was only one of many factors related to this change. More important factors were the publishing of "The Core Report" and the changes it brought on a Province-wide basis; the encouragement by both Provincial and Division authorities to innovate and try new programs; the gradual loosening of controls over curriculum and the personal drive, enthusiasm and skills of individual teachers.

Despite the presence of these factors, some teachers felt more confident of moving into new programs under this system because it was easier to obtain the necessary supplies. Some also felt that the introduction of POB had facilitated course changes, with the result that teachers had begun mini-courses (courses within courses) in the junior high section. It also meant that courses such as Arts and Crafts, which was started by a Program Grant, could be continued instead of finishing when the Grant's financing did.

Since the introduction of POB, there have been no moves to curtail programs now that their approximate costs are more generally known although, in some cases, the introduction of new courses has had to be postponed for at least a year. However, the flexibility provided by POB has meant that some courses have been introduced, even though the Division has not been able to provide financing for them. An example of this is seen in the anticipated introduction of

the new Marketing course in September, 1976.

### Goals

The change had no real effect on the School's goals. However some teachers felt they were easier to achieve because of the changes in:

1. the resources now available to staff members;
2. the control of finance; and
3. the authority structure regarding budgeting within the School.

In relation to goals, change goals were established at the School level and these were described in an earlier section. Their importance lay in the fact that they influenced the peripheral changes that occurred in organizational dimensions such as communications, decision-making and control systems.

This analysis has revealed that, where budgeting was concerned, the major changes in organizational dimensions occurred in communications, decision-making and control over resources. There was an increase in communications about budgeting within departments but little change in communications between departments. Since communications form a vital part of the decision-making process, it was natural for the increase in the decision-making power of teachers in the School to be confined to their own departments. Any sharing of this power did not extend below the level of the department heads. Consequently, in this situation, before there can be any effective sharing of such power, the communications gap between the two sections of the School must be closed, or at least

reduced.

The other area of major change involved the School's resources. The majority of the staff felt that with the change in control, resources were improved in quality and, in some cases, quantity. Therefore, based on these results, it appears that if control over resources is decentralized to the School level, the School staff can purchase supplies and equipment more appropriate to the needs of the student population. However, not all staff members had the same perceptions of the change and these perceptions are examined in the next section.

## II STAFF MEMBERS' PERCEPTIONS

In the course of this description and in the presentation of results, in keeping with the phenomenological approach taken to the study, perceptions of staff members have been included with data obtained by observation and documentary analysis. In the majority of cases teachers did perceive the changes that have been described in Chapter IV. Since these perceptions were supported by observation and documentary data, it would appear that they had viewed the changes objectively. However, for a minority of staff members their perceptions had revealed no change in various organizational dimensions. In the case of one teacher, while there had been change, it had not been to the advantage of the School. As pointed out in Chapter III, these perceptions constituted the real world for these teachers. One of these staff members was the Department Head who felt that having to develop a budget detracted from time that should be spent on "educational matters". The

researcher was able to observe this person on a number of occasions in Finance Committee meetings. In many of them he was confused and unaware of the reasons for the existence of different accounts such as Print and Non-Print and Transportation. For him, these "confusing" proceedings replaced a telephone call to his Coordinator when in need of supplies.

In the case of the other staff members who found little or no change or no advantages under the new system, both documentary and interview data were analyzed for possible explanations. In the case where a teacher felt she could no longer obtain the equipment she needed it was found that she had not been allowed to purchase some electric typewriters for her class. In the case of another teacher, from questions he had asked before the implementation of the change, it was apparent he was not in favour of it. Consequently, he could have had a biased view and preconceived ideas, which prevented him from objectively assessing the change. The data revealed that the remainder of the teachers in this group belonged to the junior high section and to departments where the heads did not allow very much teacher involvement. Although the attitudes of these teachers towards their department heads may have produced some bias which affected their objectivity, their assessment of their situation appeared to be relatively accurate. This conclusion was reached because there was consistency in the relevant responses from these teachers in interviews with them and the results were also substantiated in informal discussions with staff members.

These findings suggest that, to increase the chances of the change surviving, the change agent should attempt to identify those who perceive little or no change. Once they have been identified, their particular problems can be discussed with them and, perhaps, solutions proposed. The same findings also imply that, if the majority of the staff members perceive little or no change, then the probability that the new system will persist is greatly reduced.

### III SURVIVAL OF THE CHANGE

Despite the passage of time, the presence of staff members who felt the change had not been very beneficial and the departure of two key people involved in the change (the former Principal and Administrative Assistant), it had successfully survived. This conclusion is made on the basis that the School personnel still maintain control over their budget after three years of operation and it is still developed by department heads and teachers. Therefore the data were analyzed to find possible explanations for its survival.

The reasons are divided into two categories:

1. environmental factors; and
2. within-school factors.

In the first category, survival of the change was related to its timing. It occurred at a time when the School's environment was receptive to the change. Neighbouring school divisions had successfully introduced decentralized budgeting and the Division itself had taken major steps towards decentralization in the year

the change was implemented. Thus, there was obviously a favourable attitude towards decentralization amongst personnel at the Division level. Changes were also made in the Division's budgeting policy to accommodate POB at the School.

Within the School, numerous factors contributed to the survival of the change. The single most important of these factors was probably the Principal's ability, in the early stages, to maintain control over spending at the School level. This ensured the effectiveness of the newly-formed structure (the Finance Committee) and procedures (teacher-participation in budget development and determination of priorities). Therefore the change survived because staff members felt there was a purpose to what they were doing and they could see results in the form of the acquisition of resources in a manner not previously possible.

In addition to this factor, there was the Principal's ability to deal with his superiors in the Division without being intimidated, and the fact that the Change Agent, who was the Principal at the time, had developed the change plans so that the new system could operate without him. Another important factor was the role played by the department heads. Being closer to teachers than the School administrators, they assisted in the selling of the idea to the staff and then in the implementation of the change. Their importance to the change continued over time because they served as communication links within the School. This role is discussed in relation to similar findings in other research in a later section.

There were also more minor factors which possibly affected

the survival of the change. One of these was the fact that there was some dissatisfaction with the old system among staff members at the time the change was proposed. They also perceived the change as being to their advantage and this increased its chances of being accepted. Then, as time passed and their perceptions, in most cases, were found to be correct, the change survived. Another factor was related to the change in leadership. The new Principal had been Vice-Principal at the time of the change and she had assisted the former Principal at that time. Consequently staff members did not notice any major effect on the new system resulting from the leadership change. Some even felt that she was more democratic, since she had not used her position power to veto Finance Committee decisions to date.

#### IV RESEARCH QUESTIONS

The findings of this research would not be complete without referring to the questions posed in Chapter III. Many of them have already been answered. However, some were found to be less central to the major focus of the research and these questions are answered in this section.

What are the present relations between the School's administrative personnel and the personnel in the Superintendent's and Secretary-Treasurer's Departments of the School Division Office?

The School's administrative personnel enjoy a good working relationship with the Secretary-Treasurer's Department for two reasons. One is that, after three years of operation, many of the

small problems that arose have been overcome and the other is that the School's former Administrative Assistant, who had helped implement the change, is now the Division's Audit Accountant. His presence in the Secretary-Treasurer's Department, at the time the whole Division adopted POB, helped considerably in reducing frustrations experienced at the School because of changes they were being asked to make in what they saw as their system.

A similar working relationship is enjoyed with the Superintendent's Department, especially since to date there has been approval from this Department for the purchasing of major items such as the off-set printing machine. Some frustration was experienced by the School personnel during negotiations for the 1976 budget because a new Area Superintendent had just been appointed and there was the feeling that he did not yet understand the system which the School staff had implemented. There is also frustration each year over the delay in budget approval but these frustrations are soon forgotten.

Was there any effect felt from the four problems associated with decentralization in the course of this change; i.e., tradition, exigencies of central control, influence of local pressure groups on the decentralized unit, and coordination of the decentralized function (Baum, 1961)?

The answer for each of these problems varies. Therefore, they are examined separately. As far as tradition is concerned, the answer would have to be in the affirmative. The effects here have been felt at two different levels. Firstly, at the School

level, since the Division had always been responsible for supplying and equipping the School, when it came to costly items, the Division personnel still tried to interfere. In the case of one of the subject coordinators, it was six months before he could break with tradition and stop ordering items for the School. Within the School, since the establishment of the position of department head, the person in this position has been responsible for the organization and direction of the department. In at least two departments this meant that teachers were not fully involved in the development of the department's budget.

The exigencies of central control were certainly felt at the School. Evidence of this was seen in the Division's attempts to veto the purchase of major pieces of equipment and in the Superintendent's suggestions of where to cut the budget. However, in these areas, the effects were not far-reaching because the School staff was able to withstand these Divisional attempts to gain more control. The effects are most obvious in the final budget figure that is approved, since here the Division usually has the final say. In 1976, the decision was to reduce the original estimate by twenty thousand dollars.

Apart from pressure from the Division, usually to reduce expenditures, the School does not experience the influence of local pressure groups. The majority of parents show a lack of interest in the School budget, except when they have to subsidize Physical Education activities and field trips. Although still only few, there have been more complaints this year from parents about

Physical Education subsidies, so perhaps there could be pressure from this direction in the future.

Regarding the last area of concern, no real problems related to coordination of the decentralized function arose. At the Division level the changes made to accommodate the new system meant that the newly decentralized accounting unit was able to coexist successfully with the larger unit without coordination problems. Within the School, with each department developing its own budget, there could have been coordination problems. However, the careful planning for the change anticipated many of them. For example, the ordering of audio-visual equipment, which is used by more than one department, was coordinated by developing a separate budget for this area. After assessing the audio-visual needs of all departments, this budget is prepared by the School's Audio-Visual Technician. The Finance Committee also serves as a coordinating body within the School.

What factors should be taken into account in determining the organizational structure for a school developing or operating its own budget?

Based on the findings of this study, it appears that one of the most important factors is the attitude of staff members. Many tend not to think of the total organization of the school. They work in isolation in their classroom and are not too concerned with organizational matters that extend beyond it, or at most beyond their own department.

Other factors include the time factor and the staff member's

lack of expertise. Those who are to be directly involved need sufficient time during the school day to prepare and operate the budget and they also need to be familiar with the budgeting process. Related to the last factor are attitudes. Many teachers in this study failed to see the importance of control over the operation of the School budget as it relates to the educational program. Finally, if the organizational structure for the budgeting process is to be departmentally-based, consideration must be given to the problem of accommodating interdisciplinary programs or other projects that do not fit into an existing department. Consideration should also be given to having a finance committee not entirely composed of department heads who might tend to allow their departmental bias to interfere with their ability to look objectively at the total school program and its needs.

Are expenditure patterns of the School different as a result of decentralized budget control?

This question has been partly answered in the description of the effect of the change on resources. In that section, it was pointed out that a definite change had occurred in expenditure patterns in relation to the supplies and equipment actually purchased. Under decentralized budgeting, the buying pattern showed more of a response to local needs, with the purchasing of supplies and equipment for remedial Reading and Mathematics and for Business Education and Industrial Arts. There had also been increased purchasing of non-print materials such as puzzles, games, film-strips, posters, maps and charts.

One of the change goals in this move to decentralized budgeting was that it should lead to financial savings. However, it was almost impossible to gauge the effect of decentralized budgeting on this aspect for two reasons:

1. There had been dramatic price increases due to inflation;
2. With the Division's former accounting system it was impossible to isolate all areas of the School's spending prior to the change.

However, the research brought to light some factors that point to possible financial savings. For example, because teachers were aware of actual costs and a budget limit, they were less inclined to over-order; books were returned for credit; the use of duplicating paper was reduced during the period of observation; there was better coordination of supplies through the Finance Committee; some savings were obtained by local purchasing and the School has operated with a surplus in its budget during each year that POB has been used.

Despite the problems of obtaining data that would answer this question, Tables 7 and 8, allow some comparisons to be made. The Print and Non-Print budget is determined on a per pupil basis and expenditures are financed by a grant from the Provincial Government on the basis of twelve dollars per student. (This Grant was increased by four dollars in 1976.) Therefore little is to be gained by looking at the totals. However, Table 7 does show that in the two subject areas (Junior English and Mathematics) where remedial work was undertaken, there was increased expenditure following the introduction

Table 7

## Print and Non-Print Expenditures for the Period 1972-1976

	1972	1973	1974	1975	1976 (expressed intentions as at 20-1-76)
Art	-	-	28	-	-
Business Education	\$ 2,065	\$ 2,157	\$ 1,097	\$ 1,165	\$ 800
Computer Science	-	-	-	372	-
English - Senior	771	1,507	1,502	696	250
English - Junior	1,797	2,272	1,100	1,908	2,500
Industrial Arts	-	92	185	72	100
Languages	1,965	1,154	551	1,552	1,216
Mathematics	1,721	1,408	3,702	2,222	500
Science	3,785	3,551	2,320	2,814	200
Social Science	2,696	1,706	3,660	1,713	-
Music (incl. Band)	508	306	995	307	500
Home Economics	8	283	267	-	200
Guidance	73	-	16	1,058	1,000
Resource	139	-	363	-	100
Miscellaneous	47	-	-	-	1,000
<b>TOTAL</b>	<b>\$15,575</b>	<b>\$14,436</b>	<b>\$15,695</b>	<b>\$13,879</b>	<b>\$ 8,366</b>
				\$14,200*	\$20,301**

\*Allotment for 1976

\*\*Total allotment for 1976

Table 8  
School Budgets For Period 1972-1976

General	1972 Actual	1973	1973 Actual	1974	1974 Actual	1975	1975 Actual	1976
Student Assistance	839.06*	1,050	774	1,000		1,000	531	1,000
Office Supplies & Equipment	11,603.92	13,950	10,625.38	12,675		12,365	15,756	12,225
Curricular grants	597.63	650	404.67	600		600	-	600
Print & Non-Print	15,426.49	16,100	14,659.88	14,500		13,500	13,879	10,301
Sub-Total		31,750	26,463.93	28,775	30,751	27,465	30,166	34,156
Art	2,189.73	2,300	3,299.70	3,000	2,873	3,000	3,131	4,000
Audio-Visual	1,575.53*	4,775	4,023.61	6,700	5,826	2,000	2,479	3,570
Business Education	5,281.49*	10,750	11,502.15	6,200	4,648	4,000	3,583	3,805
Computer Science+								3,445
English - Senior	— **	2,500	1,827.90	2,850	2,148	2,475	2,399	250
English - Junior	— **	125	98.36	1,300	1,111	1,770	1,535	1,695
Guidance	19 *	550	485.93	750	756	900	1,058	428
Industrial Arts	3,817.76	3,850	4,849.34	5,200	6,698	6,200	6,400	13,045
Languages	— **	1,375	802.39	1,475	894	1,670	144	702
Library	— **	1,175	670.77	900	639	250	240	400
Music	— **	2,175	2,575.80	2,000	2,078	2,470	2,316	1,500
Mathematics	— **	475	487.46	2,525	1,090	1,850	1,450	475
Physical Education	3,250.42*	6,450	6,463.94	8,300	8,397	6,730	6,644	6,365
Resource	— **	175	137.95	200	153	200	54	400
Science	1,925.46*	7,875	7,914.18	6,925	6,730	6,600	6,017	6,200
Social Science	— **	3,000	2,877.07	1,900	1,979	3,075	2,352	1,450
Home Economics+								5,950
Transportation+								2,808
Total		79,300	74,480.48	79,000	76,771	70,655	69,968	100,380++

\* incomplete figures

\*\* no figures available

+ new accounts

++ includes accounts for Special Education and Markers which are not shown.

of POB. In Science there was a reduction in spending and in some areas, where there was a marked increase in one year, there was a reduction in the following year, as occurred for example in Social Science. This provides evidence of cooperation between departments with some "holding off" after a year of heavier spending.

In Table 8, surpluses have not been shown because of the difficulty of obtaining exact expenditures from the School records and committed expenditures each year do not become actual expenditures until well into the following year. However, the most important point, is that in each year of its operation to date, the School's supplies and equipment budget has been operated with a surplus which is carried onto the next year. Another point to be noted from this table is that subject areas such as Mathematics, Social Science, Languages and English, which are not constantly using expendable supplies, have regularly been able to operate with a surplus, with the exception of Mathematics in one year.

Immediately after the change, this table shows that there was an increase in expenditure in Industrial Arts and Business Education where there was an updating of equipment. It should also be mentioned that in Social Science and Senior English the greatest proportion of these budgets is for the payment of markers. However, in the case of Social Science, only \$356.25 of the \$1,800 allowed was actually expended on markers. The rest was channelled into supplies and equipment to build up the resource centre.

The library only buys supplies such as pens, pencils and binding tape from the School budget. Therefore expenditure in this

area appears to be relatively low. The bulk of its supplies come from the Central Library Service.

The increased expenditure on the General Account in 1973 was due to the purchase of the off-set printing machine. The proposed 1976 Industrial Arts budget was also greatly increased for a similar reason. The staff of this department want to purchase a scope for analyzing engines. This would mean that students become familiar with equipment used in Service Centres today. Finally, an important point to note about the School's expenditure during the operation of POB is that, despite inflation, it was only in 1976 that there was a marked increase in the total. Much of this increase was due to expansion such as the introduction of courses in Computer Science and Marketing and the inclusion of new accounts in the budget.

If there was to be more decentralization, what other areas would be appropriate?

In light of the findings of this research, if there was to be a greater response to local needs, it appears that the hiring of teachers should be decentralized to the local school. This would allow the selection of teachers whose particular ability lies in the area of greatest local need. To complement this, it would seem appropriate to allow the school a professional development budget. In this way, the school could finance teachers already on the staff who wanted to attend conferences or in-service sessions in areas most suited to satisfying the needs of the student population. To further support this attempt to satisfy local needs, the school could have its own budget for payment of substitute teachers. If a

broader interpretation of the term "substitute" was allowed, it could mean that were the staff to save money in this account by not having to call on substitute teachers so often, then the money saved could be used to pay specialists or guest speakers who were experts in areas of education in which the students needed most help.

Of course complete decentralization, so that the school's total budget, curriculum decisions and hiring and firing of staff were controlled by the school's staff would mean an even greater response to local needs. However, in interviews many staff members at this School felt they already had enough freedom to make decisions. They were wary of further moves in this direction for various reasons, some of which included the lack of expertise and problems of coordination within the Division.

On the question of decentralization of library purchases, one of the librarians expressed concern about proposed moves in this direction. The main cause for concern was the fact that in using the Central Library Service, books arrived at the School processed and ready for the shelves. Thus saving the School's librarians hours of clerical type work; hours which can be spent more profitably reviewing books for the Library Centre. Such a move would also increase costs in the Librarian's opinion, since, by ordering library bound books in small quantities through the publisher, the advantages of bulk purchasing are lost.

Although decentralization has already occurred in the area of Guidance, some problems have been created by this move. The problems concern the supply of resources such as films and filmstrips.

If the School staff purchases films for the School, this represents an expensive outlay of funds for materials used once or twice per year. With each school in the Area making similar purchases, there is wasteful duplication. Added to this is the problem that such resources must be kept up to date. If outside agencies such as the Department of Health are used, their borrowing periods usually do not coincide with the school cycle. Thus not all classes can see the films. The Division has set up Area Resource Centres but so far their main focus has been on the elementary school. Therefore, it appears that the introduction of decentralized purchasing may be questionable in areas where use of the resources purchased is limited and where there is a need for constant updating of these resources.

The research provided answers to the questions posed in Chapter III. However, in addition to these findings, the study produced other findings, not directly related to these questions, and not previously mentioned. These findings include the fact that, in this case, introducing budget decentralization alone did not ensure a complete response to local needs. This was seen in the introduction of Computer Science, where one of the factors was perhaps environmental, in that this School was the only one in the Division without a Computer Science course. Thus, it is proposed in the 1976 budget that \$3,445 be spent on about 2 per cent of the student population. Similarly in Physics, courses using \$25,000 worth of equipment are being offered to approximately 9 per cent of the student population. The enthusiasm and ability of the

teacher has meant the development of a successful program which is attracting more students each year. However, as only about 20 per cent of the student population continue their education at university, and then, very few attempt science-based degrees, the program has a limited target population.

Another finding to result from the research was that the change in structure and control led to a re-distribution of power. In this case, there was an increase in the power of the School's personnel, with the result that they acted as a kind of power valve. Consequently, in this School, where budgeting was concerned, the amount of power each level in the organization was allowed was determined by those in the positions immediately above the level in question. In some departments, teachers felt they had as much power as their department heads; in others they felt they had none. However, it was observed that, despite differences in the area of power, the Principal and department heads took on more of a collaborative role in relation to development of the School budget. This type of role was observed in Finance Committee meetings where the Principal did not assume an authoritative role but acted as one of the Committee, involved in discussions with the other members more as colleagues rather than subordinates.

## V DISCUSSION OF FINDINGS

Writers on organizational change have described most features of such change and similarities were found between their ideas and the results of this research. Bennis (1969) suggests that the

circulation of ideas to those with power is one approach that can be taken to change and, in this case, this was one of the steps taken by the Change Agent. Friedmann's (1973) theories on social change also partly account for what happened in this School. One of his theories is that of experimental evolution in which he claims that man learns from experience and new discoveries. The Change Agent in this organization had experienced a new form of budgeting during his sabbatical leave and this was one of the stimulants for the change.

The findings of this study lend support to the writings of such authors as Bennis, Chin and Benne (1969) and Watson (1967) when they claim that certain conditions are necessary for successful change. In this case, there was support from senior officials of the system and there was no threat to the autonomy or security of members of the School staff. The Division's subject coordinators were the only ones threatened in this respect and they did show an adverse reaction by telephoning the Principal to question his actions. There was collaboration and cooperation among key personnel involved in the change and there was a Change Advocate (the Principal) who developed an atmosphere of confidence, trust and acceptance.

Virtually no resistance existed in the organizational change studied and there are a number of possible explanations for this, all of which find support in the literature reviewed in Chapter II. Probably, among the most important are the facts that some higher level needs were satisfied (Maslow, 1943) and the organization's members could see the benefits of the change (Mann and Neff, 1964).

At all levels of the organization there was an increase in power and responsibility and this is related to the findings of a study quoted by Lippitt (1973). According to that research, professional personnel will not resist a change when it is perceived as increasing, or at least causing no lessening of professional status and power and these were the conditions existing in this change. The same research also indicated that successful change in a hierarchical organization was related to the presence of complementary changes in levels above and below the organizational level where the major change occurred. This proved to be the case in this study.

Another factor found to add to the success of change in a hierarchical organization was the extent to which members perceived the behaviour of superiors, peers and subordinates to be in keeping with the norms of behaviour in the larger culture (Guest, 1962). In this case, staff members could see their peers in neighbouring school divisions operating their own budget. In the Division itself, their superiors were introducing more decentralization changes.

The findings of this research are of particular interest in relation to what Havelock (1971) describes as school characteristics not conducive to change. It is interesting from the point of view that some of these characteristics were absent and change was successfully introduced. For example, there was no community input and there was no outside change agent. Consequently there was no threat to the integrity of staff members. Other characteristics not conducive to change were present. Some of these included a lack of training for change at the teacher level; the separation of

members and units, which was intensified by the physical layout of the School and the hierarchy with its differential status. However, these characteristics did not prevent the change or its survival, suggesting that all of these characteristics are influential to varying degrees. Based on the findings of this research, it would appear that a strong factor in overcoming them is the ability, power and influence of the internal change agent.

Possible factors, which may have operated in the few cases in this research where staff members were not really in favour of the change, can be derived from Watson's (1967) ideas on resistance to change. Two such factors were primacy and selective perception and retention. In the case of primacy, if the former system of budgeting operated successfully as far as these staff members were concerned, they would not have seen any need to change it. Where selective perception and retention operate, only new ideas that fit the established outlook are permitted. As far as these teachers were concerned, the established outlook may not have included more decision-making power for teachers. Therefore, in these cases, there was less participation in the budget development process and this supported the finding of Tannenbaum (1954), Vroom (1960) and Alutto and Belasco (1972).

Finally, on resistance to change in a school setting, Wacaster (1973) and Gross, Giacuinta and Bernstein (1975) could be correct in their identification of factors leading to failure in organizational change.

These factors were:

1. no clarification of role expectations;
2. incompatibility of expectations between the school staff and district personnel.

In this case, role expectations were clearly defined in the change proposal and the School staff members were allowed to develop their own change proposal so that major problems of incompatibility did not arise.

Charters and Pellegrin (1973) had found that resistance was related to a perceived lack of expertise on the part of the staff. In this study, some staff members cited this as cause for some apprehension. However, it did not affect the change. Therefore it could be that, if the staff contains some members who perceive that they have sufficient expertise, their confidence in their ability can overcome the fears of those lacking expertise. In this case, the Chairman of the Finance Committee commented in an interview that those with experience in budgeting assisted those who had none.

Probably the most important finding of this research is the relationship between the success of the change and the role of the change agent. This finding lends support to the suggestions of Gallaher (1969). He proposes that the way in which the change agent plays his role is one of the more crucial variables in the success or failure of attempts to direct change. In this research, the particular role played by the Change Agent appeared to be an important factor in his successful direction of the change. Another factor seen by Gallaher as being crucial in the success of the change is the dependence of the organization's members upon the change

agent's authority in matters of change. In this case, the School's staff members were dependent on the Change Agent to the degree that the latter was responsible for the developmental work in the initial stages and the staff accepted his decisions about the change. In Lippitt and Nadler's (1967) terms, the Change Agent used a directive approach. However, it was not done in such a way that staff members felt they were being dictated. This was achieved by involving the department heads and, through them, the staff. The new pattern of relationships was found to be rewarding and productive. Thus, there was no dependence on the Change Agent to sustain this new pattern (Guest, 1962). This was achieved by the Change Agent playing a very influential part in the initial planning stages and in the setting of change goals. Then he withdrew to a large degree and let the department heads implement the actual change. This approach of the Change Agent's to the change strongly supports the findings of Jones (1968) in his analysis of the change agent's role.

In the literature review, the four major roles for the change agent are described (Lippitt, 1973). In this study, it appeared that the Change Agent was the coordinator of the change efforts and programs; he was a change specialist and he was an internal consultant. However, on many occasions, he delegated the tasks of fact finding and acting as an information link to the staff of the School. The same author claimed that a metamorphosis of the change agent occurs, in that, at first, he is an individual and then he is replaced by a group. To a limited degree, this idea found support in the study since the Finance Committee continued to make changes. However,

the changes were too small to allow this to be anything other than rather tenuous support.

In the specific field of education, there was very strong support for some of the findings. In this case, the administrative positions did dominate in the introduction of change and the department heads (chairmen) were very important as communication links between teachers involved in carrying out the changes and the Principal who had developed the change plan. The Principal also played a very important role as a "boundary person", linking the demands of the Division with the change occurring within the School (Hage and Aiken, 1970).

However, findings from other research studies were not supported so strongly. Weins (1970) found that principals who promoted change were older; had held more than one principalship and had received more education. In this case, only the last point was true. Hoy and Aho (1973) had also found that outsiders to a school district were more often perceived as change agents. In this case, the Principal had come to his position from within the district. However, his sabbatical leave had obviously introduced an outside element. Therefore, in change in education, it appears that the importance of the outside environment, whether it is an idea or a person, should not be under-estimated. On the point of inside and outside change agents, Griffiths (1964) suggested that change in response to insiders usually led simply to a clarification of rules and internal procedures. However, this was not the case in this change. Again, it was probably the leave taken outside the country

which led to a different result, comparable to that obtained with outside change agents.

In this case there were elements of Leeds' (1964) "protest absorption", since a new subunit was formed as far as budgeting was concerned. The School was the subunit because, under the new system of POB, its accounts and their operation were separate from the rest of the Division's. With some variations, all of Leeds' steps eventuated. The subunit did gain power but, rather than a new administrative unit being formed to accommodate it, new administrative procedures were developed. However, a new administrative unit (the Finance Committee) was formed within the School. The subunit demanded and obtained more autonomy and resources, which led to innovations as far as the School was concerned. These innovations were mainly in the acquisition of different resources such as the off-set printing machine and supplies for the new plastics course in Industrial Arts. Then, when the School's budgeting system gained legitimization, procedures became routinized and innovation subsided to a degree. Thus, Leeds' theory of protest absorption is one possible explanation for what is involved in organizational change.

In his research on change Lawrence (1958) found that changes in structure put many people into conflict situations in regard to their established self-concept. This was definitely the case with the Department Head who found the change "a hell of a procedure". Perhaps this conflict can be avoided or at least reduced by re-education. A similar role conflict problem was found by Baum (1961) where the Commission had decentralized authority to its agents, yet it was still accountable to Congress. In this research,

the School Board had delegated authority to the School in relation to budgeting. However, it was still accountable to the taxpayers of the community; hence its attempts to control, where major expenditures were concerned. This inability to allow complete decentralization hinders the adaptation of operations in attempts to meet local environmental demands (Lippitt, 1973).

Baum (1961) found that no teaching of the philosophy of decentralization had been undertaken. Such teaching at the organizational level permitting the delegation of authority might reduce reluctance to give up control. In this case no such teaching occurred and there was evidence of some unwillingness to completely delegate authority. As stated in Chapter III, Baum also found that decentralization brought "speed and realism" to the operation and the perceptions of the change program determined behaviour in it. This research produced similar results since staff members perceived an improvement in the supply process and more appropriate supplies and equipment were now available to them. It was also apparent that those who failed to see the importance of budget control in relation to their program were not heavily involved in the budgeting process. Consequently they had no opportunity to gain any insight into the new system.

Structural change, according to Greiner (1967), leads to a change in the relationships of subordinates. Associated with the structural change in this case there was increased collaboration between the organization's members at all levels. Therefore Greiner's suggestion was supported by this finding. However, it would appear, that structural change can also lead to variation in

organizational type as occurred here. In Likert's (1961) terms, as far as budgeting was concerned, this School changed from an authoritative organization, because of Divisional policy, to a participative one.

Some of the findings of this research supported those relating to the budget systems that are described in Chapter III. The most important of these were that staff communications may be improved when a program-oriented form of budgeting is used and there may be increased involvement of the staff in problem-solving and planning. However, in this research, such involvement was dependent on the attitude of individual department heads. Indications were that, even though only one school was involved here, if such a change was introduced on a division-wide basis, there would be more opportunity for operating a system based on local needs.

However, unlike Miller (1974), the workload of teachers was not found to have increased in this case. This was due to the fact that the department heads took on much of the extra work involved. Nevertheless, under the new system, the Principal adopted a more collaborative role where budgeting was concerned and this finding gains support in Miller's research.

Judging from superintendents' reports of unit budgeting in the Newark Unified School District, California (1972), the system studied here was a similar one, because teachers were more aware of cost budget limitations; there were less complaints about the supply of materials necessary for School programs and it allowed flexibility and a response to local needs.

With regard to the Riffel, Watts and Hudson (1972) study

which had a Canadian setting, it is difficult to make comparisons on the major implication of that study, because this budgeting system was modified to the extent that it could hardly be called a technological change. The contention of the authors in that case was that technological change in an organization required commensurate organizational change. However, there were aspects in this change that were similar to those found in successful change attempts in the Riffel, Watts and Hudson study. These included the School administrators working with the Secretary-Treasurer; the integration of the new system with the old and a feedback mechanism. In this research, the department heads provided feedback to the staff.

Finally, the organizational change researched in this study was compared with the models presented in Chapter III. This comparison revealed that the most appropriate one was Chin's intersystem model (1969), although there were some elements of it which did not apply. For example, as far as the staff were concerned, the change did not occur as a result of their perceiving a need for it. Nevertheless, the Change Agent was part of the situation and a participant in the change. The overall goal of the change could be said to have aimed at improvement of the system. The source of the change was mainly the Change Agent and the change was controlled (Table 5, p. 35)..

With regard to the models summarized by Bennis (1963) (Table 4, p. 33), some elements of each were found appropriate in this case. At one time or another during the change, the Change Agent played all of the roles described in the three models, although mainly he was consultant, teacher and researcher. Of these three

models, the organic model is the most suitable as a basis for the change in this case. However, the change target and the instrumentation used were different. The change target was not problem-solving alone but the budget control system and the instrumentation used did not involve Organization Development activities. The instrumentation used to bring about this change was data collection, group discussion and reconceptualization. The reconceptualization involved thinking of the work of each department in terms of programs. It was in cases where this had not occurred that staff members failed to see the importance of the direct relationship between budgeting and the educational program.

As pointed out earlier in this thesis, much of the literature on change in organizations is based on the Organization Development movement and the models described above are derived from this orientation to change. Hence, they are not always appropriate for all types of organizational change. Therefore the model shown in Figure 12 is perhaps more applicable in this case. In line with the reason for taking a phenomenological approach to the study, this model includes the perceptions of staff members which motivated each step in the change process.

### Propositions

The description and analysis of the organizational change studied in this research revealed some crucial variables in relation to successful change involving decentralization. The results show that change in the high school was dependent on:

1. the perceptions of staff members;

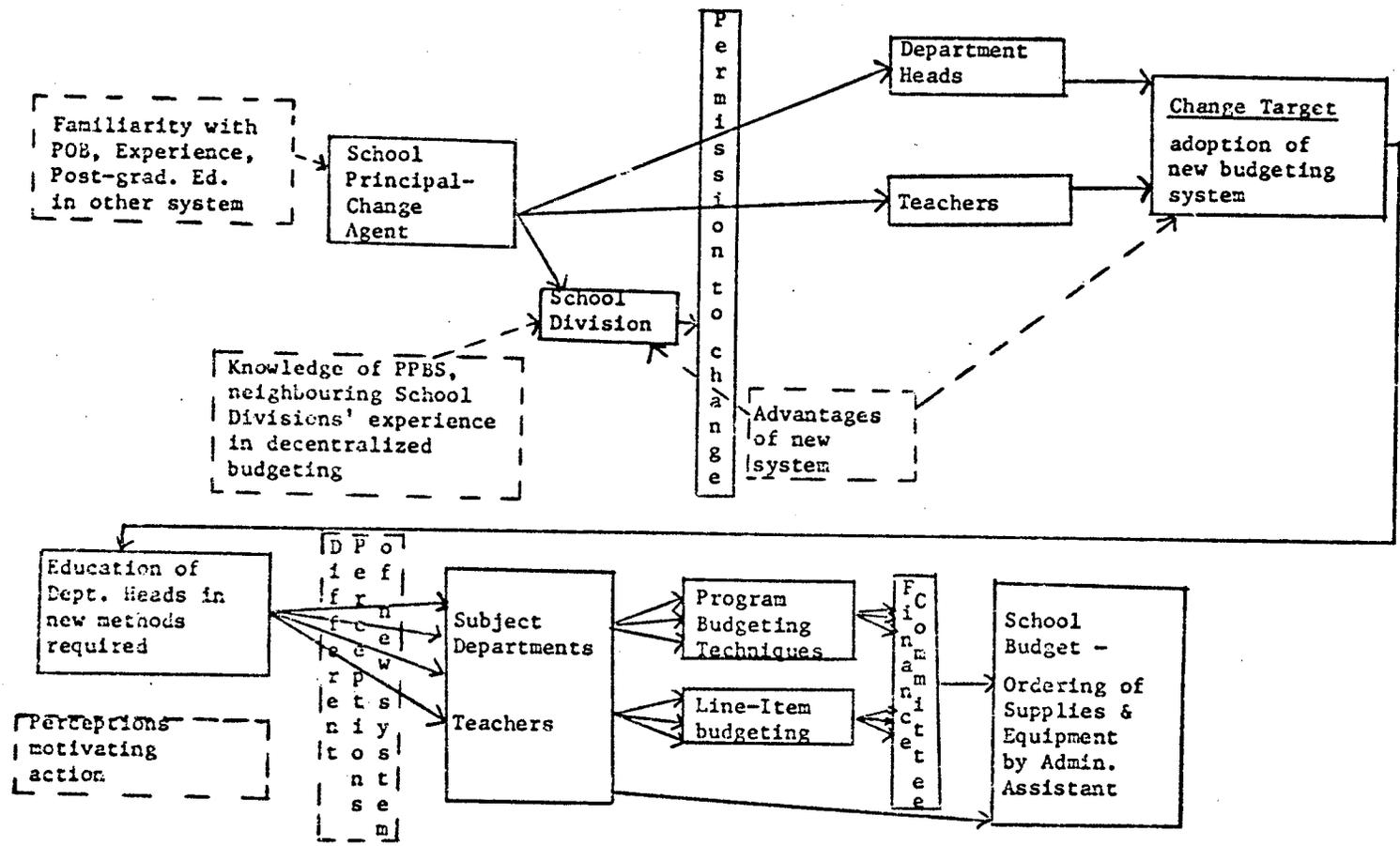


Figure 12. Model of Change at the High School Studied

2. staff members' willingness to be involved in the change and to accept increased decision-making power;
3. the principal's ability to successfully play the role of change agent; and
4. the use of influential department heads in implementing the new budgeting system.

The variables summarized here lead to certain overlapping propositions. However, before they are stated it should be pointed out that they are made on the basis of change in one area (budgeting) and the study, although intensive, was conducted in one high school. Therefore, they apply mainly in the context of the School studied, although they may be relevant in other similar contexts. When they have been tested in further research their general applicability can be more readily assessed.

1. A change to decentralized control over the budget may lead to increased communications, increased decision-making power for school staff members and the acquisition of resources more appropriate to local needs, if:
  - a. staff members perceive the advantages of maintaining this control at the school level;
  - b. department heads are willing to allow department members to participate in the budgeting process;
  - c. staff members can overcome personal disinclinations towards participation and withstand conflicting pressures when acquiring resources appropriate to local needs.

The last-mentioned condition applies to the response to local demands and this part of the proposition is supported by Lippitt (1973).

The results of the research indicated that, where both conditions a. and b. were fulfilled, then teachers were involved in the budgeting process, with a subsequent increase in communications and decision-making.

2. If the principal, acting as a change agent, secures the

support of influential department heads in implementing change, the chances that the change will be successful are improved.

This proposition is supported by the research of Hage and Aiken (1970), who found that administrators, including department heads, dominate in the introduction of change. They are also important as communication links and this contributes to the success of the implementation.

3. A major change in structure may lead to a re-distribution of power among the organization's members if:

a. the individuals who are to delegate power are willing to do so unconditionally;

b. the organization's members, whose power is to be increased, are willing to accept both the power and the increased responsibility associated with it.

It is evident from Greiner's (1967) ideas on the use of power in organizational change, that this proposition finds support in his suggestions. However, it is also evident from the research that some teachers are not willing to accept increased power, nor are some department heads willing to delegate it. Therefore, the extent to which this proposition is true is entirely dependent on the beliefs and perceptions of the organization's members.

4. In a change to decentralization, the administrative positions act as power values, with the people in those positions delegating only as much power as the individual is willing to relinquish.

In this research it was apparent that the amount of power filtering to the bottom level of the organization in each department varied. Therefore, this variation in the delegation of power formed the basis of this proposition. In the cases where the department head would not involve department members in the budgeting process and, instead, he or she retained decision-making power, teachers experienced no increase in power. On the other hand, where

department heads encouraged the involvement of their members, the teachers experienced increased power. Consequently the degree to which decentralization of control occurred was partly determined by those in positions of power.

5. Environmental factors will influence attempts by a decentralized unit to respond more fully to local needs, if conflicting pressures are stronger.

Teachers, at the bottom level of the organization, are exposed to conflicting pressures. For example, their behaviour may be influenced by personal interests, the School Board and community interests. Therefore, they will probably respond to the strongest of these pressures and this response may not necessarily be appropriate for local needs. In the School studied in this research, courses such as Computer Science were offered, even though they were aimed at a small percentage of the student population. However, if such courses were deleted, School Board trustees are open to the charge that they have denied students at the School equality of educational opportunity. In cases where the teacher's ability lies in areas of little interest to students, local needs are not completely met. Therefore, environmental factors and conflicting pressures must be considered in decentralization changes.

6. The success of organizational change in a high school is dependent on the perceptions of staff members.

If staff members perceive that the change will be advantageous for them, there is a greater likelihood that they will support it and contribute to its successful implementation and survival. The presence of a few dissenters does not hinder the change provided that very few of them are in key positions as far as the change is

concerned.

Implications of this research are that there should be education of staff members, not just in techniques required, but also in the philosophy and rationale underlying the change. The change agent must be capable of controlling the careful planning for change, yet involving the staff in the process, and he must be able to anticipate from which direction challenges to the change proposal will come, so that he is prepared for them. It would also appear that a change advocate, who promotes change, without necessarily managing it, is essential in an educational setting if major change is to occur. The writer is prompted to make this observation in view of the fact that interviews in this School revealed so many teachers content and secure within their own world. This world consisted of their pupils and classroom and it is difficult to envisage them instigating any major changes.

In the final chapter these implications are examined in more detail. The thesis is summarized and conclusions are drawn.

## CHAPTER VI

### SUMMARY AND CONCLUSIONS

This chapter contains a review of the thesis. The multiplicity of findings are summarized and conclusions are drawn to emphasize the major findings of the research. Finally, the implications of this research are discussed.

#### I SUMMARY

The main purpose of the thesis was to describe analytically an organizational change that occurred in a city high school. The change involved a structural change incorporating a change in control over the supplies and equipment budget. This control now lay at the School level. The origin and implementation of the change were studied so that knowledge could be contributed in an area of education that, up to date, has been dominated by the Organization Development movement. The technical, organizational and sociological aspects of the move to decentralized budgeting were studied in an effort to provide data on the implementation of successful change and its survival in the organization.

In order to achieve this purpose, a phenomenological approach was taken to the research. However, this approach was restricted to observation of the new budgeting system's actual operation. This decision was made because, in the researcher's opinion, the value of this approach lay in being able to observe the actions motivated by

the attitudes and perceptions of the organization's members.

Historical/survey methods were used to collect data about the past. These methods included documentary analysis and interview and the phenomenological approach incorporated documentary analysis, interview and observation.

The data were analyzed so that a picture of the change, as it progressed over time, could be developed. Organizational variables such as the authority structure; control systems; goals and programs were analyzed to assess what change had occurred in them.

The phenomenological approach, which could also be regarded as a person-oriented approach, proved to be a most useful one in this research. It allowed the development of three different pictures of the change, according to the different perceptions of staff members. First, there was one supported by data collected by interview, observation and documentary evidence, which pointed to the fact that a definite change, to the advantage of the School, had occurred. Then there was the case of a few staff members who found no change had occurred and this was supported by observation and interview. Finally, there were two staff members who found that change had occurred but it had not been to their advantage or to their pupil's advantage. This perception of the change was supported by interview and documentary evidence.

More detailed findings revealed that a change in the organizational structure of the School had occurred. A finance committee was established to exercise control over the budget and its members included the Principal, vice-principals, department heads, and the Administrative Assistant. The control exercised by the Committee

was also part of the organizational change since, before the change this budgetary control lay at the Divisional level. When the School assumed this control, it meant that the School's staff members had the power to decide who would make decisions concerning spending within the School. They could also control the quality and quantity of resources purchased by the School.

Although a new structure had been formed, the role of the teacher changed very little. However, a change in role and responsibility was experienced more at the department head level. The responsibility of these staff members increased, as they were now responsible for the development of a departmental budget and for the spending that occurred within their departments. The School's administrators adopted a more collaborative role where budgetary matters were concerned and the School budget increased in importance for the Administrative Assistant.

The effects of this change were felt in other organizational dimensions of the School. An increase in communications about budgeting occurred within departments, with the result that teachers became more aware of the School's programs and their costs. However, the increase did little to close the existing communications gap between the senior and junior high sections of the School. Related to the within department increase in communications was an increase in teachers' decision-making power. An attempt by one of the vice-principals to increase shared decision-making was met by strong resistance from the influential department heads who still perceived themselves as the final decision-makers.

Despite the perceptions of these department heads, there had

been a change in the authority structure, as a re-distribution of power had occurred. More power flowed into the School from the Division and this power was distributed within the School according to the attitudes of those in administrative positions. Consequently, some teachers found they did have the power to make decisions within their departments and others, although they were being consulted more, still had little real say in important decisions such as those involving cuts in expenditure. In most cases, the Finance Committee was allowed by the Principal to function as a decision-making body.

Once budget control had been delegated to the School staff, a noticeable change occurred in the type of resources purchased by the School personnel. They reflected the new and expanded programs being offered by the School and they included more non-book materials than were previously purchased. There was also an up-dating of existing equipment in subject areas such as Business Education and Industrial Arts and a response in purchasing to the needs of the student population. Less duplication of supplies and equipment occurred and costly informal adaptations of the old system such as over-ordering were eliminated. Under the new system, similar adaptations did not occur because teachers were more aware of program costs.

A change did occur in the School's programs, in that there was an expansion of existing programs and the introduction of new ones. However, these changes were related more to environmental factors such as Provincial and Divisional encouragement of such expansion and innovation in local program development, rather than to the change that occurred within the School.

The change appeared to have little effect on the School's

goals, except that staff members felt that the goals were easier to achieve because of their increased control over spending. This was due, in part, to the removal of the subject coordinator's influence when it came to supplying schools. When these coordinators had control over resources, some staff members felt that, if their School was not one of the coordinator's "favourites", their requests for supplies and equipment were sometimes not fulfilled. Now that this control lay within the School, influence patterns changed and some individuals who previously had little influence at the Divisional level, found they could now use their influence at the School level.

The major change, involving a change in structure and budgetary control, was successful because the School staff was able to maintain control over the budget at the School level. The research revealed certain factors that ensured this success. The most important of these appeared to be the Change Agent's role and his knowledge of change. This knowledge meant he was able to anticipate problems and to guard against them in planning for the change; as Principal, he could withstand inputs from the Division, which he felt were not to the School's advantage and he perceived that maintenance of control at the School level was a factor crucial to the success of the change. A most important influence on the Change Agent appeared to have been his experience with a similar budgeting system during his sabbatical leave. This meant he became the prime motivator for the change and he therefore completed all the developmental work involved in introducing the new system. During this stage he served as a boundary link between the Division and the School. Then, although he was still within the School, he withdrew to a large degree and allowed

the department heads to implement the change. They, in turn, involved their department members in developing a departmental budget estimate. By acting as communication links in both selling the idea to the staff and in implementing the new system, the department heads played an important part in the change. Other influential factors ensuring its success were the changes made to accommodate the new system at the Divisional level and the receptive environment that existed at the time of the change. The last-mentioned factor meant that the Principal had the support of his superiors at the School Board Office. There was also some dissatisfaction with the existing system amongst staff members, although this dissatisfaction did not appear to be a major factor contributing to the success of the change. Finally, adding to its success, was the fact that clear role definitions were established for each position under the new system during the planning stages of the change.

Since the change involved the delegation of some authority, decentralization problems were examined. Exigencies of central control were still felt at the School level, as evidenced by the attempts of the Division to control major expenditures. The traditional roles of the department head and subject coordinators still influenced the behaviour of some of the people in these positions. Consequently there was a certain reluctance to delegate authority on their part.

It should be remembered that these findings result from research that was conducted under certain limitations. Perhaps the most important of these was that findings about the change itself had to be derived 'ex post facto' and they are related to only one

school. There is also the fact that they are confined to the budgeting process and budget-related matters.

## II CONCLUSIONS

From the numerous findings resulting from this research, many conclusions can be drawn. Firstly, in relation to the methodology used, the results indicate that the decision to conduct the research based on a multi-model conceptual framework was justified. The decision to take two slightly different approaches to the data collection for the two different time phases also seemed appropriate in this situation.

A major conclusion to be drawn from this research, as suggested in one of the propositions, is that a change in structure, that involves a change in control, will lead to a power re-distribution. This, re-distribution, in turn, will have some effect on other organizational dimensions such as communications, decision-making, resources and programs. When the control change involves the delegation of authority to a subordinate unit, there is a shift in informal, influential relationships. Under the old system, such relationships existed between personnel within the School and officers of the Division. With the introduction of POB, these relationships were confined to the School itself.

Where decentralization of authority, control and finance are involved, it appears that there will not be a complete response to local needs in education because political motives are often stronger than the need to satisfy some local demands. For example, demands

by today's society for equality of educational opportunity lead to the introduction of courses that might have limited appeal in some areas. In the School studied in this research, if courses such as Physics and Computer Science were to be eliminated from the School's programs, then students at the School are denied the opportunity of studying courses available to those in other schools. Administrators could then be accused of denying these students educational opportunities that are provided for students in other schools.

Another valid conclusion that might be made on the basis of the findings of this research is that the amount of control over finance and spending that filters to the bottom levels of the organization is basically determined by the availability of finance. Closely related to this is the amount of pressure exerted on the decentralized unit. If finances are greatly restricted, then more pressure to reduce expenditure is felt by those occupying the bottom levels of the organization.

The examination of the change in this research revealed that a departmentalized approach was taken to the new budgeting system. The conclusion related to this finding is that such an approach leads to a fragmentation of the School's program. This is accentuated by the fact that many staff members have a focus that is restricted to their own pupils, within their own classroom. Hence, they fail to take a broader perspective and do not see the totality of the educational program.

With regard to the implementation of the change certain conclusions can be drawn from the findings of this research. One

of the most important is that a person's behaviour, with respect to the changed procedure, is perhaps shaped more by their attitude towards the change, than by their involvement in its implementation. In addition to the importance of attitudes in organizational change, it would appear that the presence of an internal change agent is a critical factor for successful change in an educational setting. The chances of successful change occurring are enhanced if department heads serve as communication links between organizational levels and if the change agent can direct the change. Based on the results of this research, it appears that it is best for the change agent initially to play an active role in developing the change plans and then retire to a less active role for the implementation. An environment receptive to the change must also exist and, of course, a similar atmosphere must exist within the organization. Finally it can be concluded that where decentralization of control is concerned, the change agent must ensure that control is maintained at the appropriate level.

### III IMPLICATIONS

The implications drawn from this research can be examined at four different levels. The findings have resulted in implications for:

1. Teachers;
2. Schools;
3. Administrators; and
4. Researchers.

The main implication for the teacher is that perhaps at this level there should be a broadening of perspective so that the teacher sees the totality of the school's educational program. A broadened perspective could lead to a re-evaluation of routinized procedures and the eventual introduction of useful change. There is also a need for teachers to understand the underlying philosophy involved in any organizational change. This will enable them to see the importance of the change in relation to their work in the classroom and this could subsequently influence their attitude to the change.

One of the main implications for the school as a whole that can be drawn from this research is that, if the school is to offer a balanced program that responds to local needs, the fragmentation caused by the departmental approach must be reduced. This is particularly important in the light of moves towards individualized instruction which could mean an even greater narrowing of focus and, therefore, further loss of a broader perspective.

Another implication relating to the school as a unit that arises from this study is that, while there is a need for fund-raising at the local level, there is contact between the school and its community. If this need was eliminated, a valuable means of contact with the community would also be eliminated.

For administrators, the implications of this research are many. First, in some cases, there could be a need for them to work towards the welding of the high school into a more complete organizational unit that takes into account the individual subject areas in the context of the school's total educational program.

Related to this need is the implication that education of staff members, aimed at increasing their awareness of the functioning of the school as an organization, could broaden the perspectives of teachers. Such education could overcome some of the problems created by too narrow a focus. The broader implication of this is that, even in cases of organizational change involving structural or technological approaches, such changes should be introduced in association with "people" approaches or Organization Development techniques.

Administrators must bear in mind that where change involves decentralization and, in fact, where organizational change is concerned, there is a need to educate the organization's members, not only in the technical aspects of the change but also in the philosophy and rationale underlying the change. If one of the goals of the change leading to decentralization is to induce a response to student needs, consideration should be given to ways of reducing the effects of influence external to the school.

This research also implies that, in an educational setting, if there is a need for change, the staff should be exposed to outside ideas or personnel and there should be a change agent capable of directing the change. If staff members are to be involved, administrators must allow time during the school day for such involvement and they must also provide training to overcome any lack of expertise on the part of teachers.

More specific implications that can be drawn from this research are that if a finance committee is established to exercise control over the budget, careful consideration must be given to the

composition of such a committee. It should be composed of members with a broad view of the school's educational program and they should be capable of acting free from possible bias towards any particular subject area.

Finally, a major organizational change has more chance of being accepted if it is introduced with a certain amount of flexibility, as was the case in this study. The experimental nature of the change removed a sense of permanency in the initial stages and made it easier to make adaptive changes as the implementation progressed. Such an approach to change also allows a return to the former system, if the change should fail.

One of the main implications that can be drawn from this study for the researcher is that, where more than one time dimension is involved, there is need for a methodology appropriate for each dimension. This may involve a multi-model conceptual framework which allows a slightly more structured approach for researching the past when some reliance must be placed on memory in the collection of data. Secondly, the phenomenological approach is most appropriate for researching the existing situation in an organization, because it allows for observation of actions motivated by the individual's perceptions and attitudes. However, it is less appropriate for researching the past, since no such observation is possible. There is also the possibility that it may be difficult to collect data about individual perceptions if interviews are not possible as it is usually more formal data that is recorded in documentary form in any organization.

However, the implications of this research are that the phenomenological approach is appropriate in a school setting where the researcher cannot, and does not want to, rigidly restrict the aspects of the organization to be studied. This is particularly important in view of the fact that much educational research to date has focussed on organizational aspects derived from research into non-educational organizations, without due regard to the question of the appropriateness of that approach.

Although the school is an organization, it has some unique organizational characteristics. Some of these include a very flat hierarchical structure and the majority of its members working in isolation in the classroom, so that there is often more interaction on a one-to-one basis rather than on an organizational level. The results of research into these unique organizational characteristics could lead to ways in which the administrator can develop the organizational aspects of the school. This would improve its functioning as a complete organizational unit serving the needs of students from the local community.

In conclusion, it is apparent from this research that organizational change can be successfully undertaken in a high school. However, key factors in its success appear to be the presence of a change agent who has the confidence of the staff and sufficient expertise and knowledge of change to lead and involve teachers. Such expertise is important in view of the fact that teachers are often very secure in using existing methods and procedures. It is also necessary to have personnel who are in favour of the change, in key positions in the organization so that

they are close enough to those at the bottom level of the organization but, at the same time, in a position to offer leadership in the change. Finally, there must be top-level support and non-interference, if the change was initiated at a lower level of the organization.

This research also revealed the problem faced by administrators who try to involve teachers in school processes that call for participation in events not directly related to teaching. The problem arises because the teacher cannot see the importance of the event in relation to his or her teaching in the classroom. This leads to non-involvement which hinders the functioning of the school as an organization. It highlights the importance of educating staff members in the rationale that underlies any proposed change and their involvement in it.

**REFERENCES**

## REFERENCES

- Alutto, J.A. and Belasco, J.A. 1972. Patterns of teacher participation in school system decision-making, Educational Administration Quarterly, Vol. 9, No. 1, 27-41.
- Baldrige, J. Victor and Deal, Terrence E. (Eds.). 1975. Managing Change in Educational Organizations. Berkeley, California: McCutchan Publishing Corporation.
- Barnard, C.I. 1938. The Functions of the Executive. Cambridge, Massachusetts: Harvard University Press.
- Baum, B.H. 1961. Decentralization of Authority in a Bureaucracy. Englewood Cliffs, New Jersey: Prentice Hall, Inc.
- Beckhard, R. 1969. Organization Development: Strategies and Models. Reading, Massachusetts: Addison-Wesley Publishing Company.
- Bell, Daniel. 1967. Notes on the post-industrial society, The Public Interest, Spring, 24-35.
- Bendix, R. 1956. Work and Authority in Industry. New York: John Wiley and Sons, Inc.
- Benne, K.D. and Birnbaum, M. 1969. Principles of changing, in W.G. Bennis, K.D. Benne & R. Chin (Eds.), The Planning of Change. New York: Holt, Rinehart and Winston, Inc., 328-334.
- Bennis, W.G. 1963. A new role for the behavioral sciences: effecting organizational change, Administrative Science Quarterly, 8, 125-165.
- \_\_\_\_\_. 1969. Organization Development: Its Nature, Origins, and Prospects. Reading, Massachusetts: Addison-Wesley Publishing Company.
- \_\_\_\_\_, Benne, K.D. and Chin, R. (Eds.). 1969. The Planning of Change. New York: Holt, Rinehart and Winston, Inc.
- Berger, P.L. and Luckmann, T. 1966. The Social Construction of Reality. Garden City, New York: Doubleday & Company, Inc.
- Blau, P. 1956. Bureaucracy in Modern Society. New York: Random House.

- Carlson, R.O. 1964. Environmental constraints and organizational consequences: the public school and its clients, in D.E. Griffiths (Ed.). Behavioural Science and Educational Administration. Sixty-third Yearbook, Chicago: National Society for the Study of Education. 262-276.
- \_\_\_\_\_, Gallaher Jr., Art, Miles, M.B., Pellegrin, R.J. and Rogers, E.M. 1969. Change Processes in the Public Schools. University of Oregon, Eugene, Oregon: Center for the Advanced Study of Educational Administration.
- Chin, R. 1969. The utility of system models and developmental models for practitioners, in W.G. Bennis, K.D. Benne and R. Chin, The Planning of Change. New York: Holt, Rinehart and Winston, Inc., 297-312.
- Charters Jr., W.W. and Pellegrin, R.J. 1973. Barriers to the innovation process: four case studies of differentiated staffing, Educational Administration Quarterly, Vol. 9, No. 1, 3-14.
- Cooper, W.W., Leavitt, H.J. and Shelley (Eds.). 1964. New Perspectives in Organizational Research. New York: John Wiley & Sons, Inc.
- Cyert, R.M. and March, J.G. 1959. A behavioral theory of organizational objectives, in Haire, M. (Ed.), Modern Organization Theory. New York: John Wiley and Sons, Inc., 76-90.
- Dalton, G.W., Lawrence, P.R. and Greiner, L.E. 1970. Organizational Change and Development. Homewood, Illinois: Richard D. Irwin, Inc. and The Dorsey Press.
- Drucker, P.F. 1958. Business objectives and survival needs: notes on a discipline of business enterprise, Journal of Business, XXXI, 81-90.
- Emery, F.E. and Trist, E.L. 1973. Socio-technical systems, cited in D.S. Pugh, D.J. Hickson and C.R. Hinings, Writers on Organizations. (2nd ed.). Middlesex: Penguin Books Ltd., 49-55.
- Etzioni, A. 1959. Authority structure and organizational effectiveness, Administrative Science Quarterly, Vol 4, No. 1, 43-67.
- \_\_\_\_\_. 1961. Complex Organizations A Sociological Reader. New York: Holt, Rinehart and Winston.
- Fargo Public Schools, North Dakota. 1974. Model for educational accountability - development of planning PBES, Final Report, Research Series No. 11.

- Fayol, H. 1949. General and Industrial Management. London: Sir Isaac Pitman & Sons, Ltd. (Translator Constance Storres.)
- Fox, D.J. 1969. The Research Process in Education. New York: Holt, Rinehart & Winston, Inc.
- Friedmann, J. 1973. Retracking America. A Theory of Transactive Planning. Garden City, New York: Anchor Press/Doubleday.
- Gallaher Jr., Art. 1969. Directed change in formal organizations: the school system, in R.O. Carlson, Art Gallaher Jr., M.B. Miles, R.J. Pellegrin and E.M. Rogers, Change Processes in the Public Schools. University of Oregon, Eugene, Oregon: Center for the Advanced Study of Educational Administration, 37-54.
- Good, C.V. 1963. Introduction to Educational Research. (2nd ed.), New York: Appleton - Century - Crofts.
- Gorden, R.L. 1975. Interviewing, Strategy, Techniques and Tactics. Homewood, Illinois: The Dorsey Press.
- Gordon, R.A. 1945. Business Leadership in the Large Corporation. Washington, D.C.: Brookings.
- Gouldner, A.W. 1969. Quoted in R.L. Peabody, Perceptions of organizational authority: a comparative analysis, in J.A. Litterer, Organizations, Structure and Behavior. (2nd ed.). New York: John Wiley & Sons, Inc., 115-120.
- Greenfield, T.B. 1973. Organizations as social inventions: Rethinking assumptions about change. Journal of Applied Behavioral Science, 9, (5), 551-74.
- Greenfield, T.B. 1974. Theory in the Study of Organizations and Administrative Structures: A New Perspective. Paper presented to the third International Intervisitation Program on Educational Administration, Bristol, England.
- Greiner, L.E. and Barnes, L.B. 1970. Organization change and development, in G.W. Dalton, P.R. Lawrence and L.E. Greiner, Organizational Change and Development. Homewood, Illinois: Richard D. Irwin, Inc. and The Dorsey Press.
- Greiner, L.E. 1967. Patterns of organization change. Harvard Business Review, May-June, 119-130.
- Griffiths, D.E. (Ed.). 1964. Behavioural Science and Educational Administration. Sixty-third Yearbook, Chicago: National Society for the Study of Education.
- \_\_\_\_\_. 1964. Administrative theory and change in organizations, in M.Miles (Ed.) Innovation in Education. New York: Teachers College Press, 425-436.

- Gross, N., Giacquinta, J.B. and Bernstein, Marilyn. 1975. Failure to implement a major organizational innovation, in J. Victor Baldrige and Terrence E. Deal (Eds.), Managing Change in Educational Organizations. Berkeley, California: McCutchan Publishing Corporation, 409-426.
- Guest, Robert H. 1962. Organizational Change The Effect of Successful Leadership. Homewood, Illinois: The Dorsey Press, Inc., and Richard D. Irwin, Inc.
- Hage, J. and Aiken, M. 1970. Social Change in Complex Organizations. New York: Random House.
- Haire, M. (Ed.). 1959. Modern Organization Theory. New York: John Wiley and Sons, Inc.
- Havelock, R. 1971. Planning for Innovation through Dissemination and Utilization of Knowledge. Ann Arbor, Michigan: University of Michigan.
- Hopkins, T.K. 1961. Bureaucratic authority: the convergence of Weber and Barnard, in A. Etzioni, Complex Organizations A Sociological Reader. New York: Holt, Rinehart and Winston, 82-98.
- Hoy, Wayne K. and Aho, F. 1973. Succession of principals and organizational change, Planning and Changing, Vol. 4, No. 2, 82-88.
- Huberman, A.M. 1973. Understanding Change in Education: An Introduction. Experiments and Innovations in Education No. 4. Unesco: IBE.
- Jones, G.N. 1968. Planned Organizational Change. London: Routledge & Kegan Paul.
- Katona, G. 1951. Psychological Analysis of Economic Behavior. New York: McGraw-Hill.
- Kelman, H.C. 1969. Processes of opinion change. In W.G. Bennis, K.D. Benne and R. Chin, (Eds.), The Planning of Change. New York: Holt, Rinehart and Winston, Inc., 222-229.
- Lawless, D.J. 1972. Effective Management Social Psychological Approach. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Lawrence, P.R. 1958. The Changing of Organizational Behaviour Patterns. Harvard University, Boston: Graduate School of Business Administration, Division of Research.

- Leeds, R. 1964. The absorption of protest: A working paper, in W.W. Cooper, H.J. Leavitt and M.W. Shelley, New Perspectives in Organizational Research. New York: John Wiley & Sons, Inc., 115-135.
- Levin, M. and Simon, R.I. 1973. The Creation of Educational Settings: A developmental Perspective. Alternative Learning Environments Paper No. 2, Toronto: O.I.S.E.
- Lewin, K. 1947. Frontiers in group dynamics. Human Relations 1, 5-41.
- Likert, R. 1961. New Patterns of Management. New York: McGraw-Hill Book Company, Inc.
- Lippitt, G. and Nadler, L. 1967. Emerging roles of the training director. Training and Development Journal, August.
- Lippitt, G.L. 1973. Visualizing Change Model Building and the Change Process. Fairfax, Virginia: NTL Learning Resources Corporation, Inc.
- Lippitt, R., Watson, J. and Westley, J.B. 1958. The Dynamics of Planned Change. New York: Harcourt, Brace and World, Inc.
- Litterer, J.A. 1969. Organizations: Structure and Behavior. (2nd. ed.). New York: John Wiley and Sons, Inc.
- Lofland, J. 1971. Analyzing Social Settings. Belmont, California: Wadsworth Publishing Company, Inc.
- McCall, G.J. and Simmons, J.L. 1969. Issues in Participant Observation. Reading, Massachusetts: Addison-Wesley Publishing Company.
- Manitoba. 1970. The Public Schools Act. R.S.M., c.215.
- Manitoba Teachers' Society. 1975. Handbook. Winnipeg: McMaster House.
- Mann, F.C. and Neff, F.W. 1964. Managing Major Change in Organizations. Ann Arbor, Michigan: The Foundation for Research on Human Behavior.
- March, J.G. and Simon, H.A. 1958. Organizations. New York: John Wiley & Sons, Inc.
- March, J.G. (Ed.). 1965. Handbook of Organizations. Chicago: Rand McNally & Company.
- Maslow, A.H. 1943. A theory of human motivation, Psychological Review, 50, 370-396.

- Miles, M.B. 1964. Innovation in Education. New York: Bureau of Publications, Teachers College, Columbia University.
- \_\_\_\_\_. 1969. Planned change and organizational health: figure and ground, in R.O. Carlson, Art Gallaher Jr., M.B. Miles, R.J. Pellegrin and E.M. Rogers, Change Processes in the Public Schools. University of Oregon, Eugene, Oregon: Center for the Advanced Study of Educational Administration, 11-36.
- Miller, J. 1974. Program budgeting, Unpublished Ed. D. dissertation, University of Nova, Microfiche No. ED102701.
- Newark Unified School District, California. 1972. Unit budgeting: prelude to PPBS, Nation's Schools, Vol. 90, No. 3, (September), 41-44.
- Parsons, T. 1956. Suggestions for a sociological approach to the theory of organizations. Administrative Science Quarterly, 1, 63-85.
- Pellegrin, R.J. 1969. The place of research in planned change. In R.O. Carlson, Art Gallaher, Jr., M.B. Miles, R.J. Pellegrin and E.M. Rogers, Change Processes in the Public Schools. University of Oregon, Eugene, Oregon: Center for the Advanced Study of Educational Administration, 65-78.
- Perrow, C. 1961. The analysis of goals in complex organizations. American Sociological Review, XXVI, 854-865.
- Presthus, R.V. 1958. Toward a theory of organizational behavior. Administrative Science Quarterly, Vol. 3, No. 1, (June), 48-72.
- Pugh, D.S., Hickson, D.J. and Hinings, C.R. 1973. Writers on Organizations. Middlesex: Penguin Books Ltd.
- Riffel, J.A., Watts, H.N. and Hudson, J. 1972. Program Accounting and Budgeting in Alberta: Retrospect and Prospect. Edmonton, Alberta: Human Resources Research Council.
- \_\_\_\_\_. 1975. The limits of systems: toward a phenomenological view of evaluation in education. Working notes for paper presented at Annual Conference in Canadian Association for Curriculum Studies, Edmonton.
- Riggs, Norman D. 1968. The internal organization of junior high schools for instruction, Unpublished Doctoral dissertation, University of Utah, Microfiche No. ED023156.
- Roeber, R.J. 1973. The Organization in a Changing Environment. Reading, Massachusetts: Addison-Wesley Publishing Co.

- Roethlisberger, F.J. and Dickson, W.J. 1939. On organizational goals, in F.J. Roethlisberger and W.J. Dickson, Management and the Worker. Cambridge, Massachusetts: Harvard University Press, 552-562.
- Rummel, J.F. 1958. An Introduction to Research Procedures in Education. New York: Harper & Brothers, Publishers.
- Selznick, P. 1948. Foundations of the theory of organization, American Sociological Review, 13, 25-35.
- Sofer, C. 1961. The Organization from Within. London: Tavistock.
- Starbuck, W.H. 1965. Organizational growth and development, in J.G. March (Ed.), Handbook of Organizations. Chicago: Rand McNally & Company, 451-533.
- Tannenbaum, A.S. 1954. The relationship between personality and group structure, Unpublished Doctoral dissertation, University of Syracuse, U.S.A.
- Thompson, J.D. and McEwen, W.J. 1958. Organizational goals and environment, American Sociological Review, 23, 23-31.
- Tichy, N., Hornstein, H. and Nisberg, J. 1974. Organization diagnosis and intervention strategies. Preparation of paper supported by National Institute of Mental Health, U.S.A.
- Tsouderos, J.E. 1955. Organizational change in terms of a series of selected variables, American Sociological Review, 20, 206-210.
- Urwick, L.F. 1947. The Elements of Administration. London: Pitman.
- Vroom, V.H. 1960. Some Personality Determinants of Effects of Participation. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Wacaster, C. Thompson. 1973. The Process of Planned Change in the School's Instructional Organization. Eugene, Oregon: CASEA.
- Watson, G. 1967. Toward a conceptual architecture of a self-renewing school system, in G. Watson (Ed.) Change in School Systems. Washington, D.C.: National Training Laboratories, N.E.A., 106-115.
- \_\_\_\_\_. 1967. Change in School Systems. Washington, D.C.: National Training Laboratories, N.E.A.
- Weber, M. 1946. From Max Weber: Essays in Sociology. Translated and edited by H.H. Gerth and C. Wright Mills. New York: Oxford University Press.

- Weiss, R.S. 1969. A structure-function approach to organization, in J.A. Litterer, Organizations Structure and Behavior. New York: John Wiley & Sons, Inc.
- Westley, W. 1969. Report of a Conference in Innovation in Education, Part 1, Paris: OECD, 55 pp. (Document CERI/E1/69.19).
- Wiens, J. 1970. Differences between influential and noninfluential administrators, Alberta Journal of Educational Research, 16, (2), 103-110.

**APPENDICES**

APPENDIX A

INTERVIEW SCHEDULES FOR STAFF MEMBERS  
WHO EXPERIENCED CONDITIONS  
BEFORE AND AFTER THE CHANGE

## TEACHERS

Part A

1. Do you perceive that there has been any change in the budgeting system?
2. What differences has it meant to you?
3. What do you think initiated the change?
4. Was any pressure for change exerted? By whom?
5. Why was there none? or Where was it directed (institutionally or individually)?
6. Were you involved in planning for the change that resulted in the type of budgeting you now have?
7. How did you feel about the change at the time it occurred?
8. Why?
9. (If against the change) Was any pressure applied to you to try to get you to change your attitude, position?
10. By whom?
11. What other changes have been brought about since the change in budgeting?
  - in communications
  - decision-making
  - goals, objectives
  - programs, courses
  - resources.
12. Are resources shared more, or less? Or has there been no change since the budgeting change?
13. How have these changes affected the School? For better

or worse? Elaborate?

14. Were there any initial problems? How have these been ironed out?

Part B

Period before the change - 1972

15. In the past, under the old budgeting system, what did you do in the School besides classroom teaching? This was later modified to: In relation to budgeting, what did you do?

16. What did you have to do in the past to obtain supplies and equipment?

17. In the past, in connection with budgeting, how often did you meet with:

students

your department head

total department (department meeting)

School administration

total staff (staff meeting)

Who usually  
initiated these  
meetings?

- What written communications were there? How often?

18. In the past, in what areas of school life were you involved in decision-making?

- selection of text books, programs, courses, time-  
tabling, budgeting?

- To what extent were you involved?

Part CPresent time - under the present budgeting system

19. Why do you think teachers do not volunteer for the Finance Committee?
20. Now, besides classroom teaching, what tasks are you expected to perform in the School?
- later modified to: In relation to budgeting, what do you do now? Does it require much preparation?
21. What procedure do you follow now to obtain supplies and equipment?
22. Now, in connection with budgeting, how often do you meet with:
- |  |   |                                       |
|--|---|---------------------------------------|
| students                               | } | Who usually initiates these meetings? |
| your department head                   |   |                                       |
| total department (department meetings) |   |                                       |
| School administration                  |   |                                       |
| total staff (staff meeting)            |   |                                       |
- What written communications are there? How often?
23. In what areas of school life are you involved in decision-making? - selection of textbooks, programs, courses, time-tabling, budgeting?
24. What do you think of the present form of budgeting?
25. Does this system lead to conflict between departments or staff members?
26. Does this system lead to trade-offs between departments?
27. Do you feel that you have any influence in relation to

budgeting?

28. In what direction would you like to see this budgeting system moving? Extensions beyond supplies and equipment?

Improvements?

29. Do you think the leadership change has had any effect on this budgeting process? What effect?

30. Has the change created any problems? If yes, what kinds? Major or minor?

31. How do you think these might be overcome?

32. What other organizational changes have been introduced since the budgeting change?

33. Assuming this type of budgeting involves decentralization (of decision-making), are there other facets of school life that could or should be decentralized?

## ADMINISTRATIVE ASSISTANT

1. Were you able to perceive that there had been a change in the budgeting system?
2. What differences did it mean?
3. What do you think initiated the change?
4. Was any pressure for change exerted? By whom?
5. Why was there none? or Where was it directed?
6. Were you involved in planning for the change?
7. What form did this involvement take?
8. What other changes occurred after the budgeting change in:  
communications  
decision-making  
programs, courses  
goals  
resources?
9. What was the overall effect of these changes on the School?
10. Does this system lead to conflict? Trade-offs?
11. Did it mean any change in your tasks?
12. Would you like to see the system extended?

**APPENDIX B**

**INTERVIEW SCHEDULES FOR POST-CHANGE STAFF MEMBERS**

## PRINCIPAL

1. Does this type of budgeting have any effect on the tasks you perform?
2. What do you think about the operation of this form of budgeting in the School?
3. In the three years you have been here, have there been changes in:
  - communications
  - decision-making
  - goals, objectives
  - programs, courses
  - resources?
4. Based on your experience in other schools and observations in this School, how different are the responsibilities of teachers in this School?
5. And the responsibilities of department heads?
6. Does this system mean more work in either case?
7. In connection with budgeting, how often do you communicate with the School Division? Or they with you? What type of communications are they?
8. How often do you communicate about budgeting with department heads?
9. How often is budgeting mentioned at staff meetings? Is the communication at staff meetings information-giving or discussion or other?
10. Does this system lead to conflict between departments or staff members?

11. Does it lead to trade-offs?
12. Do you feel you have any influence in relation to budgeting?
13. Would you like to see an extension of the system?
14. Are there other areas where decentralization to the School level would be useful?

## VICE-PRINCIPALS

1. Does the School's type of budgeting have any effect on the tasks you perform.
2. What do you think about the operation of this type of budgeting in the School?
3. Based on your experience in other schools and your observations in this one, how different are the responsibilities of teachers in this School?
4. Of department heads in this School?
5. Does this system mean more work in either case?

## TEACHERS

1. In relation to budgeting, what do you do? Does it require much preparation?
2. What procedure do you follow to obtain supplies and equipment?
3. In connection with budgeting, how often do you meet with:
  - students
  - your department head
  - total department (department meetings)
  - School administration
  - total staff (staff meetings)
 - What written communications are there about budgeting?

How often do you receive them?

4. In what areas of school life are you involved in decision-making?
  - selection of textbooks, programs, courses, time-tabling, budgeting?
  - To what extent are you involved?
5. What do you think of this form of budgeting?
6. Does it lead to conflict between departments or staff members?
7. Does it lead to trade-offs between departments?
8. Do you feel you have any influence in relation to budgeting?
9. Do you see any problems with this budgeting system?

Improvements?

10. Would you like to see it extended beyond supplies and equipment?

11. Assuming this type of budgeting involves decentralization (of decision-making), are there other facets of school life that could or should be decentralized?

**APPENDIX C**

**STAFF LETTER**

January \_\_\_\_, 1976

Dear .

Would you please indicate whether the following date and time is a convenient one for me to interview you:

---

I would appreciate it if you could leave your reply with the Secretary in the office.

If the time includes a study hall or resource period, the Principal has agreed to relieve you of your duty for that period.

Could we meet at the time indicated at the Senior High Conference Room if you are a Senior High staff member and at the Junior High Conference Room if you are a Junior High staff member? If these rooms are in use we will find an alternative location.

Thank you.

Deirdre Duncan

---

The above mentioned time IS convenient

The above mentioned time IS NOT convenient

**APPENDIX D**

**INTERVIEW SCHEDULE FOR FORMER PRINCIPAL**

## FORMER PRINCIPAL

Part A

1. How would you describe the form of budgeting used at your former School?
2. How does this differ to that used in the past?
3. Where did the idea originate?
4. Was any pressure exerted in support of the change?
5. What assistance/hindrance did you get from the School

## Division personnel?

6. Was any planning done prior to the change?
7. Who was involved in planning for it?
8. To what extent were you involved in the planning?
9. How was the change implemented?
10. What was your role in the implementation?
11. What changes did this form of budgeting bring?

Part B

12. In 1972, what did you do in relation to budgeting?
13. In relation to budgeting, what did you expect of teachers in 1972? Of department heads? Of vice-principals?
14. In 1972, in connection with budgeting, how often did you meet with:

students

teachers

department heads

vice-principals

Division personnel?

15. Were you involved in decision-making in relation to budgeting in 1972? To what extent?

16. Did the change create any problems? Why? (If any) What were they? Were they overcome? How?

Part C (After the budgeting change had been introduced)

17. After the change, what were your tasks in relation to budgeting?

18. In relation to budgeting, after the change, what did you expect of teachers? Of department heads? Of vice-principals?

19. In connection with budgeting, after the change, how often did you meet with:

students

teachers

department heads

vice-principals

Division personnel?

20. After the change, were you involved in decision-making in relation to budgeting? To what extent?

21. In the time that you were there, were there any other organizational changes introduced that affected the budget? What were they? How did they affect it?

**APPENDIX E**

**FORMER REQUISITION FORM**

PURCHASING DEPARTMENT

No. A 283

Page 1 of 4

SCHOOL \_\_\_\_\_

1973  
BUDGET REQUESTS

AUDIO-VISUAL  
EDUCATION EQUIPMENT AND SUPPLIES

Signature of Principal \_\_\_\_\_

DATE \_\_\_\_\_

DEPARTMENT \_\_\_\_\_

AUDIO EQUIPMENT  
Account 100-270-000-518

Item	Unit	Quantity		Details of Unit to be replaced - Make, Model, Serial No., etc.
		Additional	Replacement	
Radio	one			
Record Player	one			
Tape Recorder - Reel	one			
Tape Recorder - Cassette	one			
Listening Station	one			
Playback Unit	one			
Other Audio Education Equipment:				

VISUAL EQUIPMENT  
Account 100-270-000-517

Projector - 16mm Sound	one			
Projector - Filmstrip	one			
Projector - Filmslide	one			
Projector - Super 8 Filmloop	one			
Projector - Overhead	one			
Filmstrip Viewers	one			
Projector Screens:				
Wall 70" x 70"	one			
Tripod 70" x 70"	one			

VISUAL EQUIPMENT

Item	Unit	Quantity		Details of Unit to be replaced - Make, Model, Serial No., etc.
		Additional	Replacement	
<b>Projector Carts:</b>				
26" High	one			
34" High	one			
42" High	one			
<b>Other Visual Education Equipment:</b>				

AUDIO-VISUAL SUPPLIES  
ACCOUNT 000-270-000-384

Item	Unit	Quantity
<b>Pens: Non-Permanent Transparency Marking:</b>		
Green	one	
Red	one	
Blue	one	
Black	one	
<b>Pens: Permanent Transparency Marking:</b>		
Green	one	
Red	one	
Blue	one	
Black	one	
<b>Overhead Projector Acetate Rolls:</b>		
50'L x 10½"W x .005"	roll	
50'L x 10"W x .005"	roll	
<b>Acetate Sheets - 8½" x 11" x .005"</b>		
	sht.	
<b>Transparency Framing Mounts</b>	one	
<b>Masking Tape - 3/4" x 60 yds.</b>	roll	

## AUDIOVISUAL SUPPLIES (Continued)

Item	Unit	Quantity
Hinges - Transparency	C	
Letters: Rub-on Transfer Type:		
Small	sht.	
Medium	sht.	
Large	sht.	
Transparencies - Thermal Dry Copier Type:		
Type 127 - Clear 8½" x 11" x .005"	sht.	
Type 129 - Assorted Colors, 8½" x 11" x .005"	sht.	
Belt Cleaner for 3M Dry Copiers	btl.	
Master Carriers - 8½" x 15":		
Plastic	one	
Silk Screen	one	
Transparencies - CRF Wet Copier Type - 8½" x 11"	sht.	
Diazo - Intermediate Masters (CRT) - 8½" x 11"	sht.	
Recording Tape - Reel Type:		
1200' reel	one	
900' reel	one	
Recording Tape - Cassette Type:		
30 minute	one	
60 minute	one	
90 minute	one	
Head Cleaning Cassette	one	
Reels - Take-up for Tape Recorder:		
3½" dia.	one	
5" dia.	one	
7" dia.	one	

**AUDIO-VISUAL SUPPLIES (Continued)**

Item	Unit	Quantity
<b>Reels - Take-up for 70MM Sound Projector:</b>		
400' capacity	one	
1200' capacity	one	
1600' capacity	one	
<b>Audio Jumper Cables:</b>		
PPG	one	
PPE	one	
RK34	one	
<b>Record Cleaning Cloths - 24" x 24"</b>	one	
<b>Other:</b>		

No. G 74-117

Page 1 of 4

PURCHASING DEPARTMENT

SCHOOL \_\_\_\_\_

1974 BUDGET REQUESTS

Signature of Principal \_\_\_\_\_

GENERAL EQUIPMENT AND SUPPLIES

DATE \_\_\_\_\_

BLINDS AND CURTAINS  
ACCOUNT 100-400-000-528

DEPARTMENT \_\_\_\_\_

Item	Unit	Quantity	State Room No. or Area and Approximate Size
Dark Blinds	one		
Light Blinds	one		
Curtains	pr.		

**NOTE:** The above is for new installations only. Do not include repairs to existing blinds or curtains. When repairs are required to existing blinds or curtains, a Form 4-1 Requisition, giving full particulars, should be submitted to the Purchasing Department.

STAFF ROOM EQUIPMENT, FURNITURE AND SUPPLIES  
ACCOUNT 100-200-000-515

Item	Unit	Quantity	
		Additional	Replacement
Table (State Size)	one		
Dining Chair	one		
Easy Chair	one		
Sofa	one		
Coffee Urn - 30 Cup	one		
Coffee Urn - 55 Cup	one		
Electric Kettle	one		
Refrigerator	one		
Plates 4"	one		
Plates 6"	one		
Cups	one		
Saucers	one		
Mugs	one		
Glasses - 9 oz.	one		
Sugars	one		
Creams	one		
Soup Bowls	one		

## STAFF ROOM EQUIPMENT, FURNITURE AND SUPPLIES (Continued)

Item	Unit	Quantity		
		Additional	Replacement	
Fruit Bowls	one			
Salt & Pepper Set	one			
Dessert Fork	one			
Dessert Knives	one			
Teaspoon	one			
Dessert Spoon	one			
Teapot - 6 cup	one			
Teapot - 8 cup	one			
Teapot - 10 cup	one			
Paring Knife	one			
Bread Knife	one			
Can Opener	one			
Frying Pan (Non-Electric)	one			
Tea Kettle (Non-Electric)	one			
Saucepan - 1/2 quart	one			
Saucepan - 2 quart	one			
Bread Board	one			
Coffee pot - 7 cup	one			
Coffee pot - 9 cup	one			
Coffee pot - 14 cup	one			
Trip Can	one			
Dishpan 16 3/8" dia.	one			
Dishpan 18 1/8" dia.	one			
Towel Rack 3-bar	one			

DUPLICATING EQUIPMENT  
ACCOUNT 100-200-000-545

Item	Unit	Quantity		State Make, Model and Serial No. of unit to be replaced	School Dept. or Area
		Additional	Replacement		
Duplicating Machines:					
Mimeograph	one				
Spirit	one				
Photocopy	one				
Stencil Cutting	one				

**FILING CABINETS**  
ACCOUNT 100-200-000-546

Item	Unit	Quantity		Color	School Dept. or Area
		Additional	Replacement		
<b>Filing Cabinets - Cap Size:</b>					
1 Drawer	one				
2 Drawer	one				
2 Drawer with lock	one				
3 Drawer	one				
3 Drawer with lock	one				
4 Drawer	one				
4 Drawer with lock	one				
<b>Card Cabinets:</b>					
1 Drawer 3" x 5"	one				
1 Drawer 4" x 6"	one				
1 Drawer 5" x 8"	one				
2 Drawer 3" x 5"	one				
2 Drawer 4" x 6"	one				
2 Drawer 5" x 8"	one				

**PIANOS**  
ACCOUNT 100-230-000-516

Item	Unit	Quantity		State Make, Model and Serial No. of unit to be replaced	School Dept. or Area
		Additional	Replacement		
Piano	one				

**TYPENRITERS**  
ACCOUNT 100-200-000-544

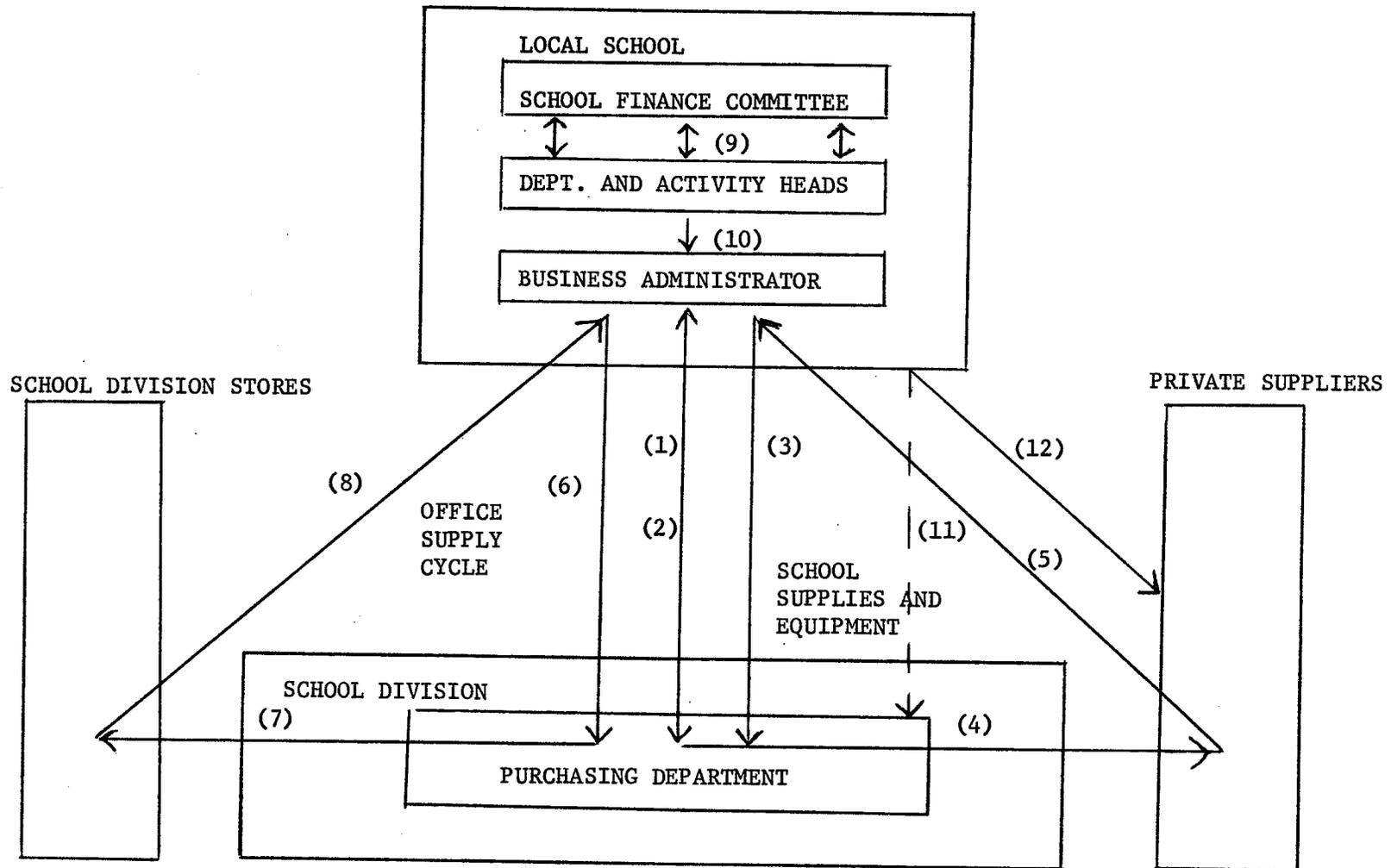
Typewriter	one				



**APPENDIX F**

**BUDGET MODEL - FLOW CHART**

BUDGET-PURCHASING FLOW CHART



The Budget-Purchasing flow can be described with respect to the following activities. The numbers refer to the attached flow chart.

1. The School prepares and submits three copies of each requisition to the Purchasing Department.
2. The Purchasing Department returns one requisition together with the necessary purchase order numbers.
3. Only the School initiates purchases.
4. A central office purchasing procedure sends supplies and equipment requests for the School to private suppliers.
5. Supplies and Equipment are delivered directly to the School where the original requisitions are cross-referenced with the supplier's invoices in terms of purchase order numbers.
6. )  
and ) Office supplies are requisitioned in the
7. )  
and ) normal manner.
8. )
9. The School Finance Committee negotiates the PBR.
10. All purchases within the approved PBR area are processed through the person responsible for that area.
11. ) Minor items are ordered directly from the suppliers in  
and ) terms of an order number received from the
12. ) Purchasing Department.

**APPENDIX G**

**IMPLEMENTATION PROCEDURES**

## PROCEDURES FOR IMPLEMENTING PROGRAM-ORIENTED BUDGETING

The development of a systems approach to budgeting for instructional supplies and equipment within a school requires the establishment of specific procedures at the school and central office level. An outline of the necessary and sufficient processes that might be capable of generating an open and cooperative relationship between the School and the Central Office, in particular the purchasing department, is summarized below. It is the hope that this summary will serve to identify problem areas, indicate possible solutions, and coordinate everyone's efforts.

## 1. Budget Procedures

- a. The total budget amount for supplies and equipment must be established together with the categorization of those items that are to be included in the budget.
- b. All orders for the School must be authorized and initiated by the responsible personnel in the School.
- c. Requisitions sent to the School Division purchasing office will stipulate suppliers and estimated prices if they are readily available. Sufficient requisition copies will be forwarded to the School Division Purchasing Office for processing so that one copy can be returned to the School; complete with a purchase order number. Within the School, one requisition copy will be kept for the Budget record and one for the Department Head or Activity Director.
- d. One copy of the requisition form sent to the

Purchasing Department is to be assigned a purchase order number by that Department and then returned to the school. The School Administrative Assistant will check the purchase order number on this requisition against the order numbers on the supplier's invoice to provide a close and logical control over the local school ordering-purchasing-supplying process. This step is a necessary condition for the successful implementation of the proposed plan.

- e. In certain cases it appears to be advisable to obtain a purchase order number from the School Division, so that items might be requisitioned and purchased directly by the School. Here, it is suggested that the current procedure which is used for the 2110 Account be extended to the area of all School supplies and equipment. Naturally, this would not apply to items that are to be tendered.
- f. At the local School level, Department Heads and Administrative Assistant will be involved, to some extent, in "shopping around" for prices.
- g. The School is to be advised of all tendered items by the School Division.
- h. A common account coding system is to be set up, so that the School and the School Division can be consistent in their reporting procedure and practices.
- i. It is asked that monthly reports be issued to the

School by the School Division in terms of the following breakdown:

Department or Activity

- i) Supplies
- ii) Equipment
- iii) Print and Non-Print Materials

The School will keep its own books, at the same time, with a further breakdown. In addition, the School will use estimated costs for accounting purposes until the actual costs are known.

- j. It is requested that copies of all invoices be sent to the School so that they can be compared against the requisitions, the purchase order numbers, and the packing slips.
- k. To provide for a reasonable purchasing procedure certain orders will be spaced out over the course of the calendar year.
- l. It is suggested that a new distinctive requisition form for this High School be used. Attached to this report is a copy of one that could be identified easily when it is being processed by the purchasing department. A distinctive requisition form, typed out and with suppliers stipulated where possible by the School, might provide an efficient procedure for processing.
- m. During the 1973 calendar year the School is to be held responsible for the supplies and equipment budget only.

This does not include those items to be charged against the Capital Account. In addition, Home Economics and Band instruments have been excluded, for the time being, from the School budgeting arrangements.

- n. No provision has been made for the theft or mysterious disappearance of any supplies or equipment. It is our feeling that this should remain a contingency to be provided for by the School Division. The in-school system components and their roles can be described as follows:

2. a. School Finance Committee - This is a committee of interested teachers and Department Heads chaired by a Vice-Principal, who are responsible for studying and approving the Program Budget Requests from the following areas:

Art  
 Band  
 Business Education  
 English (Senior High)  
 English (Junior High)  
 Industrial Arts  
 Languages  
 Mathematics  
 Science  
 Social Studies  
 Guidance  
 Physical Education  
 Resource  
 Library  
 Music  
 Staff Rooms  
 Audio Visual

- b. Department and Activity Heads. These are individuals

who are responsible for planning and preparing the PBR with others in their area, developing a hierarchy of priorities, and submitting and negotiating the PBR with the School Finance Committee.

- c. Administrative Assistant. This person is responsible for processing and recording the approved PBR's in terms of requisitions that are sent along to the School Division Purchasing Office.

APPENDIX H

MODIFICATIONS AT SCHOOL DIVISION

## DIVISION'S MODIFICATIONS

The total budget allocation made to the school will need to be divided into three figures and included in the budget document as three separate line items as follows:

- (a) INSTRUCTIONAL SUPPLIES  
21 General  
 2148 -- \_\_\_\_\_ High School
- (b) INSTRUCTIONAL SUPPLIES  
27 Print and Non-Print Material  
 2728 -- \_\_\_\_\_ High School
- (c) PLANT MAINTENANCE AND BETTERMENT  
48 Equipment Replacement  
 4848 -- \_\_\_\_\_ High School

Furthermore, some modification will need to be made in the application of the policy of the Board (as set out in paragraph 9 of section VII of By-law 468) which provides that:

If the Superintendent considers it necessary to incur expenditures in any principal item exceeding the appropriation in the budget for that item he shall report the matter to the Board for approval. Individual items in an appropriation may be over-expended provided that the over-expenditure will be offset by an under-expenditure within that general item, and provided further that any significant over-expenditure is reported to the Board.

Two of the three new accounts proposed to be opened for this High School (2148 and 2728) as outlined above, while under separate "general items" (21 and 27) are under one "principal item" (Instructional Supplies). One of the three new accounts (4848) is under a different "principal item" (Plant Maintenance and Betterment). However, for the purpose of the School's budget proposal, it would be necessary to consider the aggregate of these three new accounts as one "principal item". Thus any one or two of the three accounts so included could be over-spent provided there was a corresponding under-expenditure in one or two of the other accounts, (any significant over-expenditure to be reported to the Board). The aggregate of the three items would, for the purpose of the above regulation, however, be considered as one "principal item" and the aggregate of the three could not be exceeded without the Superintendent first reporting the matter to the Board for approval.

APPENDIX I

PROGRAM BUDGET REQUEST DOCUMENT

HIGH SCHOOL

PROGRAM BUDGET REQUEST

Date \_\_\_\_\_

Department \_\_\_\_\_ Department Head \_\_\_\_\_

Program \_\_\_\_\_ (approval signature)

**I. Brief Description of the Program**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**II. Objectives of the Program**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**III. Resources Required (briefly describe each item or set of items required; where possible provide supplier, catalogic numbers, quantity, etc.)**

Quantity	Item	Description	Cost

**IV. Source of Funds: School Funds**

School Division \_\_\_\_\_  
Other \_\_\_\_\_

**V. Account to be charged:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Date \_\_\_\_\_ Principal's signature \_\_\_\_\_

APPENDIX J

NEW REQUISITION FORM

NO. 76 017

PURCHASING DEPARTMENT

DEPARTMENT \_\_\_\_\_

REQUISITION FOR EDUCATIONAL EQUIPMENT  
AND FURNITURE - 1976

Signature of Department Head \_\_\_\_\_

DATE \_\_\_\_\_

AUDIO-VISUAL EQUIPMENT: If a school has a preference for a certain Make and Model No., this should be noted on the form in the space provided. If a preference is not shown, the Purchasing Department will purchase the most economical model listed in the Audio-Visual Handbook.

Item	Unit	Approx. Cost	Quantity		Preference of Make and Model No.	School Area or Dept.
			Add.	Repl.		
LISTENING STATION c/w 8 headsets	Ea.	98.00				
PROJECTOR - 16mm sound	Ea.	750.00				
PROJECTOR - 35mm filmstrip	Ea.	135.00				
PROJECTOR - 35mm carousel filmslide	Ea.	145.00				
PROJECTOR - Super 8mm filmloop	Ea.	240.00				
PROJECTOR - overhead with roll attachments	Ea.	135.00				
PROJECTOR - opaque, H.D., 10" x 10" aperture	Ea.	620.00				
PROJECTOR - opaque, portable, 5" x 5" aperture	Ea.	190.00				
PROJECTOR SCREEN 70" x 70" wall	Ea.	31.00				
PROJECTOR SCREEN 70" x 70" tripod	Ea.	70.00				
PROJECTOR CART - 26" H	Ea.	44.00				
PROJECTOR CART - 34" H	Ea.	46.00				
PROJECTOR CART - 42" H	Ea.	48.00				
RADIO - portable, AM/FM, AC/DC operation	Ea.	30.00				
RECORD PLAYER - for single classroom use	Ea.	87.00				
RECORD PLAYER - for open area classroom use	Ea.	127.00				
RECORD PLAYER - for auditorium use	Ea.	190.00				
TAPE RECORDER - reel type	Ea.	250.00				

AUDIO-VISUAL EQUIPMENT (Continued)

Page 2

Item	Unit	Approx. Cost	Quantity		Preference of Make and Model No.	School Area or Dept.
			Add.	Repl.		
TAPE RECORDER cassette type for student use	Ea.	50.00				
TAPE RECORDER cassette type for high quality recording	Ea.	108.00				
FILMSTRIP VIEWER individual, with audio cassette playback	Ea.	126.00				
FILMSTRIP VIEWER individual	Ea.	25.00				
REAR PROJECTION SCREEN individual or small group use	Ea.	25.00				
REAR PROJECTION SCREEN large group use	Ea.	60.00				
OTHER:						

MAP RAILING AND HOOKS

Item	Unit	Approx. Unit Cost	Quantity	State Room No. and Number of Feet per Room
MAP RAILING	Ft.	1.25 per ft.		
MAP HOOKS	Ea.	.35		

**FILING CABINETS** - unless requested otherwise, color will be grey (standard colors are beige and grey).

Item	Unit	Approx. Cost	Quantity		Color	School Area or Dept.
			Add.	Repl.		
<b>FILING CABINETS - cap size</b>						
- 2 drawer	Ea.	62.00				
- 2 drawer with lock	Ea.	67.00				
- 3 drawer	Ea.	76.00				
- 3 drawer with lock	Ea.	86.00				
- 4 drawer	Ea.	91.00				
- 4 drawer with lock	Ea.	100.00				
<b>CARD FILING CABINETS</b>						
- 1 drawer 3" x 5"	Ea.	8.50				
- 1 drawer 4" x 6"	Ea.	10.00				
- 1 drawer 5" x 8"	Ea.	12.00				
- 2 drawer 3" x 5"	Ea.	14.50				
- 2 drawer 4" x 6"	Ea.	16.00				
- 2 drawer 5" x 8"	Ea.	20.75				
<b>OTHER:</b>						

**TYPEWRITERS**

Item	Unit	Quantity		Make, Model & Serial No. of Trade-in	School Area or Dept.
		Add.	Repl.		
<b>TYPEWRITER - manual</b> Approx. cost 15" - \$265.00 18" - 305.00 Trade-in allowance 50.00	Ea.				
State: Type style (pica, elite, etc.) _____ Carriage width _____					
<b>TYPEWRITER - electric</b> Approx. cost: 13" standard - \$425.00 16" standard - 500.00 16" selectric - 695.00 16" selectric (dual) - 760.00 Trade-in allowance 70.00	Ea.				
State: Type style (pica, elite, etc.) _____ Carriage width _____					

FURNITURE - OFFICE

Page 6

Item	Unit	Approx. Cost	Quantity	
			Add.	Repl.
DESK - Principal. Double pedestal, top size 36" x 72" x 29"H. Standard color - walnut arborite top, chrome legs and frame, black enamel drawers and panels.	Ea.	185.00		
CHAIR - Principal. Upholstered, swivel, arm, with casters. Standard color - black upholstered seat and back, matching enamel frame.	Ea.	110.00		
DESK - Secretary. Single pedestal, top size 60" x 30" x 29"H with right hand typewriter return. Standard color - walnut arborite top, chrome frame, blue enamel drawers and panels.	Ea.	275.00		
CHAIR - Secretary. Upholstered with Sheppard casters. Standard color - gold upholstery with matching enamel frame.	Ea.	60.00		
CHAIR - Side (Visitor). Upholstered 2 piece seat and back. Standard color - black upholstery with chrome frame.	Ea.	18.00		

FURNITURE - CLASSROOM

Item	Unit	Approx. Cost	Quantity		School Area or Dept.
			Add.	Repl.	
DESK - Teacher. Single pedestal, top size 45" x 30". Standard color - walnut arborite top with light yellow drawers and panels.	Ea.	125.00			
CHAIR - Teacher. One piece moulded seat and back, 18" seat height. Standard color - tangerine with matching enamel frame.	Ea.	10.00			
CHAIR - Student. Two piece seat and back with book rack, seat height 18". Standard color - tangerine seat and back, gold bronze enamel frame.	Ea.	13.00			
CHAIR - Primary. Two piece seat and back, stacking. Standard color - blue seat and back with matching enamel frame.					
12" seat height	Ea.	9.00			
14" seat height	Ea.	9.00			
CHAIR - Music. With tablet arm that swings down and away, seat height 18". Standard color - grey.					
Right hand	Ea.	40.00			
Left hand	Ea.	40.00			
CHAIR - General purpose (gymnasium, meeting rooms, etc.). Stacking, one piece moulded seat and back, seat height 18". Standard colors - blue, tangerine or charcoal with matching enamel frame.	Ea.	10.00			
State color: _____					

FURNITURE - CLASSROOM (Continued)

Item	Unit	Approx. Cost	Quantity		School Area or Dept.
			Add.	Repl.	
<p><b>LOCKERS</b> - Student. Steel, approx. 72"H x 15"W x 18"D, with 4" base, two hat shelves, one double ceiling hook and three single wall hooks. Standard color - grey.</p> <p>State Number per Bank _____</p>	Ea.	42.00			
<p><b>TABLE</b> - Student Science. Standard color: top - Blond Maple, frame - Gold Bronze enamel.</p> <p>Top size 24" x 18"</p>	Ea.	21.00			
<p>Top size 48" x 24"</p>	Ea.	38.00			
<p>State height: _____</p>					
<p><b>TABLE</b> - General purpose (library type). Various sizes. Standard color: top - walnut arborite, frame - black enamel.</p> <p>State size: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	Ea.	48.00 - 58.00			
<p><b>TABLE</b> - Trapezoidal. Top size 30" x 30" x 30" x 60". Standard color - teak arborite top, chrome legs.</p> <p>With tote tray shelf</p>	Ea.	65.00			
<p>Without tote tray shelf</p>	Ea.	55.00			
<p>State height: _____</p>					
<p><b>OTHER:</b></p>					

OTHER EQUIPMENT

Item	Unit	Quantity		School Area or Dept.
		Add.	Repl.	

APPENDIX K

REIMBURSEMENT FORM



APPENDIX L

PROGRAM REPORTS DOCUMENTS

## PROGRAM REPORTS

I. Program Report of Activities of \_\_\_\_\_  
Department, 1972-73

1. Brief Description of the Program

2. Objectives of the Program

3. Instructional procedures used in the classroom

4. Resources used in addition to in-school materials e.g.  
speakers, field trips, additional equipment

Resource	Approximate Cost	Source of Money

5. Comment on the success of the program. Were the program objectives met?

**II. Future Program Plans of \_\_\_\_\_ Department,  
19 -****1. Brief Description of the Program****2. Objectives of the Program****3. Instructional procedures used in the classroom****4. Resources needed in addition to in-school materials e.g.  
speakers, field trips, additional equipment.**

Resource	Approximate Cost	Source of Money