ORGANIZATION DEVELOPMENT AND
THE IMPLEMENTATION OF PLANNED
CHANGE

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by
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This case study, conducted in a vocational and technical education institution at post secondary level, was concerned with the effects of an organization development intervention on the ability of an organization to implement a planned change initiated by itself.

More specifically, the study hypothesized that organization development, or change to the organization itself, could enhance the process of planned change by the organization.

The study develops at length the concept and theory of implementing planned change, of the critical importance of common understandings and shared expectations to this process, and of the centrality of resocialization and social interaction in successful implementation.

The study also lists in detail the events and procedures used in this particular organization development intervention, as well as the concept and theory underlying organization development. A number of principles which guided the author's intervention activities are also listed and examined.

Data on organizational change induced by the intervention were collected over a period of two years through a questionnaire, used for repeated measures, and through participant observation. These data are presented both quantitatively and qualitatively in the study. The qualitative
data are presented in the form Eisner (1979) has described as "educational criticism".

Data on the implementation of planned change were collected through a questionnaire, used for repeated measures, a structured interview technique closely based on the Levels of Use methodology (Hall et al., 1975), and through participant observation data. Data were again collected over a period of two years and are presented both quantitatively and qualitatively.

The study indicates clearly that the organizational intervention was successful in bringing about organizational change across a broad range of variables. These changes included organizational elements which research has identified as determinants of the implementation process. The study also indicates that during the period of the intervention the education institution concerned enhanced its ability to implement planned change, and that this enhanced ability was closely related to the organizational changes which had occurred as a result of the organization development intervention.
ACKNOWLEDGEMENTS

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Finally, I must acknowledge the encouragement provided by my wife Mary, and children Susan, Sandra, and Cameron.
DECLARATION

I declare that this thesis is my own account of my research.

John C. Henderson
Organization development and the implementation of planned change.

John C. Henderson
CHAPTER 1
INTRODUCTION

"It must be remembered that there is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system".

MACHIAVELLI, 1513

Machiavelli's caveat is as relevant to the wasteland of planned change in education today as it was to the Prince five hundred years ago. Although the general notion of planned change in education is not seriously challenged, and although vast amounts of time, effort and money have been expended to promote particular changes in Australia and elsewhere, the simple fact is that extreme difficulty is experienced in bringing about planned change. The literature abounds with evidence to support this assertion. With few exceptions, systematic studies of planned change which have employed rigorous criteria and methodology have reported that the anticipated outcomes were not achieved, or that the educational benefits were minimal. Where such studies have reported success it has generally been scattered and fragmentary. Success has been reported in numerous anecdotal type reports, frequently based on self-report, however, a number of detailed studies of such reports have observed that the rhetoric has rarely been matched by the reality.

The difficulties of bringing about planned change and the lowly incidence of success have stimulated considerable research. A major outcome of this research is the strong suggestion that there are a number of organizational variables, as well as individual variables, which act
as determinants of the planned change process and which may profoundly influence the change process and its outcomes. The consequential implications of this are that it may be possible to "match" a particular planned change to the existing organizational variables of an educational institution, or, that it may be possible to systematically vary elements of the organization in order to enhance the planned change process.

It is about these two issues, the difficulty and apparent failure of most planned change efforts, and the potential offered through the restructuring of organizational variables, that this study is based.

PURPOSE OF THE STUDY

In broad terms this study is concerned with the planned change process as it is affected by organizational variables. More specifically, it is concerned with a particular educational context, Technical and Further Education (TAFE); a particular aspect of planned change, the implementation process; a particular strategy for the restructuring of organizational variables, organization development; and the relationship between systematic change to organizational variables and the organization's subsequent ability to implement planned change.

TECHNICAL AND FURTHER EDUCATION AS THE CONTEXT FOCUS

TAFE offers a fertile environment for the study of planned change. For a number of reasons TAFE in Western Australia, as elsewhere, operates under considerable pressures and stresses to which planned change is a rational response. The milieu in which TAFE operates is
one of considerable change. TAFE is expected to respond to these pressures and stresses in order to maintain its credibility as an effective and efficient organization in meeting the vocational and further education needs of the community it serves. These needs change almost continuously, derive from many sources, and are frequently of considerable magnitude. Technological changes are in evidence everywhere and affect almost every aspect of industry and commerce, and consequently vocational education and training. There are intermittent bursts of economic development which place intense strain on the supply of particular categories of skills in the workforce, even during times of high general unemployment. TAFE is expected to respond to these. Similarly it is expected to accommodate downswings in particular industries which lead to structural unemployment and demands for retraining.

Changing attitudes within the community at large also demand a TAFE response. There are trends towards decreasing hours of work per week and earlier retirement, both of which have created demands for the provision of a less formal education for the purposes of personal development, enrichment, and the creative use of leisure. TAFE also has a partial responsibility for those not needed in the workforce in terms of meeting some of their personal, social and vocational needs, and there is a developing awareness of the need for improved articulation between TAFE and other components of the education system.

Finally, there is a changing knowledge and understanding of the learning process and change in the availability of advanced instructional technologies based on computerization. Both have contributed to the potential for change in instructional methods and in methods of assessment and evaluation of student progress.
The particular structural characteristics of the TAFE organization in Western Australia provide further potential for the study of planned change, both at a number of levels and as it results from a number of stimuli. TAFE in Western Australia is carried out principally through a separate and largely autonomous Division of the state's Education Department. Although a degree of co-operation exists at the national level, and there are belated moves towards common core curricula and common nomenclature in some vocational areas, to all intents and purposes TAFE in Western Australia is responsible for its own course offerings and operations within the state.

These offerings and operations are effected through a central office structure which exerts a most powerful influence over courses offered, staffing and resource allocation, and through sixteen geographically dispersed colleges. Given the degree of influence exercised through the central office, the total operation may be thought of as a single multi-campus institution, with the central office capable of mandating planned change across the entire structure.

However, in spite of appearances, the organization does not operate solely as a monolithic structure. In practice each of the sixteen colleges exercises a considerable degree of autonomy over its deployment of staff, its approach to the curriculum (but not the syllabus), the allocation of resources other than major capital items, and has some degree of discretion over the course programs which it may offer. Within this context it is possible for individual colleges to identify necessary planned changes to accommodate some of the environmental stimuli listed in the previous paragraphs, and to take appropriate action to implement these changes at the college level.
In practice planned changes of this nature do occur at the college level and one such organizational planned change is a focal point of this study.

THE IMPLEMENTATION PROCESS AS A FOCUS

The implementation process is one phase of the planned change process. As will be related in subsequent chapters, there is little consensus among either theoreticians or practitioners on the subject of planned change. However, there is a near consensus about two characteristics, that planned change is a process, not an event, and that this process consists of a number of stages or phases. There is also a broad agreement that implementation follows the adoption phase and that it precedes institutionalization.

Recognition that implementation is a distinct phase of the planned change process is relatively recent. Early research on planned change or innovation in education proceeded largely from the premise that it was the nature and quality of the innovation which determined the outcomes. Zaltman et al. (1973, pp.32-50) synthesized years of research effort in the nineteen "attributes of innovations" which they listed, analysed, and related to a necessary/sufficient condition scheme.

The lack of acceptance of many of the curriculum packages and projects which were initiated from this "nature and quality" premise led to a second research phase, a concentration upon the factors affecting adoption. This research, characterized by works such as Havelock (1970), or Rogers and Shoemaker (1971), pursued many themes. Among these themes may be identified, the characteristics of organizations and the relationship of these to adoption; the search for particular demographic
characteristics which were uniquely related to adoption; an emphasis on the personality characteristics of those involved in adoption; the use of change agents; and, the politics associated with adoption.

These research approaches have been fruitful in contributing to the pool of knowledge and understanding of planned change, however, it has been evident that consideration of the innovation itself and of its adoption have failed to explain how and why some changes succeeded while the majority did not. The mutually contradictory nature of many of the findings was in itself sufficient evidence that some further level of explanation was required.

The attempts at further explanation constitute the third, and present, phase of research. This phase has led to acceptance of the premise that planned change is a process with distinctive inter-related stages, and to acceptance of the centrality of implementation to successful planned change. In essence, if there is no implementation, then there is no change. Regardless of the quality of the innovatory idea or practice, or the best intentions of the adoptors, or resounding rhetoric, the fact can not be disguised that if the planned change has not been implemented, then that particular change has failed no matter what other outcomes have been generated.

In the following chapter a number of related concepts concerning the implementation process are argued in detail, including the dimensions of implementation and the processes involved. The notions of successful and unsuccessful implementation are also considered, as are the determinants of success. It is these which in broad terms constitute a second focal point of this study.
Organization development, which is the third focal point of the study, is a strategic approach aimed to enhance the effectiveness of organizations.

Traditionally, and most commonly, the approach used to effect changes in an organization's capability and effectiveness has been based on strategies which involve the development of individual members of the organization. It is possible, using an appropriate combination of learning strategies and technologies to design individual development programs which address and give experience in every aspect of the factors which affect the organization's capability and effectiveness. When the individuals concerned achieve success the outcomes include an awareness and appreciation of the issues involved, and the development of personal skills and behaviours which can be used at the organizational level.

As a means of promoting individual development this approach has much to recommend it, but as a means of developing an organization the effects are much less predictable. As is expanded at length in the following chapter, organizations function through an intricate and subtle interaction of the formal and the informal, of values, attitudes, roles, role relationships, power distribution, and authority. These elements, which are acquired and developed primarily through social interaction, lie at the heart of the operation, behaviour, and performance of any organization. It is unrealistic, or at best optimistic, to expect individuals who have acquired such ideas and understandings independently of their workgroup to successfully introduce those ideas and understandings to that workgroup. Newly "developed" individuals,
replete with new ideas, understandings and enthusiasm are frequently greeted by a wall of indifference when they return to their parent organization. This reception is exacerbated when the new ideas and understandings concern the organization itself and its operations.

To change the organization itself is to change that subtle and intricate pattern of interaction of the formal and the informal referred to previously. In effect it requires the resocialization of the organization's members. Significant change of this nature, introduced by an individual, can be successfully implemented, but the probability of success is low. Individuals must somehow transmit their private understanding of a new reality of roles, relationships and behaviours to the group so that it becomes the group's shared understanding. Then this shared understanding must be translated into behaviour. It can be done. Charismatic, dynamic leaders of sustained energy have wrought such changes, but leadership of this nature in all contexts is neither prevalent nor really desirable. Changes initiated and sustained by a dynamic and charismatic leadership almost invariably fade rapidly and disappear when the leader concerned departs from the organization. Leaders who attempt to gain the same ends from other power bases, whether by coercion, reward, legitimacy, or expertise, are likely to find that they gain no more than behavioural compliance which lasts only while there is continued surveillance, or worse, stimulates dysfunctional consequences which outweigh whatever compliance is induced. For most who seek to initiate planned change, the harsh realization that their private perception of what is possible is not shared, is rejected, or is opposed, gradually saps the initiative of all but the most determined or obstinate, with the end result that the project gradually slides into oblivion.

To change an organization demands an organizational approach, and this
is the essence of organization development. The overall aim remains the same as in the traditional individual development orientation: the development of enhanced effectiveness by the organization. However, the members of the organization are collectively the target rather than the individuals. Together, actively working with each other, the organization members develop a shared understanding of what is possible. Together they develop a new set of organizational relationships and behaviours, based on changed attitudes and expectations.

The technology and methods by which such changes to attitudes, expectations and relationships can be implemented on an organization-wide basis exist, having evolved or been developed over the past thirty years, mainly in the United States. The particular strategies and tactics used vary in application from one organizational change effort to the next, but regardless of which strategy or set of tactics is used, every organization development project shares two common elements: there is a concern with the total group or organization, and, the major effort is directed at the collective attitudes and expectations of the organization.

In spite of its widespread usage and demonstrated success in a wide variety of host organizations when applied with understanding and patience, the methodology is still viewed with suspicion, and labelled as "radical".
THE RELATIONSHIP BETWEEN ORGANIZATION DEVELOPMENT AND THE
IMPLEMENTATION OF PLANNED CHANGE

This relationship is the principal focus of this study. It can be summarised as the relationship between change to the organization itself, defined in this study as "first order" change, and change by the organization, defined in this study as "second order" change.

The literature on planned change clearly indicates the centrality of organizational factors as critical determinants of the planned change process, however, these factors are not in themselves sufficient to guarantee the success of the implementation process. As Charters and Jones (1973) have observed, if such a thing as necessary and sufficient conditions for successful implementation do exist, they remain a well concealed secret. There is no single panacea, no simple combination of conditions, which guarantee successful implementation. However, across a wide range of studies the properties of the organization itself have appeared as determinants of the implementation process.

In parallel with this the organizational psychology literature has indicated the potentialities for deliberately restructuring organizational properties through the use of organization development.

Organization development does not seek the restructuring of organizational variables as an end in itself, and nor do its proponents particularly assert its purpose to be the enhancement of the implementation process. Rather the stated objective of organization development is generally cast in terms of the development of a self-renewing organization. In practice this has meant an organization which more or less continuously monitors the environment in which it operates, as well as reflexively monitoring its own operations and processes. The two
operations are combined and related in order to proactively accommodate changes in the environment through adjustments to and by the organization. As such there is no explicit reference to the enhancement of the implementation process although the inference may be drawn that any organization which consciously and successfully adapts to a changing environment over a period of time has established a degree of mastery over the implementation process.

More important, however, than a wholistic level of mastery over the implementation process is the potential of organization development to systematically vary organizational elements which have been identified as determinants of that process. The literature on implementation identifies properties of organizations such as structure, climate, roles, role relationships, and supportiveness as determinants of the process. The literature on organization development identifies these same properties, among others, as appropriate and attainable targets of organizational change. It is therefore the major purpose of this study to investigate the relationship between induced changes to an organization and the implementation process.

In order to examine this particular relationship it is necessary to study in detail a planned change by the organization. However, it should be emphasized at this point that the concern of the study is at the level of processes and relationships rather than with the specifics of a particular planned change. Further, it should be emphasized that the study is concerned primarily with the implementation phase of planned change and only with the other phases of change to the extent that they impinge directly upon implementation.
BACKGROUND TO THE STUDY

The study has been stimulated and guided in a number of ways both by the context in which the study took place and by the review of the literature.

As mentioned above (pp.2-5) the context of the study is Technical and Further Education in Western Australia. In common with the TAFE educational sector in other parts of Australia the pressures on TAFE to undertake planned changes are almost certainly greater than on any other sector of the educational establishment, but there is no particular evidence that it has any greater innate capacity to implement planned change than have these other sectors. Consequently, the study was stimulated, in part at least, by the issue of practicality, or the need to develop a workable strategy which would enhance the ability of TAFE to successfully manage and implement planned change.

This issue of practicality, while an important stimulus to the study, was only one of a number of considerations. The literature review revealed issues related to organization development in Australia and elsewhere, and to implementation, which stimulated or shaped particular aspects of the study.

The literature search identified relatively few accounts of organization development in Australian educational institutions and no written account of organization development in an Australian TAFE context, although the author was aware from professional contacts that such strategies had been employed on at least two occasions in TAFE institutions. This apparent absence, or scarcity, of literature of an Australian, and specifically TAFE, experience with organization development suggested the need for a detailed and fully documented study

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of an intervention in such a context.

This perceived need for a detailed and fully documented study was reinforced from reviews of literature which originated from outside of Australia. There is a broad acceptance that organization development has demonstrated its worth as a means of bringing about change to organizations. However, there is also widespread confusion as to exactly what has occurred in most interventions which have been reported. There is also widespread debate as to the efficacy of different methods and approaches. The confusion and debate arise largely from the fact that there is no one model of organization development. Its application means different things to different practitioners. Friedlander and Brown (1974) identified six sets of distinct methodologies which were widely practiced, but even within a single set there are divergent understandings of what is, or should be, involved. The confusion and debate have been exacerbated by the failure of many studies to provide more than a token account of the processes and methods used. These omissions, and the confusion and debate present, lent weight to the author's perception of the need for a detailed and well documented study.

The literature on planned change also helped shape and guide the study. At the time this study was commenced there were a number of empirical studies of implementation in North America which were methodologically rigorous and comprehensive in scope, and some analyses, or overviews, of empirical studies, such as that by Fullan and Pomfret (1977). However, there was a relative absence of well documented Australian studies. Although this gap has been partly filled by studies such as Porter's (1980) comparison of implementation issues in the United States and Australia, nevertheless a gap persists which this study has sought to
partially fill. However, the study has also sought to break new ground beyond presenting a well documented account and analysis of implementation. The literature appears devoid of studies designed to test the effects of experimental treatments on the implementation process. Literally hundreds of proposed, or tried, implementation strategies have appeared in the literature, mostly anecdotal accounts, although some have incorporated various degrees of theoretical foundation. Into this void this study has attempted to provide an understanding of one particular treatment, organization development, on the implementation process.

Finally, the literature has also indicated an apparent absence of theoretical or conceptual studies of the processes involved in organizational planned change. Almost twenty years ago Katz and Kahn (1978) cautioned that organizational planned change was a vastly different proposition to planned change undertaken by individuals, that it was not simply a matter of aggregating the actions of many individuals, but rather a dynamic and exceedingly complex group process. In consequence this study has placed considerable emphasis on the conceptual and theoretical level to identify and explicate the interpersonal processes at work during the implementation of organizational planned change. This emphasis includes such perspectives as the initial perception of the need for change, the transfer of this to other group members, the political processes involved and the use of power, conformity and compliance, and the role of group norms which permeate the above processes.
STRUCTURE OF THE THESIS

The body of this study commences in Chapter 2, Conceptual and Theoretical Framework, with a discussion of planned change and implementation, and considers at some length the concepts of success and non-success, and mutual adaptation as they are related to the implementation process. At a theoretical level the determinants of the process are identified and analysed and a categorization of these determinants is developed to provide a framework for the subsequent investigation. The chapter also considers the interpersonal processes integral to organizational implementation and these are subsequently related to the experimental treatment used. This treatment, organization development, is also explored in concept and theory, and, as indicated, related to the implementation process and its determinants. Chapter 3 reviews the literature of organizational planned change, implementation and organization development and seeks to support the conceptual and theoretical foundations of the previous chapter. Chapter 4 provides a detailed and fully documented account of the principles underlying an organization development intervention and of the exemplary practices identified from the literature which are associated with each stage of the intervention process. Chapter 5 is an account of the particular intervention that is the subject of this study and describes the context in which the intervention took place as well as the events of the intervention. It also seeks to provide an explanation of the likely processes and of causality between processes and events during the intervention.

Chapters 6 – 8 cover the research design and present the research outcomes and an analysis of the results. Chapter 6 delineates the research variables and the development of the research instruments, and their relationship to these variables. It also details the use made of
participant observation and a methodology based on "Levels of Use", two further methods of data collection used in this study. Chapters 7 and 8 both present the research outcomes, but from very different perspectives. Chapter 7 presents the data using a method described by Eisner (1979) as "educational connoisseurship", a method that is essentially qualitative and that seeks to capture through the subtle intricacies and nuances of process the feeling of what is involved. Chapter 8, by way of contrast, approaches what is essentially the same data from the traditional, or quantitative, perspective. These two approaches are then linked in this chapter to provide an analysis of the outcomes of the intervention and of its relationship to the implementation process.

The final chapter, Chapter 9, summarises the study, brings together its conclusions and discusses the implications of these conclusions. In addition there is an Appendix which contains the research instruments, and the interview schedule based on the Levels of Use methodology.
CHAPTER 2
CONCEPTUAL AND THEORETICAL FRAMEWORK

This study is concerned with planned change at two levels. The first of these is the organizational level. Changes at this level are to be the direct result of the application of a collectivity of strategies and tactics labelled "organization development". The immediate goal of this planned change is the functioning of the organization in terms of, formal leadership, informal or peer leadership, organizational climate, organizational processes, and the satisfaction of organization members. These immediate planned changes, resulting from the application of a particular treatment, may be thought of as first order change.

The second level, or second order of change considered is planned change, or innovation, by the organization itself, and in particular the implementation phase of planned change. Planned change is a complex function of a number of variables, including organizational factors. For the purposes of this study it is conceptualized as a second order change, one which can be influenced by first order change.

This chapter will consider both levels of change and their relationship, but because an understanding of the organizational variables associated with planned change will provide an organizing framework for the first level of change, an ends-means approach of considering the second level of change first has been adopted.
PARAMETERS OF THE STUDY

The second level orientation of this study is organizational innovation initiated within and by the organization.

An educational institution is an organization in its own right, however, it is also the subsystem of a larger social system, and is itself made up of subsystems as well as individuals. Within this context innovation may be initiated at different levels: Initiated at one level of the system and ordered or imposed on subsystems; initiated by and implemented within a particular level of the system; or, initiated and implemented by an individual operating with relative autonomy and independence. This study is focussed on innovation initiated by and implemented within an identifiable system. In this sense it is an organizational innovation.

It is also an organizational innovation in another sense. Among other things an organization is a complex interaction of position, roles, structure, expectations, power, and authority. If an innovation impinges upon these factors, then it is an organizational innovation. (Giaquinta, 1973). Therefore, the nature of the innovation which concerns this study is not simply an aggregation of change by individuals, but rather a change where the individuals within the organization are influenced by a set of determinants derived from organizational sources.

INNOVATION IN EDUCATIONAL INSTITUTIONS

Innovation is a generic term which may be applicable to any planned change effort, whether this effort concerns techniques, programs, rules, norms, or any other aspect of the educational organization, its operation and mission. Planned change efforts possess the characteristics of
a process, (Greenwood et al, 1975; Giacquinta, 1973), and the actions associated with undertaking a planned change or innovation may be referred to as the planned change process, or innovation process, terms which are used interchangeably in this study.

Numerous studies have provided definitions of innovation. Pincoz defined it as

"A technology which improves educational outcomes, improves working relationships within the school system or between the school system and the public, or reduces the costs without significantly reducing the quantity or quality of desired outcomes or processes."

(1975, p.114)

Lippitt et al describe planned change as

"Conscious, deliberate and collaborative effort to improve the operations of human systems .... through the utilization of valid knowledge."

(1958, p.13)

while Downs and Mohr have defined innovation as

"The adoption of means or ends that are new to the adopting unit."

(1975, p.701)

These definitions together embrace a number of key concepts which it is believed are essential elements of a definition of the innovation process, including that it focusses on change that is planned; that it is intention; that it is directed at improving the effectiveness of the system; that it be new; and, that it embraces both ends and means. Taking account of these concepts, innovation process is defined in this study as:

"The planned application of ends or means, new to the adopting educational system, and intended to improve the effectiveness and/or efficiency of the system."

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The innovation process must focus on change which is planned. "Planned in this context means that it is conscious, deliberate, and purposeful, that is, that there is an awareness of the existence of alternative means or ends, a conscious decision to apply these means or ends to the educational institution, and an objective of promoting some change in the system.

Further, the innovation process includes intention and application. Application means that the innovation process extends beyond an awareness of alternatives to an intention to implement those alternatives. In turn, the emphasis on implementation highlights not only what has been a relatively neglected aspect of innovation research, (Giacquinta, 1978) but one which recent research indicates may be the most crucial variable in the innovation process (Berman and McLaughlin, 1978; Fullan and Pomfret, 1977).

Innovation is also directed at improving the effectiveness of the system. The concept of effectiveness is the subject of considerable disagreement, a disagreement some authorities have attributed to the lack of consensus as to what frame of reference to apply (Katz and Kahn, 1978). However, given the "human service" orientation of school systems, the Parsonian frame of reference is utilized whereby the effectiveness of the system is defined in terms of the system's contribution to the next higher order of social structure. Parson's frame of reference has been paraphrased, and the appropriate criteria for evaluation, as

"The basic question in assessing the effectiveness of an organization thus becomes 'how well the organization is doing for the suprasystem'."

(Katz and Kahn, 1978, p.246)
The concept as such lacks operational definition, however, the level or degree of effect of an innovation on the effectiveness of an organization is not a central concern of this study, and the concept as stated offers sufficient guidance. Similarly efficiency, a subset of effectiveness, and defined in terms of the ratio of energetic input to energetic output (Katz and Kahn, 1978, p.226), lacks operational definition, but indicates the direction in which innovation is to act. Therefore, based on these definitions, an innovation should be intended to improve educational outcomes, or to improve working relationships or organizational processes within the adopting educational system or between the educational system and its environment as a preliminary to improved educational outcomes, or, to improve the efficiency of the use of resources within the system.

Another concept is that of newness. It is sufficient that the subject of the innovation process be new to the system, that it is neither presently employed by, nor within the repertoire, of the system. Therefore, by inference, an innovation requires either additional learning by the participants or the unlearning of old behaviours and the relearning of new.

Finally there is the concept of ends and means. Ends may be aims, goals, or objectives, while means may be any form of technology or structure through which ends may be pursued. The latter may include a product, a process, a role, an attitude, a value, syllabus content, or an organizational structure. The broad conceptualization of ends and means as listed in the above definition, and without further qualification, may be criticized on the grounds that trivial planned changes may be categorized as innovations. Some theorists, such as Morrish (1976), employ the distinction that the change must be qualitatively, as well as quantitat-
ively, different from what had previously been in operation. That
distinction can be refuted. Whether or not a change is qualitatively
different is a value judgment, dependent upon the interaction of the
innovation, the environment, and a set of values. The adoption of a
textbook may constitute a change of considerable magnitude and signif-
icance in one system, whereas the same actions in another system might
simply constitute part of an annual ritual.

THE INNOVATION PROCESS

The innovation process includes all events or activities which are
related to the idea, product, or process which is to be the subject
of innovation. These events or activities include awareness, the proced-
ures used in reaching a decision to initiate the change, any planning
or preparation activities related to the change, and any activities
related to mobilising resources to be used in relation to the innovation.

The processes involved are complex and depend upon multiple factors
which interact in a non-linear relationship. In consequence the
processes and events tend to be unique to each and every situation.
The difficulties in analyzing the innovation process are compounded
by the lack of rigorous research into innovation and organizational
change (Giacquinta, 1978). Nevertheless, in spite of the unique
nature of each innovation, and of research methodologies and frames
of reference which make many reports suspect, there is a consensus in
a number of significant studies of educational change that the process
of innovation occurs in three discernible stages which are interdepend-
ent (Giacquinta, 1973; Greenwood et al, 1975; Fullan and Pomfret,
1977; Zaltman et al, 1977). Following common usage these are ident-
ified and labelled as
initiation, the stage when plans are conceived and formulated, resources sought, and decisions to support sought.

(Greenwood et al, 1975, p.3)

implementation, the stage when the project confronts the reality of its institutional setting, and project plans are translated into practice.

(Greenwood et al, 1975, p.3)

institutionalization, the stage when the project loses its "special project" status and becomes part of the institutionalized behaviour of the organization.

(Greenwood et al, 1975, p.4)

Recent reviews and studies of the planned change process are unequivocal in their conclusions: implementation is the most crucial stage in planned change (Berman and McLaughlin, 1976; Fullan and Pomfret, 1977). It is with the implementation stage that this study is concerned.

IMPLEMENTATION

Implementation has been identified above as "when the project confronts the reality of its institutional setting". Elsewhere it has been defined as, "what an innovation consists of in practice" (Fullan and Pomfret, 1977, p.356). Neither definition conveys more than a parsimonious comment on what is involved.

Implementation, as conceptualized by this study, is a process, and consists of the whole set of factors involved, their interaction and consequences, in translating an idea, program or set of activities into
practice. The process is complex, multi-dimensional, and multi-level in terms of usage. This conceptualization of implementation as multi-dimensional is consistent with the most recent research, (Fullan and Pomfret, 1977; Hall and Loucks, 1978; Leithwood and Montgomery, 1980), as is the notion of multi-level usage (Hall et al, 1975; Fullan, 1980; Hall and Loucks, 1980).

Fullan and Pomfret have suggested five general dimensions of implementation:

- subject matter or materials - the content of the innovation that is to be transmitted to, or acquired by the students.

- organizational structure - formal arrangements and physical conditions. They may include the rearrangement of space or time, or the reallocation of human and physical resources.

- role/behaviour - role relationships, manifested through behavioural changes in particular roles, and, more important, behavioural changes resulting from the effects of one role change over another.

- knowledge and understanding - by the innovation's users, about such components as philosophy, values, objectives, strategies, and other organizational components, particularly role relationships.

- value internalization - the users valuing of, and commitment to implementing the innovation's components.

(1977, pp.361-365)

With the substitution of the term clients (used in the sense of intended receivers of the innovation in practice) for students in the first
dimension, these dimensions support this study's definition of innovation, and are adopted as a framework by this study. As such they focus attention on the multi-dimensional nature of implementation and in turn on the need to avoid a simple global concept in research or theorizing.

The multi-level usage concept supports the notion that there is no simple dichotomy of "implemented - not implemented", but rather that there is a whole range of different levels of usage and implementation. (See Chapter 5). The multi-level usage concept can be combined with the multi-dimensional concept to provide a framework for analysis and assessment, however, analysis and assessment are fraught with difficulty, there being enormous definitional and methodological problems involved. Previous research has utilized three perspectives in measuring implementation. The oldest established, the measurement of outcomes, usually in terms of how much the intended receivers of the innovation's effects have changed according to some criteria, relegates implementation to the level of a "black box", something which immutably occurred when a decision to undertake a planned change was made. A perspective such as this is a model by default only, and as Charter and Jones (1973) have cautioned, runs the risk of appraising non-events. There is a widespread belief that many innovatory ideas discarded as "unsuccessful" measured the outcomes of planned changes that had never been implemented as intended (Fullan and Pomfret, 1977; Herriot and Gross, 1979).

There are, however, two other approaches to investigating the implementation process, each of which represents, implicitly at least, a model or theory of the implementation process. These have been identified as the "relatively structured" and the "relatively unstructured" approaches (Fullan, 1980, p.2)
The relatively structured perspective subsumes what is basically a fidelity or engineering theory of implementation. There is an assumption that the innovation upon implementation should exhibit certain intended outcomes, and the success of implementation can be gauged from the fidelity, or faithfulness, with which the implementation reproduces these intended outcomes. These intended outcomes are stated in terms of the dimensions of implementation previously listed, not as changes in behaviour or learning by the ultimate recipients of the innovation. Therefore, when implemented, an innovation might be expected to exhibit certain subject matter or materials in use, to utilize particular organization structures, and to manifest certain role behaviours by those using the innovation. The latter may be expected to have a prescribed level of understanding and knowledge of the innovation's components, and may also be expected to value, and show commitment to, the various components. The fidelity, or how the use of the innovation in practice relates to the intended outcomes, is a matter of degree, and is assessable against some criteria such as the multi-level, multi-dimensional framework suggested previously, or similar conceptual frameworks developed by Leithwood and Montgomery (1980) or Hall and Loucks (1980).

The relatively unstructured perspective is more clearly an explicit theory of the implementation process. The approach is based on a recognition that there are fundamental differences in the milieu, or environment, in which innovations are to be implemented. These differences give rise to an "empirical law of implementation", that each classroom, each school, and each school system, being somewhat different to others, implements the same innovations in different ways at different times or places (Berman and McLaughlin, 1978, p.16).
The variation has two components, variation to the proposed change itself, and variation to the institutional setting, including the participants. Following the usage adopted by the Rand study, variations are labelled adaptations, and where there is variation in both components, mutual adaptation (Greenwood et al, 1975).

Mutual adaptation may occur in almost any element of the planned change or the host environment as the two interact in the planned change process. Indeed, it is difficult to imagine a dynamic, interactive situation where some adaptation does not occur, and it is the belief of this author that the mutual adaptation construct accurately reflects the process of implementation and provides an important link in designing and formulating more effective implementation practices. This theme will be developed at length later in this study.

SUCCESSFUL IMPLEMENTATION

The process of implementation is too complex and dynamic, and its outcomes too broadly, and probably unequally, distributed across a number of dimensions to evaluate the process by a simple dichotomy of implemented, not implemented. Consequently, while it is possible to identify non-implementation as one outcome, there is a continuum of other possible outcomes. The mutual adaptation construct provides a useful heuristic by which to identify those other process outcomes, and it is the conceptual basis for Figure 2:1.
Figure 2:1  Outcomes of the implementation process, based on the Rand study construct of mutual adaptation

(Berman and MoLaughlin, 1978)

Although the model provides for an infinite number of outcomes of the implementation process, only four basic types were categorized by the Rand study.

Non-implementation was described as the situation "when the project neither altered its setting, nor was adapted to it" (Berman and MoLaughlin, 1978, p.16). On Figure 2:1 it occurs at the point of origin of the two axis. For whatever reason, at the reality of the workplace, the innovation as such is totally without lasting impact or effect.

Cooptation occurs "where the staff adapted the project .... without any corresponding change to traditional institutional behaviour or practices" (Berman and MoLaughlin, 1978, p.16). In relation to the figure, cooptation lies somewhere along the Innovation Adaptation axis. Berman and MoLaughlin suggest that the innovation is changed, frequently
emasculated, to suit the needs of staff who generally maintain that the innovation has been "implemented" (1978, p.16). The result is a "formidable discrepancy" between the rhetoric and the actuality of practice (Goodlad, 1975).

Technological learning occurs where staff "acquire skills in a new educational method without adapting the method to the users' situation" (Berman and McLaughlin, 1978, p.18), and corresponds to a position in relation to the figure of somewhere along the Host Environment Adaptation axis. Assumptions of a "technological learning" approach appear to have been implicit in some of the curriculum packages produced under the Research, Development and Diffusion model of innovation.

Finally, Mutual adaptation occurs when "both project and setting are changed", (1978, p.16), a position which corresponds on the figure to most of the infinite combinations which are available, and encompasses every case of implementation which does not lie along an axis.

The mutual adaptation construct is a most appropriate and useful heuristic for analysis in a general sense, however, alone it has limited usefulness. Two of the categories of implementation, cooptation and technological learning, are effectively boundary conditions and it may be argued that they are unlikely to occur in as pure a form as posited. Can an innovation be "implemented" without some change occurring in both the host environment and the innovation? Given the complex nature of social organizations it can be argued that the very existence of a planned change, in name or otherwise, constitutes a change. And it is difficult to conceive of any innovation, other than one which exists only in a technical dimension, not undergoing some change during implementation.
Further limitations of the construct for the purposes of analysis and evaluation exist within the category mutual adaptation. There is no indication given of what order of change signifies that adaptation, and therefore whether implementation, is occurring. Nor, at the other extremities, are there indications of finality. With respect to a specific innovation which can be identified and delineated from the ongoing life of the organization, it may be possible to establish relativities in terms of innovation and host environment, and consequently to plot some point of "mutual adaptation". This was, in fact, the thrust of the Rand study, to assess and analyze the effectiveness of Federal "seed money" in the United States in improving local educational practices. However, for many organizations, and for many innovations, conditions where the innovation can be delineated do not prevail. At the theoretical level it is possible to conceptualize an organization which is "in process", an organization which proactively or reactively, and through the use of appropriate processes, is consciously and intentionally undergoing planned change. Related to Lewin's (1947) paradigm of change, "unfreeze, move, refreeze", the organization maintains an unfrozen state which permits a more or less continuous movement of a controlled, rationalistic nature. In practice organizations aspire to a condition of "in process" and in the case of those which approach the condition the interactive processes and mutual adaptation are without end. The innovation, particularly one which is not essentially technical in nature, may merge imperceptibly into the fabric of the organization, interacting with other planned changes, spawning or generating other changes in turn, and gradually becoming an unidentifiable behaviour in its own right within the organization.
The preceding paragraph has identified two limitations to evaluating implementation using the mutual adaptation construct, namely, that the concept itself provides no operational criteria of what does, or does not, constitute adaptation, and, that mutual adaptation is a process without end. The first limitation may be met by the use of a multi-dimension, multi-level frame of reference, as previously outlined, and by aligning it with the mutual adaptation construct. When used in this manner, as a measure of what is rather than as an orthodox engineering measurement of attainment, such a matrix provides the basis for a relative measure of implementation.

It is the contention of this study that a measure of this nature would be applicable both to specific innovations and in the short term to organizations which are "in process". As such it can only serve a formative evaluation role and then for only a limited period after the innovation is first put into effect. In the longer term continued mutual adaptation and the absorption of the innovation into the fabric of the organization is itself the hallmark of successful implementation.

**DETERMINANTS OF THE IMPLEMENTATION PROCESS**

Implementation results from the interaction of two sets of variables, the innovation and the host environment. The former may vary in complexity. The adoption of a new textbook, a structural rearrangement of the use of facilities, or the use of a new piece of audio-visual equipment are all relatively simple innovations. In contrast, a change to a system of differentiated staffing, or open classes, or structures of greater delegated authority, or the adoption of "new material" syllabi, are relatively complex and may require changes in attitudes, values, roles, role relationships, power, or authority, and a concomitant
acquisition of new skills and behaviours. Concurrently, the set of variables which constitute the host environment are inevitably complex, incorporating as they do a social organization and its environment. The potential for variation in the combination and interaction of variables is extremely large, to the extent that the process of innovation is never quite the same from one situation to another. In consequence the number of factors which could influence the processes and outcomes is similarly very large. These observations are supported in the empirical literature. Literally hundreds of influences have been identified or suggested.

Although there is a mass of data, some conflicting, and much of it derived from studies which have been described as methodologically and conceptually weak, (Fullan and Pomfret, 1977; Giaquinta, 1978), nevertheless many commonalities are in evidence and several empirically based classifications or categorizations of determinants of the implementation process exist (Giaquinta, 1975; Lippitt, 1974; Morrish, 1978; Fullan and Pomfret, 1977). The classification proposed by Fullan and Pomfret was the most recent at the time this study was commenced, and also appeared to be the soundest in the sense that it was supported by an extensive and thorough analysis of well documented case and field studies. The basic classification of determinants it proposes, with relatively small changes and additions, is used in this study. Both Fullan and Pomfret's classification and the classification used in this study are listed in Table 2:1. In the paragraphs which follow the nature of each determinant, and premises re its direction and effect, are examined.

The Characteristics of Innovations have provided a focus for research over many years, mainly in the context of their influence on the adoption
process. This study is concerned only with those characteristics thought likely to influence the implementation process. There are four.

Explicitness refers to the degree to which the "what, who, where, and how" of the innovation are spelt out, particularly as they concern implementation. The premise underlying the explicitness determinant is that there is an optimal range of explicitness which does not unduly constrain the behaviour of individual organization members, but which at the same time provides sufficient direction so as to avoid user confusion and frustration. Complexity refers to both the proposed scope and scale of the planned change, and the degree to which the planned change is divisible into sub-elements. The premise underlying the inclusion of "proposed scope and scale" is that innovations need to be demanding to the extent that they provide a meaningful challenge and the opportunity for a sense of achievement for those implementing the change. Although complexity brings management problems with it, these are more than offset by the ongoing involvement of participants. The inclusion of "divisible into sub-elements" is based on the premise that concurrent with challenge there must be ease of understanding and of use. Resocialization refers to the need to change basic habits and attitudes in order to make members capable of performing new roles. The concept is central to organizational innovation. However, because it involves unlearning old behaviours and relearning new it is extremely difficult to effect. By deduction it can be anticipated that the greater the resocialization required by an innovation the greater will be the difficulties to successfully implement the change. To suggest that innovators seek to limit the degree of resocialization required, and thereby enhance the probability of success, is not, however, the premise associated with this determinant. Rather, it is to acknowledge its fundamental role in organizational innovation, and to ensure that the
Classification of Determinants of Implementation

Fullan and Pomfret

1 Characteristics of the Innovation
   a. Explicitness
   b. Complexity

2 Strategies
   a. In-service training
   b. Resource support
   c. Feedback mechanisms
   d. Participation

3 Characteristics of the Adopting Unit
   a. Adoption process
   b. Organizational climate
   c. Environmental support
   d. Demographic factors

4 Characteristics of the Macro Socio-political Unit
   a. Design questions
   b. Incentive system
   c. Evaluation
   d. Political complexity

1 Characteristics of the Innovation
   a. Explicitness
   b. Complexity
   c. Resocialization
   d. Compatibility

2 Strategies
   a. In-service training
   b. Resource support
   c. Feedback mechanisms
   d. Participation
   e. Planning
   f. Incrementalism

3 Characteristics of the Adopting Unit
   a. Adoption process
   b. Organizational climate
   c. Environmental support
   d. Demographic factors
   e. Peer and authority relationships
   f. Organizational structure

4 Characteristics of the Macro Socio-political Unit
   a. Incentive system
   b. Closed evaluation
   c. Political complexity

Table 2:1 Classifications of Determinants of the Implementation Process
problem is addressed continuously in an integrated manner throughout the implementation process. **Compatibility** refers to the consistency between existing organizational arrangements, including mission, management, structure, and process, and those required to implement and sustain the planned change. In a sense compatibility is a proxy for conservatism, and as such is closely linked to the notion of risk. The premise is that the less compatible a planned change is with existing organizational arrangements the greater will be the difficulties of implementation.

The second major classification of determinants is that associated with **Strategies** or methods employed to introduce and implement innovations. Six are identified in this study. **In-service training** refers to all training activities undertaken by participants to assist them in translating project guidelines into practice, and in adapting project concepts to the reality of their particular situation. In-service training can provide situations and experiences which facilitate resocialization, in addition to providing training in required behaviours and skills and adding to the clarity and understanding of the innovation and its implementation. **Resource support** refers to the provision of time, materials, and other facilities during implementation. The central-ity of resocialization, and attendant difficulties and problems in changing internalized attitudes, behaviours, and habits, virtually ensures that implementation will be a lengthy process. A strategy which provides an ongoing commitment to the provision of resources increases the prospects of successful implementation. **Feedback Mechanisms** refers to the interactive network and mechanisms through which problems are identified and solutions and other information relevant to the innovation and its implementation are discussed. Given an acceptance that the implementation process occurs through mutual adaptation,
and an assumption that some degree of uniformity among participants' understanding of the innovation in process is desirable, then strategies which emphasise feedback are essential. There are, however, other reasons. It is a major contention of this study that the actual behaviour which occurs in organizations is largely determined by a set of organizational expectations which are being modified continuously through social interaction. Feedback mechanisms provide the opportunities for testing and modifying organizational expectations, with specific reference to the planned change. Similarly, resocialization, which results from changes in internalized behaviours and attitudes, is closely linked to this notion of organizational expectations and is also largely a function of social interaction. Participation is a multi-dimensional concept which may refer to the extent to which members influence decisions of the group, or that they are involved in group situations without necessarily influencing decision making, or that they are present in group situations when decisions are made. Throughout this study, unless otherwise stated, the term is used with reference to the influence of members on group decisions. The premise is that participation promotes a sense of ownership of the decisions made, and thereby promotes an ongoing commitment in the individuals concerned to see that a planned change is implemented. It is noted, however, that the desire to participate results from complex motivational factors, including perceptions of instrumentality, valency, probability of success, and individual needs and is not an evenly distributed characteristic across the population. Planning refers to all the activities associated with decision making and the systematic preparation for putting the proposed change into effect. These include data collection and analysis, diagnosis, generating and evaluating alternatives, determining strategies, and making decisions. In combination with the notion of mutual adaptation the premise is that successful implementation is dependent on
systematic, continuous, and flexible planning for change. Incrementalism refers to the implementation of planned change through small successive steps rather than in a single dose. The premise is that it will help prevent an innovation management overload and associated dysfunctional consequences, and that it will promote psychological success, or reinforcement of motivation through success. As a strategy incrementalism may be directly related to the problems associated with resocialization, compatibility, and political complexity, and it contributes as a further means through which these problems may be alleviated or overcome.

Although strategies have been delineated and differentiated into a number of distinct categories, it is believed that they work best when they are applied in concert, to combine, interact, and mutually support each other.

The third major classification of determinants is the Characteristics of the Adopting Unit. From these, Adoption process refers to both the motives underlying adoption and the activities preceding and following the adoption decision. A direct relationship exists between the activities of the adoption and implementation processes because of their relative position in the planned change process, but the nature of determinance extends beyond this. Issues such as who was involved, to what degree, and how closely their activities matched the expectations of organizational role and behaviour are all important aspects of the process. Similarly the motives underlying the adoption process are of fundamental importance. Intuitively it would appear that if innovations are adopted for what are essentially opportunistic reasons, that is, if some agenda or motives other than the proposed change itself are operative and dominant in those initiating the change, then the prospects of successful implementation will be seriously diminished. Specifically,
these might include adoption because of a concomitant access to additional resources, or because of enhanced prestige and status for persons or groups associated with the process. **Organizational climate** refers to the atmosphere within an organization and is derived principally from the impact of leadership behaviour at the top and upper levels of the organization. This impact exerts a subtle and intricate effect throughout the organization on its expectations, and interactive patterns of roles, norms, values, and relationships. In turn these affect the various organizational processses. The premise underlying the inclusion of organizational climate is that, depending upon its nature, it is responsible for a powerful positive or negative influence on the implementation process. **Environmental support** refers to moral and emotional support given to those participating in planned change by other organization members. Two concepts appear particularly relevant, namely that of a critical mass of support, and that of legitimacy. The critical mass concept suggests that a group within an organization will mutually sustain and support each other if it is beyond a "critical" size. Legitimacy, a social-psychological concept which accounts for both the social situations in which compliance occurs and for the psychological processes within individuals that account for their compliance, is a necessary condition for individuals to participate in a planned change. Given the "formal law/legal norm/social norm" foundation from which legitimacy is imparted, this concept emphasizes the need for support from the relevant holders of formal and informal power and authority in the organization. **Demographic factors** refers to the role of personal characteristics of individual members of staff in the implementation process. Conceivably a considerable number of personal characteristics could enter the determinant equation. However, many of these, such as age, sex, education, and experience are not subject to rapid change within the particular institutions concerned
in this study. On the other hand some characteristics may be changeable, particularly some of those concerned with personal motivation. The valency of the reward derived from participating in a planned change may be increased through changes in organizational expectations of role performance, while the expectancy of probability of success may also be increased through strategies which promote the attainment of psychological success. Peer and authority relationships refers to organizational characteristics such as leadership, both formal and informal, ability to deal with conflict, interpersonal relationships, organizational processes, and the fabric of norms and expectations which underlie these characteristics. Peer and authority relationships may influence such things as lines and levels of communication, status barriers to the initiation of ideas or criticisms, and norms as to what constitute acceptable feedback. The premise is that with an appropriate set of peer and authority relationships communications will flow freely and openly and initiatives and criticisms may be freely expressed regardless of position. Finally, organizational structure refers to size, complexity, and other structural properties of organizations which may act as determinants of the implementation process. The premise is that an organizational structure which is complementary to appropriate peer and authority relationships, and which reinforces communication and feedback mechanisms, will lead to the more effective management and implementation of planned change.

The six characteristics of organizational properties listed above as determinants have been identified and delineated with the aim of achieving optimal clarity. However, although they are treated separately here, other parts of this study will argue that there is a close relationship and interdependence between the six.
The final major classification of determinants is the Characteristics of the Macro Socio-political Unit. Incentive systems refers to the complex of factors at the macro-environment level which motivate or stimulate innovation. Closed evaluation refers to the reluctance of organizations to openly identify and discuss problems associated with the implementation process because they fear a negative, and possibly punitive, reaction from the macro-environment. This reluctance to identify and discuss problems may inhibit measures designed to correct the problems. Finally, Political complexity refers to the number of decision points external to the organization where influence may be exerted on processes internal to the organization.

RELEVANCE OF THE DETERMINANTS TO THIS STUDY

The determinants included in this study have been simply listed and outlined to this point, however, some indication of their relative importance to this study is required. Of the nineteen factors listed, three are outside the boundaries of the study.

External considerations of incentive and political complexity do not come within the level of concern established at the beginning of this chapter. The third external consideration, closed evaluation, does concern this study in that although the study is basically concerned with innovation generated by and applied within the organization, nevertheless evaluation is tempered by an awareness of the suprasystem and its political categories. The remaining sixteen elements can be further categorized into two distinctive, but interactive and interdependent, groups. There are those elements which can be the subject of action by the organization as it presently exists, and those elements which require the actions to be carried out to the organization itself.
Within the first group belong the "Characteristics of the Innovation" and the "Strategies". These elements all involve conscious decisions, actions or behaviours by the organization which can be effected by the organization as it presently exists. That is, the organization can decide on the suitability and appropriateness of a particular innovation, in terms of the innovation's characteristics. Similarly it can determine a suitable strategy or combination of strategies. The second group consist of all the elements listed under "Characteristics of the Adopting Unit". These all involve elements which require change to the organization itself if there is to be more effective implementation of planned change.

The two groups are interdependent. Clearly the operation of the various strategies and their effectiveness in use may be influenced by characteristics of the organization. The presence, or absence, of participation; the quality of planning; the effectiveness of in-service training; the ability to resocialize; the openness and usefulness of feedback sessions: all may depend in large measure on the way people in an organization relate, both formally and informally, what they expect of each other, and of the feeling exuded by the organization as an entity. All of these latter qualities are functions of the characteristics of the organization.

Similarly, the characteristics of the organization may be influenced by its own operations. It is a contention of this study, and it will be argued in a subsequent section, that any interaction between organization members helps to shape the member's understanding of the organization and of its expectations of them. Therefore any specific strategies in operation, whether concerned with in-service, feedback, participation, resource support, planning, or incrementalism, may exert

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an effect on the organization's characteristics. However, this explicit recognition of interdependence does not imply that both are recognized as equivalent, or that there is ambivalence in identifying the primary target of planned change. As was argued originally by Miles (1975), the primary target must be the organization itself and it is this premise which underlies the two levels of planned change identified at the beginning of this chapter.

THE HUMAN DIMENSION OF IMPLEMENTATION

The implementation process is a function of the ongoing interaction between elements of the innovation and the environment. Both sets of elements may be subject to adaptation, however, the dynamic element is the human factor in the host environment. Successful implementation requires some adaptation by the participants, or resocialization as it has been labelled, while adaptation of the innovation itself rests essentially with decisions and behaviours of the participants. This key role of the participants themselves, expressed through a wide range of behaviours, is evident in most of the determinants identified by the study. Therefore the key element to understanding the successful implementation of organizational innovations is an understanding of what takes place in the human component of an organization undergoing change.

This emphasis on the human component, and the particular emphasis in subsequent paragraphs on the role of social interaction in shaping the implementation process, represents something of a break with the view of organizations which underlies "traditional" theory in educational administration. (For example, Halpin, 1958,1966; Campbell and Lipham, 1960; Hoy and Miskell, 1978). However, to the extent that there ever existed a single theory of educational administration, it
has been acknowledged by its established proponents to have failed to deliver manageable answers, (Griffiths, 1978; Hodgkinson, 1978) while to its critics

"(it) has made no marked advance towards substantive knowledge and has often exalted trivial and banal findings by proclaiming them general laws and fundamental insights".

(Greenfield, 1980, p.208)

**THEORY-IN-USE**

To understand the behaviour of organizations as they undertake planned change it is necessary to understand the concept of "organizational expectations", hereafter referred to as "theory-in-use" following the usage of Argyris and Schon (1974,1978).

The operation and behaviour of a functioning organization can be described at two levels. The first is the formal, as described by the organization's aims and objectives, the hierarchy of authority, the established lines of command and the integrating mechanisms. This level has been labelled "espoused theory" or "theory of action" (Argyris and Schon, 1978, pp.14-15). The second level, the theory-in-use, is the reality of what actually takes place. It is not necessarily what is espoused, but rather the product of tacitly agreed upon expectations of how individuals should or should not behave or feel in relation to the organization and its functioning. Each individual has his/her own understanding of what other members expect of them in their role enactment, of what types of behaviour are enforced or forbidden, or of what types of initiative, either individual or group, are to be nurtured, tolerated, or suppressed. There is an understanding of what attitudes
or beliefs they may, or should, or should not hold, and of what sanctions might be brought to bear for violations of the implicit rules. Having developed their perception of these expectations the individual accepts and seeks to fulfill them.

Exactly why members should comply with what they understand to be the organization's expectations is not altogether clear, although there is considerable empirical evidence that they do. Among the reasons advanced are, that individuals associate feelings of shame and guilt with deviance from expected standards, (Katz and Kahn, 1978), that there are feelings of implicit contractual obligations to be fulfilled, (McLeod and Chaffee, 1972), or that there are extrinsic rewards to be had from group membership (Katz and Kahn, 1978).

The potency of theory-in-use to determine the instrumentality of any contemplated behaviour may vary widely from one organization to another, as well as among individuals. It may be argued that its strength depends on a number of factors. If the degree of congruence among individuals' understandings is relatively small, then there will be little understanding of what is the expected behaviour and the instrumentality of any contemplated behaviour will be determined by other pre-dispositions of the individual. Some congruence among individuals' understanding is a necessary, although not sufficient, condition in determining instrumentality. The nature of the group's social interaction may also be thought of as a determining factor, in that a loosely knit group of people thrust together in a work situation are likely to exert less normative influence than a tightly knit peer group. Finally, theory-in-use may endorse non-explicit notions, such as a vaguely conceptualized notion of "professionalism" which legitimates autonomy and doing one's "own thing", or at least in certain areas. Theory-in-
use may be extremely potent in such circumstances in determining the instrumentality of a class of behaviours, all ascribed to professional-ism, but at the same time it clearly avoids the development of interactive expectations about specific behaviours.

FORMULATION AND CHANGE TO THEORY-IN-USE

Theory-in-use is not a "thing". It can not be reified, that is it can not exist independently of an individual's construction of reality. Nevertheless, it is a reality, each individual's reality, of what things make up the organization, how these things act, and how they hold together. Individuals do not develop their construct in isolation, but rather as a function of expectations developed interactively with other individuals in the organization. In turn these interactively developed expectations are derived from the individual's image of the existing theory-in-use, from their personality and in particular the values, attitudes and norms which they bring to the organization from external sources, and from their perception of the organization at work. In the case of teachers the notion of professionalism and the unique characteristics of educational institutions as organizations (Bidwell, 1965; Pinous, 1975) would appear to be particularly important factors shaping the development of theory-in-use.

As conditions change the individual's test their perception of these changes against their expectations and may modify the latter as a result. Other individuals are undergoing the same processes at the same time and this collective interaction of individuals' expectations gives rise to the organization's theory-in-use. Each person's understanding of the theory-in-use is developed and modified through social interaction with other members of the organization. In turn the development and
modification of the first individual's understanding of the theory-in-use, as evidenced through their behaviour, contributes to the development and modification of each other individual's understanding. The process is dynamic and interactive, or, to use the analogy used by Argyris and Schoen,

"an organization is like an organism, each of whose cells contain a particular, partial, changing image of itself in relation to the whole. And like such an organism, the organization's practice stems from these very images. Organization is an artifact of individual ways of representing organization."

(1978, p.16)

However, as March and Simon (1958) have warned, although the biological analogy is useful, it should not be taken too literally or too seriously. Organizations are the social constructs of their members and unlike organisms they do not have goals of their own, although individual members may have goals for the organization. Further, theory-in-use is contractual in nature. Expectations which are interactively developed and shared imply that each organization member feels that other members should feel as they do, that their beliefs carry normative sanctions, and that each member is aware that the other organization members feel the same way.

PLANNED CHANGE AND THEORY-IN-USE

The stimulus for an organization to change is provided by a performance gap, or some individual's perception that there is a discrepancy between what the organization is doing and what it is believed that it ought to be doing (Downs, 1966). Planned change is stimulated in this way, although so also is unplanned change.
When a performance gap arises it creates tension or discomfort in the individual(s) concerned. If the perceived gap is small it generates little tension and therefore may not stimulate a conscious reaction. There is a continued acceptance of both what the organization is doing and of the theory-in-use. However, the latter is subject to the ongoing testing, interaction, and incremental change previously described. The result is that small performance discrepancies almost certainly result in change, although it is change which is slow and imperceptible, unplanned and unintentional. The organization "drifts", but the series of small incremental changes may compound into a significant difference over a period of time.

In contrast, if the gap gives rise to sufficient tension then the organization, acting through its agents, the individual members, will seek to consciously neutralize the causes of tension through one of two responses. One response is to restructure the theory-in-use, a response which will lead to a new set of organizational expectations about how the organization and its members should function. A change of this nature, which is a change to the organization itself, equates to what this study has identified as "first order" change. The other alternative is to respond with a planned change which specifically addresses the performance gap which is the cause of the tension, but which at the same time is consistent with and maintains the central features of the existing theory-in-use. A change of this nature, which is a change by the organization, equates to what this study has identified as "second order" change. The organization's mode of response depends not only, nor primarily, on the size and nature of the gap perceived, but rather on the nature of the existing theory-in-use. Some organizations possess well established, finely tuned feedback mechanisms and a well developed response mentality. Thus equipped, they are capable of handling major
internal or external turbulence within their existing theory-in-use because the notion of proactive or interactive change is part of the very essence of that theory. Other organizations have such poorly developed feedback and response mechanisms, or their theory-in-use is such, that even trivial decisions may assume crisis proportions.

Although these organizational responses to performance gaps can be labelled as first or second order change they do not necessarily meet the definition of innovation. Argyris and Schon (1978) have argued at length that many responses, both first and second order, are deliberately and consciously directed at outcomes which are believed to be dysfunctional to the organization. Their argument is broadly supported by informal observation, although there is an absence of empirical data.

Irrespective of whether the organization's response is of the first or second order, it is an essential condition that the anticipated outcomes be compatible with the expectations of the theory-in-use. Given that the organization's theory-in-use directs the behaviour of the organization, through the individual members as agents of the organization, it is therefore a necessary condition for successful implementation that the performance and behaviour required by the strategies, tactics, and/or eventual outcomes of proposed responses be compatible with existing theory-in-use. This is true whether the contemplated change is of first or second order. For example, in first order change, although the theory-in-use is itself the subject of change, this can only occur to the extent that the intended changes are consistent with an order or priority among these norms.

The need for compatibility between theory-in-use and response, and
the "shared expectations - interactive formulation" nature of theory-in-use provides a basic reason for the almost universal presence of mutual adaptation in successful implementation.

SOCIAL INTERACTION AND THE TRANSMISSION OF THEORY-IN-USE

Organizational innovation is initiated when an individual or group perceives a performance gap which creates sufficient tension to stimulate them to react. Their reaction may be to communicate and share their perception with other organization members, thereby setting in motion the interactive processes associated with the testing and possible reshaping of the theory-in-use, or their reaction may lead to a unilateral decision to close the gap. In either case their perception and/or planned action is initially a private reality only. As such it is by definition compatible with their understanding of the organization's theory-in-use and may serve as a powerful motive for the individual(s) concerned. However, in order to exert a similar motivational influence for the organization as a whole the private reality must somehow become part of the shared reality, of the theory-in-use. As Lighthall has argued, there must be a transition,

"from an essentially private realm to a manifestly public realm, from individual psychology to social psychology, from impulse to collective commitment."

(1973, p.281)

A transition such as this involves two sets of factors operating through two sets of organization members. One set of factors includes the various elements of psychological change involved in promoting the perceived performance gap and/or planned action. These may include changes in behaviour, opinions, attitudes, goals, needs, values, or any other aspect of the person's psychological field (French and Raven, 1968).
The second set of factors includes the perceived performance gap and the intended actions. These two sets of factors, which can be identified as those related to the theory-in-use and those related to the innovation, operate concurrently and interactively, occasionally complementing each other, but frequently opposing. Their interaction has been likened to being "locked in a kind of arm wrestle to change the other before they themselves are changed by the other" (Mann, 1976(a), p.315).

The intermediaries through which these sets of factors operate are the organizational members. One set of members, initially either an individual or small group, is that which first perceived the performance gap and felt the need to respond. This set constitutes the "driving force" for change, (Lewin, 1951), even though their perception of the performance gap and their conceptualization of the needed response may be vague. The other set is composed of all other members of the organization. Initially, at least, the perception of a gap and the felt need to respond is not theirs. They are anchored to the existing theory-in-use which, as such, constitutes the "restraining force" to change. Whether or not this group comes to accept the perceived gap and/or planned action of the driving force set is jointly determined by the relative strengths of the two forces in conjunction with a further "own force" which stems from each individual's own needs, and which may reinforce either the driving or the restraining forces.

The operation of these forces also leads to changes in the set membership. The hold of the existing theory-in-use may be such that the existing norms prevail. The individual, or small group who constitute the driving force literally "rethink" their position, and the gap disappears. Alternatively, the ability of the gap to stimulate a reaction
dissipates. The "driving force" set ceases to exist and the particular innovation process in action ceases to exist.

At the other extremity is the completed transition from private reality to theory-in-use. In terms of the preceding analysis it is an abstraction, an idea which is seen to be compatible with a set of expectations. This compatibility is the outcome of the "arm wrestle", of the interaction between theory-in-use and intended change, between driving and resisting forces, and, in terms of the original perception of gap and/or planned change, may occur anywhere on or between the boundary conditions of cooptation and technological learning. Nor is this the final position. As the abstraction is operationalized and turned into concrete reality further adaptation of the intended change and the theory-in-use will occur.

Between these extremities are those attempts at transition which are still in process, where the private reality has not yet become the public reality, or where the private reality has not yet retreated.

Considerable attention has been paid to this transition process in the literature. Theories, strategies, and tactics abound which advance the themes of commitment, understanding, group support, co-operation, organization climate, and influence, and are all addressed, implicitly, to the joint notions of transition and theory-in-use.

**SOCIAL INTERACTION AND THE DETERMINANTS OF IMPLEMENTATION**

It is the contention of this study that if successful implementation of planned change is to occur then it is necessary, but not sufficient, that conditions of social interaction exist which present the potential
for transition from private perception to theory-in-use. This implies only that the potential must exist, not that transition will necessarily occur. In practical terms, if social interaction within the organization is severely inhibited then the potential for transition will be restricted because the process of confirmation and/or change does not occur. In organizations in which the potential for transition is weak the outcomes have been described as "anarchy" (Griffith, 1978), and the organization structure and process of transition as "loosely coupled" (Weick, 1976). Regardless of description the implications are the same: organizational change is literally precluded, at least in certain functions, because there are no accepted means through which the transition from private perception to theory-in-use may potentially take place. It is widely asserted in the literature that these conditions are common in schools (Bidwell, 1965; Pajak, 1979; Weick, 1980).

It is apparent that many of the conditions which present the potential for transition from private perception to theory-in-use are closely related to the determinants of implementation. Structural conditions which impede communication and interaction affect both the transition from private perception to theory-in-use and the implementation process. Similarly, peer and authority relationships may question the legitimacy of some organization members initiating or participating in change decisions. Alternatively, the organizational climate may be such that individuals perceive themselves as impotent to meaningfully contribute and with no sense of efficacy in relation to their implementation role. Further, the environmental support which could promote receptivity to innovation, encourage risk taking, and the acceptance of failure as a learning experience, may be lacking, and thereby impede both the transition of the idea and the operational practices through which ideas become reality.
TRANSITION, IMPLEMENTATION, POWER, AND POLITICS

The transition from a private perception of a discrepancy between observed practice and theory-in-use to a successfully implemented planned organizational change requires more than the simple existence of a potential means for transition of understandings. It also requires an ability to utilize those means, and this, in any organization, is a function of power and politics (Greenfield, 1973; Brown, 1978; Mowday, 1978).

Transition, when reduced to its barest essentials, implies that an individual perceives and believes that some element(s) of what is currently practiced by the rest of the organization is inferior, if not wrong, relative to what can and should be practiced. The inferior, or wrong, current practice could include any element of the organization, ranging from classroom organization and pedagogies, through organizational structure and processes, to the very aims, goals, or mission of the organization itself. Inevitably there is a value judgment implicit in the perception and belief, a judgment that the suggested change is superior to, or has greater legitimacy than what is practised.

It would be naive to expect a simple acceptance of the necessity for change. Many theories or strategies are "educational" in nature, and are based on assumptions of rationality, orientation towards goals, and use of information to govern actions. There is an assumption that if people are provided with more information about something then they will modify their behaviour (Mann, 1976(b)). However, while it is possible that some organization members may accept the need to change as a result of having been provided with information, there are indications that this is not a viable strategy with the majority. To the extent that the notion of professionalism prevails among teachers it may be
argued that teachers are dedicated and producing their best efforts. These efforts involve a considerable moral, ethical, and physical investment in teachers' present values, attitudes, beliefs, practices and behaviours. As such it is unlikely that they will accept the need to change simply as a result of having been provided with additional information.

The process of transition from private perception to successful implementation is essentially political and is based on the appropriate use of power, with power defined as the ability to positively influence psychological change within a particular system (French and Raven, 1968). The same authors have identified five bases from which power may be derived: reward, coercive, legitimate, referent, and expert. To these Raven and Kruglanski (1975) have added a sixth, control over information. What is appropriate from among these will vary from one group to another. Cartwright and Zander have stated,

"...it is important to recognize that influence ordinarily takes place in an established social system that has norms governing its exercise",

and that

"since norms differ greatly from one group to another, we should expect to find corresponding differences among groups in their prevailing methods of influence."

(1968, p.224)

This position supports that adopted by this study in its conceptualization of theory-in-use. The key elements are that a means exist for the potential transition of private perception to functioning reality, and that the organization be adept in the use of those power processes which ensure that the existing organizational theory-in-use will be thoroughly tested by new private realities.
OUTCOMES OF THE EXERCISE OF POWER

The exercise of power, from whatever base, may result in one of three outcomes: overt compliance without a corresponding and supportive change to theory-in-use, which may be labelled behavioural conformity; compliance with and supportive change to theory-in-use, which may be labelled attitudinal conformity; and, overt or covert organizationally dysfunctional behaviour where the negative consequences outweigh the degree of conformity present. Behavioural conformity occurs when the existing theory-in-use contains expectations which when applied may lead to conflicting behaviours, or conflicting attitudes and behaviours. In the case of planned change, one set of expectations may endorse the right of certain roles or positions to use power, whereas a second set of expectations may reject the content of the changes proposed. Cartwright (1965) has made the conceptual distinction that rejection of the right of a certain role or position to use power is resistance, whereas rejection of the content is opposition. Behavioural compliance, therefore, implies opposition, which will remain unless and until the change initiated and the theory-in-use are seen as congruent. Attitudinal compliance is instigated when the congruence of the theory-in-use and planned change has undergone the transition from private reality to shared reality. That is, whatever resistance there may have been to the initial use of power, or whatever opposition to the proposed change, if any in either case, has been dissipated. Dysfunctional behavioural responses to the exercise of power may result from resistance or opposition. Cartwright (1965) argues that resistance may be stimulated when the power process is personalized, or when an illegitimate use of power is perceived. That is, the resistance is a function of the normative standards inherent in the theory-in-use. Opposition on the other hand appears to be a function of the degree of incompat-
ibility between the proposed change and the theory-in-use, and the strength of anchorage of the theory-in-use. Irrespective of whether resistance, or opposition, or a combination of both is applicable, organizationally dysfunctional behaviour, countenanced by the theory-in-use, may result.

Argyris (1973) suggests that dysfunctional behaviour finds its way into the theory-in-use partly as an outcome of the individual's adapting behaviour as he attempts to cope with the frustration and conflict that result from mismatched needs of the organization and needs of the individual. Elsewhere, Argyris and Schon (1978) have identified four sets of norms that are prevalent in the wider environment, that are inherited by the organization, and that contribute to dysfunctional behaviour. These sets of norms are, the unilateral definition and pursuit of individual goals; the maximizing of winning and the minimizing of losing; minimizing the generation and expression of negative feelings; and, the suppression of feelings in favour of objective intellectual thought and behaviour. The behavioural manifestations of these norms are expressed mainly through inadequate communication. Information may be withheld, selectively processed to emphasize what are perceived as "more favourable" aspects, obfuscated by surplus or irrelevant information, left purposefully vague and ambiguous, or a relevant viewpoint denied by invoking some control mechanism. These behaviours, and the norms on which they are based, may be related to a number of the previously listed implementation determinants, particularly organizational climate, peer and authority relationships, and organizational structure.
The preceding sections have identified two key elements in the implementation of planned change: the existence of organizational conditions which present the potentiality for the transfer of private perception to operational reality; and, skills in the exercise and use of power, such that any one person's private perception of a discrepancy between theory-in-use and organizational practice may be thoroughly tested by the organization. In turn these two key elements have been related to a number of determinants of implementation, and in particular to organizational characteristics, including organizational climate, environmental support, demographic factors, peer and authority relationships, and organizational structure.

It follows that an organization's ability to successfully implement planned change will be enhanced by actions which increase the potency of, and the range of functions included within, the theory-in-use and by actions which increase the organization's facility in the exercise and use of power. Organization development is designed to do both of these things.

Although the term recurs frequently in the literature and although its practice appears to be flourishing both in terms of the number of practitioners and the types of organization involved (Burke, 1978), there is neither a universally accepted definition of organization development, nor a unifying theory underpinning its practice. The absence of a single, definitive notion of what constitutes organization development led to a plethora of "organization development" activities in the early to mid 1970's. Poorly conceived and ill-executed programs, (Fullan et al, 1978b) were undertaken for either opportun-
istic motives, (Derr, 1976), or as a reified, instant panacea for all that was wrong in schools (Harvey, 1974). These efforts severely dented the image of organization development, created a reputation for ineffectiveness, and obfuscated its values and conceptual foundations.

In spite of the profusion of definitions and practices, a recent systematic review has been able to identify, summarise, and list the common, critical elements which define organization development as

"planned change; long range; organizational improvement in problem solving, communication, collaboration, participation, trust, and in uncovering and confronting conflict; a focus on human processes and techno-structural factors in order to improve both task accomplishment and quality of life of individuals; assistance of a change agent or catalyst; using behavioural science techniques to gather data in a reflexive, self analytic fashion."

(Fullan et al, 1978(b), p.6)

This summary, which is based on the work of theorists and practitioners such as Miles and Schmuck (1971), French and Bell (1978), Derr (1974), Kimberly and Neilson (1975), Schmuck et al (1977), Coad, Miskell and Van Meter (1976), Petrella (1977), and Crockett (1978), has been derived from organization development interventions undertaken specifically in educational institutions. However, it is also consistent with the theory and practice taken from other situations as noted by authorities such as Bennis (1969), Beckhard (1969), and Huee and Bowditch (1977).

In many respects it is not dissimilar to many other organizational improvement theories or practices. Its uniqueness derives primarily from the use of reflexive self analysis. The organization is helped to gain insight into its own processes, and to develop its own resources to improve the effectiveness of these processes. It is also unique in its pursuit of a balance between organizational effectiveness and
the quality of work life, a balance that Fullan et al maintain is essential \(1978b, p.50\).

The conceptualization and theory which follow are closely related to Fullan et al's summary of critical elements, and therefore are consistent with the mainstream of organization development theory and practice. It is the concept and theory as applied by this practitioner, within a particular context, and as such it serves to define the treatment used in the research. In the sections which follow, the theory, concept and essential characteristics of the particular model employed in this study are examined in detail.

EDUCATIONAL INSTITUTIONS AS ORGANIZATIONS

Although this study acknowledges and accepts the notion of multiple private realities within an organization, the concept of theory-in-use is based on the understanding that these realities are interactively developed and shared, and that as a consequence there is a degree of commonality which influences organizational behaviour. This commonality, or theory-in-use, is responsible for systemic-type properties of the organization, and makes a systems perspective approach to organizational development in educational institutions desirable. This approach emphasizes the totality of an educational institution as it seeks to bring together a multitude of different elements - goals, people, knowledge, techniques, equipment, facilities, and management - in an integrated and co-ordinated manner. Educational institutions achieve this with varying degrees of success. Most institutions have established an administrative hierarchy with respect to rules, regulations, paperwork, and lines of authority. However, in the individual classroom a great deal of autonomy and discretionary judgment is exercised. Nevertheless,
because of the administrative linking, there is an essential inter-
dependence between these elements. No one element operates individually
and separately from the others. Systems theory emphasizes this inter-
dependence.

Interdependent relationships between organizational elements mean that
planned change in one element will have some interactive effect on
all other elements of the system. It follows that intended change
can be induced in an organizational element indirectly, as a consequence
of deliberate, direct change in another element. It also follows that
desired change in a particular organizational element may be best facil-
itated when supported by parallel, reinforcing changes in other elements.
The implications of this are consistent with the systemic principle of
equi-finality, or the ability of a system to reach the same final state
from differing initial conditions, and by a variety of paths, (Katz and
Kahn, 1978, p.30), and are an essential foundation to the strategies and
theory of organization development. The consequences of interdepend-
ency need to be anticipated and planned for in order to avoid disruptive
or dysfunctional outcomes. The possibility is opened, whether because
of expediency or necessity, of bringing about change indirectly rather
than through direct intervention with the target element. Further,
strategies of multiple, concurrent interventions in a number of closely
related organizational dimensions may be not only appropriate, but
also mutually reinforcing.

The nature of multi-element, interdependent, non-linear relationships
may also explain some of the anomalies which are at times evident in
planned change outcomes. Massive efforts to promote planned change in
educational and other organizations frequently disappear, in terms
of result, after an initial burst of activity. Scarcely any lasting
change remains in evidence. This result flows partly from a simple dilution and absorption of effort and effect as a single element is immersed in a number of others. However, it is also partly a result of the nature of the interaction. Mathematically it can be demonstrated that there is an intrinsic propensity for multiple input, non-linear systems to defeat planned change in the system (Forrester, 1969). However, it can also be demonstrated that within the same system there exist a number of points where considerable leverage can be exerted on the entire system. The existence of such points and relationships not only reinforces the implications of systemic interdependence and organizational change, but it also emphasizes the importance of recognizing and understanding the relationships between elements.

STRUCTURAL FEATURES OF SYSTEMS

Recognizing and understanding the relationship between organization elements is fundamental to any major effort in organizational change and improvement.

Although interdependence and the need to view systems in total has been stressed, it is important to recognize that organizations are not monolithic entities. Each organization has identifiable boundaries which serve to delineate it from its environment, however, at the same time it is part of and interacting with that environment. The organization interfaces with the environment as it imports resources and exports a finished product.

Similarly at a micro level the organization exhibits interfaces, a product of the organization's differentiation and integration mechanisms.
All open systems exhibit a trend over time towards increased differentiation and elaboration of function, (Katz and Kahn, 1978). The common tasks which result are carried out by groups of individuals which may be relatively fixed or transitional. In either case they are part of the most vital interface of all, the interpersonal or intragroup. A further organizational interface is the intergroup, a product of the need for the organization to manage its role in the environment and to therefore integrate and co-ordinate the separate activities of specialized, differentiated groups towards the organization's goals. A fourth level of interface is that between the individual and the organization. Individuals are employed by organizations to fulfil certain functions, but in addition to the specific skills for which they are employed, individuals also bring their personality to the workplace. Personality is a complex combination of physical and mental attributes, values, attitudes, beliefs, tastes, ambitions, interests, habits, and other characteristics, and it strongly influences the individual's relationship with the organization. Consequently at the level of the individual/organization interface the organization's concern is to produce a combination of organizational incentives and environmental conditions which leads to the individual contributing effectively to the attainment of organizational goals. While this is largely a function of the immediate workgroup it is also a function of the larger organization. The concepts of "psychological contract", or reciprocal expectations between organization and individual, (Schein, 1972), and of "organizational climate" are both relevant to the organization/individual interface.

These four structural interfaces provide a basic framework for the analysis of organizational behaviour. However, they are also where the interactive formulation of theory-in-use takes place, and to the extent
that organization development aims for a broader and more potent
type-in-use they are of considerable importance as intervention
targets.

A second dimension of organizational structure is provided through
the organization's generic sub-systems. Where certain norms and values
are specific to a particular function of an organization a distinctive
sub-culture or generic sub-system, results. A number of theoretical
studies have identified such sub-systems, including Katz and Kahn (1978)
and Kast and Rosenzweig (1979). The latter identify five major generic
sub-systems: a goals and values sub-system, which seeks to relate
the organization to its environment at a strategic level to ensure
that the organization performs a function for society, as well as
conforms to society's requirements; a technical sub-system, concerned
with the tasks, techniques and technology in the energetic transformation;
a psycho-social sub-system, concerned with the interaction of individ-
uals and groups and their concerns with motivation, status, role, group
dynamics, values, expectations, and attitudes; a structural sub-system,
concerned with the formal notion of the organization, the differenti-
ation and integration of functions, the patterns of authority, communi-
cation, and work flow; and, a managerial sub-system which spans the
entire organization, controlling, co-ordinating, and directing. Kast
and Rosenzweig's classification is adopted in this study as part of
the framework for the analysis of organizational behaviour. The sub-
ystem they identify as psycho-social is closely aligned with the concept
of theory-in-use, however, the presence of the other sub-systems emphasis-
izes that theory-in-use is formulated within the context of other
environmental factors.
Fig. 2:2  Two dimensional organizational structure, by interface and generic (cultural) sub-system.

The use of both generic sub-systems and organization interfaces provides a two dimensional frame of reference to organizational structure, as shown in Figure 2:2. This two dimensional view provides a framework for the analysis of organizational behaviour in terms of level and process/function and assists in the identification of areas where theory-in-use is not operative or lacks potency.
AIMS AND GOALS OF ORGANIZATION DEVELOPMENT

The ultimate goal of an educational institution is effectiveness, or making an optimal contribution to the suprasystem, society, over time. In order to achieve this there is a need for institutions to be able to adapt to changing conditions, however, there is also a need for sufficient organizational stability to enable the institution to function satisfactorily. Fulfilling these joint functions requires a "delicate balancing act" (Kast and Rosenzweig, 1979, p.565). Organization development, as its goal, seeks to promote organizational effectiveness, a goal that leads to two inter-related operational aims. The first of these aims is that it assist the organization develop a capability to successfully manage its affairs against appropriate objectives and results; the second, that it assist the organization in providing a quality of work life that more nearly matches the organization's needs with those of the individual. The first aim is primarily related to adapting to, and coping successfully with change. It requires that the organization possess what has been referred to in this study as organizational adaptability. The second aim has two foundations. In part it is based on a set of assumptions of the nature of man, consonant with the view proposed by McGregor (1960) in his "Theory Y", or by Tannenbaum and Davis (1969), and broadly labelled as "humanist". It is also based in part on the argument that organizational output depends ultimately on individuals, and that if individuals are fulfilling some of their needs co-jointly with organizational needs, then they will tend to remain with the organization, perform assigned activities dependably, and orient their behaviour to the service of organizational objectives. The second aim, therefore, supports organizational stability, as well as providing the "people" basis by which organizational adaptability may proceed.
ORGANIZATIONAL ADAPTABILITY

The essential requirement in order to be able to manage affairs against appropriate objectives and results is a two level problem solving or error correction capability. At the first level it is necessary to be able to assess processes and outcomes against designated objectives, a capability which implies accurate feedback, analysis, assessment, and diagnosis based on prevailing organizational strategies and assumptions. Where the analysis and diagnosis indicates that the existing processes and outcomes do not match organization's objectives, new actions are planned and implemented. This level of problem solving or error correction has been previously labelled as second order change.

At the second level of problem solving/error correction it is necessary to test the appropriateness of the organization's objectives, or theory-in-use, and these are subject to change. The environment in which organizations exist is turbulent, (Emery, 1974), a reality most pertinent to the TAFE colleges which are the subject of this study. TAFE colleges carry the twin responsibilities of remaining viable in a turbulent environment and for maintaining access of individual members of the workforce, ".... to the highest available standards of occupational excellence and relevance, whatever his or her chosen path of studies" (Australian Committee on Technical and Further Education, 1974, p.7). This brief, particularly in the light of rapid technological change, poses a formidable task. However, when it is combined with a changing set of social attitudes and values, changing patterns of consumption, changing proportionate distributions of enrolments between study areas, or changing expectations of the role of TAFE including the provision of a range of programs for the unemployed young (TAFEC, 1979, p.8), it produces a constant challenge to the appropriateness of existing objectives and theory-in-use.
The two levels of problem solving nominated above involve substantially the same processes. The distinction is made in order to emphasize the need for self-reflection, analysis, and diagnosis both within the organization and in its relationship with the environment. A further distinction is that changes to the theory-in-use are more fundamental than changes to strategies because they involve attitudes, values and norms and consequently are likely to be more difficult to effect.

Continuous, reflexive problem solving behaviour has been widely recognized as an essential pre-requisite to maintaining an effective organization. This behaviour has been variously labelled as self-renewing, morphogenetic, the adaptive-coping cycle, self-diagnozing, and adaptability. Conceptually each refers to essentially the same processes.

For the purposes of this study, Schmuck et al's term 'adaptability' which is derived from an educational context is adopted. They describe the process as,

"planned and constructive adaptation to change, not merely adjusting or acquiescing to externally imposed change."

(1977, p.9)

There is considerable agreement among theorists as to the competencies associated with adaptability. First and foremost among these competencies is some mechanism by which goal consensus may be promoted. It has been noted that the goals of educational institutions are often stated in ambiguous, diffuse terms (Bidwell, 1965; Pincus, 1975). This lack of clarity complicates the development of a coherent organizational program of activities, and results in group behaviour being guided "mainly by personal needs and interests". (Cartwright and Zander, 1968, p.401). This is not to suggest that complete goal consensus is ever attained, but rather that for organizational adaptability there must be
some shared view of where the institution is heading. A further competency required for adaptability is a monitoring and feedback capacity to provide the raw data from which performance gaps may be identified and against which theory-in-use is tested and ultimately reconstructed when found wanting. Similarly communication adequacy, in the form of valid, relevant, available, and understandable information is required, as is also a proactive responsiveness towards feedback. Internally the organization requires a capacity to adopt fluid procedures for the distribution of influence to cope with unpredictable situations, as well as knowledge of and access to available resources both internal and external to the organization. Finally, the organization should also possess co-ordinated sub-systems, to facilitate quick and effective responses, a systematic problem solving capability, and an ability to assess progress towards goals.

To develop these competencies and to implant them into the organization's theory-in-use are therefore important intermediary objectives in seeking to promote organizational adaptability as a means of improving organizational effectiveness. Although the intervention into the organization may occur at any level, or in any sub-system, it is a corollary of the theory-in-use concept that the most potent vehicle of change, or of stability, is the intact work group. The existing theory-in-use is the most important single factor in determining the organizational behaviour of members of the organization, and the stability of, and changes to, theory-in-use are largely a function of social interaction. Because of this a significant proportion of the total intervention into any organization is likely to be at the intragroup level.
Katz and Kahn (1978) have identified the essential systemic functions of an organization as energetic input into the system, the transformation of energies within the system, and a resulting product or energetic output which is exchanged for further energetic input which reactivates the system. Within such a framework it is clear that technical considerations, such as goals, feedback, communication, differentiation, and integrating mechanisms play an important role in determining the continuing effectiveness of the organization. However, organizational effectiveness depends not only on technical considerations, but also on the human beings who fill the job positions within the organization.

Organization development brings a philosophical commitment to bear in relation to people within organizations. In embracing and adopting the values of Tannenbaum and Davis, and the values implicit in McGregor's "Theory Y", organization development rejects the notion of man as inherently lazy, irresponsible, narrowly self-centred, and requiring coercion to perform. Rather, each individual is a whole person, in process, and needs confirmation of himself/herself as a human being, rather than negative evaluation. Each person is uniquely individual with differences to be accepted and utilized to the common good, and is capable of responsibility, motivation, and internal commitment to goals. As a consequence of embracing this broad set of values, organization development brings a commitment to a working environment appropriate to these values.

However, the case for a particular quality of work life does not rest on value assumptions alone. There is a general acceptance that an individual's behaviour is stimulated by needs. If, as is the case,
individuals spend a substantial proportion of all their time at work, then it follows that individuals might potentially satisfy many of their personal needs through job related behaviours at the workplace. This logic is implicit in Suttle's definition of the quality of work life:

"The degree to which members of a work organization are able to satisfy important personal needs through their experiences in the organization."

(1977, p.4)

To the extent that individuals are able to satisfy their needs at the workplace it is reasonable to infer that alienation from work, or dissatisfaction associated with the occupation of a position, (Hoy et al, 1980) will be lessened. Alternatively, and more positively, the satisfaction of personal needs and concomitant job satisfaction has been positively associated with high morale and organizational commitment.

In either case, the ability to satisfy personal needs at the workplace constitutes a powerful motive to organizational behaviour and performance. The problem is to identify the important needs, a task which is not altogether straightforward given the existence of conflicting theoretical frameworks and the probable absence of individual consciousness of own needs. Nevertheless, certain domains of personal motivation which can be clearly related to the work situation do recur with regularity in the literature. Specifically these include activity, achievement, affiliation, and power, or, as Schmuck et al have expressed the existence of these motives,

"Individuals act so as to maximize their chances of taking initiative, being successful, experiencing friendship, and exercising influence over their own fate."

(1977, p.13)
These domains of personal motivation interact with the individual's understanding of the organizational context and with their understanding of the organization's theory-in-use. The latter legitimates organizational roles and behaviour, implies behaviours or initiatives which are to be nurtured, tolerated, or suppressed, and includes sanctions which might be brought to bear for violation of the implicit rules. As such it is a powerful influence on individual behaviour. The former, the organizational context, also exerts a powerful influence, particularly where the norms and behaviours associated with the theory-in-use are not explicit, or where the individual is expected to determine his/her own course of behaviour. The organizational context then gives rise to expectations of the direction, degree and persistence of effort required to achieve a particular outcome, as well as to expectations concerning the probability of being rewarded equitably, either intrinsically or extrinsically, for achieving that outcome. The effort produced by an individual is therefore a function of the expectancy that effort will result in performance, which in turn will result in reward, in interaction with the strength and potency of individual motives (Vroom, 1964).

In what they described as a generous assumption, Kast and Rosenzweig (1979, p.251) speculated that an individual's output over the long period was about 65% of his/her capacity. For an organization to tap into the individual's latent capacity it must utilize some of his/her higher order needs. The implications of this for organizational theory-in-use and for the design and structure of organizations appear clear. Theory-in-use must incorporate, or at least accommodate, a value structure which places a high priority on the satisfaction of personal needs and consequent behaviours at the workplace, concurrent with the satisfaction of the organization's needs. In parallel with this the organiz-
ation structure and design must accommodate the simultaneous pursuit and satisfaction of personal and organizational needs. Specifically, it appears to be important that the workplace is structured so as to increase opportunities for being successful at meaningful, challenging tasks, so that it allows for experiencing social interaction and friendship, and so that it provides the opportunities for exercising initiative and influence over one's own actions and destiny.

The outcome of providing a physical and normative environment for the satisfaction of personal needs at the workplace is an increase in the energy and effort directed towards the task. Provided that this behaviour is focussed in desired directions, that is, to ends desired by the organization, then the needs of both the individual and the organization will be satisfied, and in particular the energy required for organizational adaptability will be available.

ORGANIZATION DEVELOPMENT, THEORY-IN-USE, AND IMPLEMENTATION

There are some obvious relationships between organization development and implementation. The most obvious of these is the relationship of organizational adaptability and the implementation of planned change. For the transition from private perception to operational reality to occur organizations require a potent theory-in-use which includes a high degree of commonality, established through social interaction, across the entire range of organizational functions. It also requires skill and practice in the use of power and political processes to ensure that mechanisms exist whereby the existing theory-in-use can be thoroughly tested. Organization development builds these characteristics. It systematically seeks to develop communication and feedback skills, the promotion of goal consensus and evaluative capacity to assess
progress towards goals, and a responsiveness towards perceived discrepancies. Each of these contributes to the development of the process of social interaction which is fundamental to a potent theory-in-use. However, to the extent that organization development seeks to promote attitudes which value relevant, valid, and understandable information, and the questioning of all organizational functions in the promotion of goal consensus it contributes to the inclusion of all organizational functions in the theory-in-use. Finally, the methods used in organization development, which are detailed in Chapter 4, rely heavily on the organization members working through actual problems which are real and relevant to the particular organization. In developing facility in organizational processes the organization also develops skills in the use of power and politics, an attribute which this study has also identified as necessary for the transition from private perception to functioning organizational reality. It is important to note that organization development does not seek to promote any particular power process. Rather, the concern is to enhance the operation of those processes which are endorsed by the organization's theory-in-use.

A successful organization development intervention should also have a considerable impact on those organizational characteristics which this study has posited are determinants of the implementation process. It is likely that organizational climate will move in a direction which can be argued to be "healthier". Similarly, the recognition of mutuality of goals and the deliberate fostering of interaction and teamwork are likely to generate a greater degree of environmental support, while the carefully controlled and safe learning environment associated with an intervention are likely to lead to psychological success and a sense of efficacy in relation to handling organizational difficulties. Peer and authority relationships are likely to be more clearly understood as
a result of close interaction and the constructive development of teamwork as the organization members systematically work their way through actual problems. Finally, where the working through of actual problems indicates structural deficiencies which inhibit organizational performance the problem solving orientation of the intervention is likely to lead to a more amenable structure.

It is also likely that an organization development intervention will lead to changes in the theory-in-use which underpins a number of behaviours associated with strategies previously identified as determinants of implementation. In particular, attitudes which value relevant, valid, and understandable communication should contribute to the operation of more effective feedback mechanisms, while the emphasis on interaction, teamwork, and problem solving is likely to positively influence attitudes towards participation and planning. These outcomes, in combination with those of the preceding paragraph, strongly suggest that an organization development intervention, properly conceived and executed, should result in an intentional and planned shift in the theory-in-use to a position which better accommodates a substantial number of the elements identified as determinants of the implementation process. In turn this will lead to an enhanced organizational capacity to successfully implement planned second order change.
CHAPTER 3

REVIEW OF THE LITERATURE

INTRODUCTION

The preceding chapter considered the conceptual and theoretical foundations of this study. Three major interrelated components were identified and addressed: the process of planned change implementation and its determinants; theory-in-use, and particularly its instrumentality to organizational behaviour directed at the planned change process; and, organization development and its relationship to theory-in-use. The literature related to these three major components is the focus of this chapter.

IMPLEMENTATION

Implementation, as a critical element of the change process, is a recent focus of research. As recently as 1973 Pressman and Wildavsky could accurately state that

"except for the few pieces mentioned in this book, we have been unable to find any significant analytic work dealing with implementation".

(1973, p.166)

However, that gap no longer exists. Giaquinta (1978, p.3) has noted the phenomenal increase in the number of papers delivered to the Annual Meeting of the American Educational Research Association between 1972 and 1978 which explicitly reflect analytical and empirical work on the phenomenon of implementation. The same period has also seen a major field study of implementation undertaken by the Rand Corporation, the
development of major centres of study of implementation at the Research and Development Centre for Teacher Education, University of Texas, at the Network Inc., Massachusetts, and at the Ontario Institute for Studies in Education, Toronto. There has also been the publication of a number of substantial volumes as well as numerous journal articles.

The focus on implementation appears to have been stimulated by a growing awareness in the early 1970's of the widespread failure to promote lasting change in educational methods, practices and institutions. Among the first to articulate the problem were Goodlad and Klein who wrote:

"(a) very subjective but nevertheless general impression of those who gathered and those who studied the data was that some of the highly recommended and publicized innovations of the past decade or so were dimly conceived and, at best, partially implemented in the schools claiming them .... It is clear .... that a substantial number of principals and teachers .... claimed individualization of instruction, use of a wide range of instructional materials, a sense of purpose, group processes, and inductive or discovery methods when our records showed little or no evidence of them."

(1970, pp.72-3)

Comprehensive and carefully documented case studies by Smith and Keith (1971) and Gross et al (1971), reinforced the perception of failure at the implementation phase. Together with Charters and Jones (1973) who cautioned researchers to beware of the risk of appraising non-events where the treatment had not been implemented, these studies served to focus attention on implementation.

In the plethora of research and analysis which followed, a number of studies stand out in relation to this thesis. First and foremost, in terms of comprehensiveness, thoroughness, and sheer magnitude is the Rand Study. Under principal researchers Berman and McLaughlin the study documented in eight volumes the outcomes of a large scale field study of the implementation of Federally funded change projects in the United
States. Although the study suffered from a methodological weakness in that it relied for its assessment of change outcomes largely on the self-reports of persons responsible for the implementation of the change programs, nevertheless because of the size of the study and because of the concepts developed the study's generalized findings are of considerable significance. The Rand Study produced numerous conclusions and recommendations with respect to the educational methods associated with particular innovations, the resources available to projects, the scope of the proposed change, implementation strategies, organizational climate and leadership, and the characteristics of schools and teachers. The implementation strategies and the organizational climate and leadership are of particular interest within the context of this study. In effect they relate to the things that can be done by a school to improve implementation, and the things that can be done to a school, again to the same ends. Among the conclusions and recommendations concerning implementation strategies the Rand study strongly supported strategies based on in-service (use of concrete, teacher specific, and extended activities), feedback sessions (regular project meetings focussing on practical problems), and participation by involved staff (in making project decisions and developing materials). (Berman and MoLaughlin, 1978, p.34). Concerning organizational climate and leadership the study concluded that

"a school's organizational climate powerfully affected the project's implementation ....(through) the quality of working relationships among teachers, the active support of principals, and the effectiveness of project directors (Berman and MoLaughlin, 1978, p.30)."

The Rand study offers a clear justification for its conclusions regarding the role of the principal and project director: 
"The principal's unique contribution lies ... in giving moral support to the staff and in creating an organizational climate that gives the project "legitimacy"."

(1978, p.31)

while

"The (project) director's special skills and knowledge can clarify project goals and operations, minimize the day-to-day difficulties encountered by classroom teachers, and furnish the concrete information they need to learn".

(1978, p.31)

A similar, clear justification of the role played by the quality of working relationships between principal and staff, and between staff and staff is not offered.

Although the study notes that

"When teachers worked well together, they formed a critical mass that could overcome both task and emotional needs"

(1978, p.30)

it offers no further explanation and fails to establish any particular links between "quality of working relationships" and the concept of "mutual adaptation" which the study developed. The latter concept, mutual adaptation, is, in the view of this author, the most significant contribution made by the Rand study to the understanding of the implementation process.

The Rand study describes mutual adaptation as

"the process by which the project is adapted to the reality of its institutional setting, and teachers and school officials adapt their practices in response to the project".

(1978, p.28)
Mutual adaptation emphasizes the role of people in the implementation process and the manner in which they interact, and interact with the innovation. Implicitly the concept brings to the forefront the issues of politics, power and influence in the implementation process, issues which largely failed to attract interest before the advent of the Rand study. Since the concept was first clearly enunciated (Berman and McLaughlin, 1974) it has become a widely quoted and drawn upon reference point for consideration of the processes involved in implementation (Schon, 1976; Peterson, 1977; Kirst, 1978; House, 1979; Farrar et al, 1980; Fullan, 1980).

Although the Rand study failed to integrate the concept of mutual adaptation with its finding that the quality of working relationships was an important determinant of the implementation process, nevertheless other studies have addressed this relationship implicitly, if not in name. In particular a critique by Lighthall (1973) greatly influenced the formative stages of this study. Lighthall's critique is of the Smith and Keith (1971) study Anatomy of Educational Innovation, which is itself a substantial case study of a comprehensive planned change project. Lighthall's critique is not only of Smith and Keith's work, but extends to a re-analysis of their data and the presentation of an alternative strategy for successful implementation. Lighthall summarizes this strategy as,

"What is needed is a sense that realities are plural, not singular, and that one's own is partial, not complete; that realities must be enlarged and co-operatively explored, not plans presented and single-mindedly pursued; that problems, not solutions, should be the centre if co-operative thought and discussion are to take place as each new group of staff members and community participants becomes involved in school improvement; that innovators will be most effective if they identify with the major themes of realities in that system and seek their fruition, rather than seeking "protection" from the system's norms; that for organizational solutions to be acceptable and lasting they must be grounded in, and derived from, a set of problems common to a majority of the realities of those involved in or affected by the solution, not
derived from private and untested realities of those who happen to possess the power of position; and, finally, that leadership is helping others come to know and achieve what they want together, not getting them to do what the leader wants when their priorities differ from his\textquoteleft.\textquoteleft

\textit{(1973, p.280)}

\textit{Lighthall's} analysis is cast in these terms throughout and is in effect an essay on the critical importance of social interaction, a process inherent with difficulties and the point at which so much implementation fails. As \textit{Lighthall} states, the task is

\textquoteleft"To move the problem from an essentially private realm to a manifestly public realm, from individual psychology to social psychology, from impulse to collective commitment. It is precisely in this transition from the private to the public that so much of organizational innovation breaks down."

\textit{(1973, p.281)}

Allowing for differences in expression, it is clear that \textit{Lighthall's} perception of the implementation process matches the Rand concept of mutual adaptation. Further, \textit{Lighthall} is explicit that social interaction is the lynch pin of implementation and that the quality of working relationships is critical to social interaction and the sharing and enlarging of mutual realities. From this perspective his critique ties together the process and the determinate as identified by Rand, while at the same time it emphasizes the human element of implementation.

\textit{Fullan's} \textit{(1982)} study of educational change lends further support to \textit{Lighthall's} strategy. \textit{Fullan} writes

\textquoteleft"Implementation, whether it is voluntary or imposed, is none other than resocialization. The foundation of resocialization is interaction."

\textit{(1982, p.67)}
and again

"Lighthall states, as I do throughout this book, that educational change is a process of coming to grips with the multiple realities of people who are the main participants in implementing change. The leader who presupposes what the change should be and acts in ways which preclude others' realities is bound to fail".

(1982, p.82)

Numerous studies have emphasized both the time and energy required in social interaction to enable resocialization to proceed (McDonald and Rudduck, 1972; Giaquinta, 1973; Pellegrin, 1975; Kritek, 1976; Popkewitz, 1977) and of the reluctance of personnel to provide that time and energy (Gross et al, 1971; Bredo and Bredo, 1975; Pellegrin, 1975; Dinunzio et al, 1976; Warren, 1976; McLaughlin and Marsh, 1978). However, in spite of the need for social interaction and the difficulties of resocialization, a number of studies have commented on the degree to which it has been overlooked as an issue to be addressed. Gross et al in their extensive case study noted the school director's assumption,

"That any professional teacher 'worth his salt' could read a document describing the innovation and then, on his own, radically change his behaviours in ways that were congruent with the new model".

(1971, p.211)

Similar assumptions have been noted in other studies. (Pellegrin, 1975; Louis and Rosenblum, 1978; Miles et al, 1978(d)).

The mutual adaptation construct provides a most useful reference point to consider the dynamics involved in the implementation process, however, the Rand study's assertion that implementation was unlikely to be successful without mutual adaptation (Berman and McLaughlin, 1976, p.361) has been questioned by two recent major studies. The Dissemination Efforts Supporting School Improvement (DESSI) study, undertaken by
Network Inc., and the Research and Development Utilization (RDU) study, co-ordinated through the National Institute of Education, Washington, D.C., have both found evidence which suggests that institutions which have consciously and persistently pursued well defined change projects have experienced successful implementation. Part of the DESSI study concluded that well defined projects which consciously sought the objective "fidelity of implementation" showed better planned change outcomes than those where mutual adaptation had prevailed. (Huberman and Miles, 1982). In a cross-study analysis of DESSI and three other major field studies, including Rand, Loucks (1983, p.13) concluded that the education scene had changed rapidly since Rand in the sense that it had become far more sophisticated in its production, dissemination and support for new practices, and that as a consequence mutual adaptation was no longer of the same critical importance. The research evidence provided by the DESSI and RDU studies is far from conclusive re the efficacy of "fidelity" strategies versus mutual adaptation, but it has certainly rekindled the debate and is likely to be a central issue for a number of years to come.

The other major study of implementation which strongly influenced this thesis was a cross-study analysis by Fullan and Pomfret (1977). From a thorough and systematic analyses of twelve research studies of implement-ation Fullan and Pomfret developed a categorization of implementation determinants which provided a useful organizing framework for the critical analysis of implementation. This analysis and framework provided the conceptual basis from which the distinctive categorization used in this study was developed. Fullan and Pomfret's analysis was not the first. Giacquinta (1973) and Kritek (1976) both produced an analysis of factors influencing the implementation process and further useful analyses and categorizations have since been made, including
a development by Fullan (1982). However, at the time that it was produced it was clearly the most thorough and systematic such analysis and thereby heavily influenced the structure of this study.

DETERMINANTS OF IMPLEMENTATION

As indicated in Chapter 2 the categorization used in this thesis contains elements which, within the context of this study, are of considerably greater importance than others.

The research evidence which follows relates to those more important elements and in particular to the nine determinants which are utilized as dependent variables in the second stage of the study. The first five of these are drawn from the subset of determinants labelled Strategies and the remainder from the subset Characteristics of the Adopting Unit.

RESEARCH ON DETERMINANTS OF IMPLEMENTATION

In-service training is almost universally asserted to be an essential element for successful implementation. The Rand study concluded that

"Teachers required concrete, "hands on" training in translating often very general and fuzzy project guidelines into classroom practice, and adapting project concepts to the reality of their particular situation".

(Berman and McLaughlin, 1978, p.29)

However, the report was also equally emphatic that such training was generally of little effectiveness where it was administered as either "one-shot" or "pre-implementation" only training (Berman and McLaughlin, 1978, p.27). The report explains the ineffectiveness of these modes of
in-service in terms of

"The training and assistance needs of teachers change over time as they encounter new problems in their classrooms, and usually cannot be accurately anticipated. But even if it were possible to forecast the nature of staff training needs, training that treated issues before they become problems was usually not meaningful to project staff".

(1978, p.27)

The Rand study's explanation does not appear to go far enough in that it fails to concede any role to sustained interaction between the staff involved. As Fullan has stated, and provided convincing supportive evidence of,

"processes of sustained interaction and staff development are crucial regardless of what change is concerned with. People can and do change, but it requires social energy".

(1982, p.67)

Fullan's position integrates the empirical findings of Rand and other studies that in-service must deal with the specifics of the planned change in experiential, concrete ways, (Doll et al, 1973; Pellegrin, 1975; Clinton, 1979; Kirst, 1979; Bolam, 1980), together with the strategy of social interaction, as developed by Lighthall and adopted by this study.

Resource support for planned change has a research history which predates the focus on implementation by several years. The Rand study reached the ultimate conclusion.

"More expensive projects were generally no more likely than less expensive ones to be effectively implemented, elicit teacher change, improve student performance, or to be continued by teachers ... differences in project resources mattered less than local choices about how to implement the project".

(1978, pp.24-25)
The Rand study's conclusions have been supported in other studies (Pinous, 1975; Kritek, 1976; Warren, 1976; but see also Shipman, 1974), however, it would appear to be unwise to discount the availability of resources too greatly. The Rand study itself, in an earlier volume, reported that the lack of materials, space and equipment was the third most frequently mentioned problem to implementation (after lack of clarity, and lack of familiarity with materials and methods) (Berman and Pauley, 1975, p.40). Other field studies have linked the presence of resources with the elimination of problems (Cooper, 1978; Fleming, 1978) and their absence to the exacerbation of problems (Miles et al, 1978(d); Von Eschenbach, 1979). More important, however, is seen to be the absence, for whatever reason, of key materials when required, (Gross et al, 1971; McDonald and Walker, 1972; Doll et al, 1973; Pellegrin, 1975; Coward, 1978; Reinhard et al, 1980), the availability of administrative time and support (McDonald and Rudduck, 1972; Dinunzio et al, 1976; Coward, 1978; Firestone, 1979; Crawford, 1979; Finch, 1981) and the quality of resources made available (Murphy, 1971; Pellegrin, 1975; Miles et al, 1978(d); Giaquinta and Kaslow, 1979).

On the balance of available evidence it would appear that the availability of adequate resources is analogous to a hygiene factor: the relative absence of resources may seriously impair the implementation process, but a relative abundance is not sufficient for success.

Feedback mechanisms were identified by the Rand study as an important determinant of the implementation process, with certain qualifications. The study concluded that
"Regular meetings of project staff that focussed on practical problems, not administrative or routine matters, often provided a forum for the feedback necessary for adaptation; an opportunity to share successes, problems, and suggestions; and, a vehicle for building the staff morale and cohesiveness important to effective implementation. However, meetings were seldom effective without a supportive school climate".

(Berman and McLaughlin, 1978, p. 29)

The Rand study's conclusion is explicit to observations made during a particular field study, however, it relates readily to a central contention of this thesis, that social interaction is at the heart of successful implementation. Feedback, along with the strategy "participation", provides one of the necessary forums for social interaction, while it recognizes at the same time the central importance of a supportive school climate to this process. It is part of the process of coming to grips with the multiple realities of the participants.

Participation, in many ways, serves similar ends to feedback in that it provides opportunities for social interaction. It is one of the most widely and strongly advocated strategies for implementation, to the extent that it has been characterised as a "general law of innovation" (Havelock, 1969). The Rand study reported a strong correlation between participation and successful implementation, and provided a rationale for the high correlation they observed.

"The reasons for this powerful effect were easy to uncover. Teachers, who are closest to the problems and progress of project activities, are in the best position to suggest remedies for perceived deficiencies. Moreover, where project activities and objectives reflected significant teacher input, the staff was more likely to invest the considerable energy needed to make the project work. The project, in short, was "theirs"."

(1978, p. 29)

Fullan is equally assertive that participation is essential to sorting out the details of implementation:
"Teacher participation in decisions about implementation is not just essential for program acceptance. The identification and solution of program problems require teacher decision making'.

(1982, p.67)

In a subsequent paragraph Pullan expands on this assertion and relates participation to interaction and the sharing of multiple realities, when he states,

"Limited teacher participation in decisions would be a good indicator that the subjective meaning of change is not developing, as would teacher decision-making which occurred without active involvement in staff development and other interaction-based activities".

(1982, p.68)

The latter position accords closely with that adopted by this study, however, other research evidence indicates that there is not a simple relationship between participation and implementation. Just as Rand and other studies have linked participation with successful implementation (Flynn, 1976; Miles et al, 1978; Paakard and Jovick, 1978; Miskell, 1979; Ridley and Farrar, 1982), so other studies have linked participation with unsuccessful implementation (Alutto and Belasco, 1972; MacMillan, 1975; Pellegrin, 1975; Wood, 1978; Felker, 1979; Bullock, 1980). Although the latter set of studies have not necessarily identified participation as the cause of non-implementation, nevertheless that was partly the conclusion reached by Hurst in a review of planned change literature.

"... there is little evidence to suggest that this (participation) helps implementation, and it may even hinder it".

(1978, p.24)

The inconsistent findings may be partly explained by the nature of participation. A recent comprehensive study (Dachler and Wilpert, 1978) has clearly demonstrated that participation is multidimensional, as
well as multi-level. Personnel within educational institutions have a
tacit understanding of "domains", or "spheres of influence", where
decision making is conducted. When people participate in activities
within what they believe to be "their" domain their participation is
legitimated, and a number of studies have found that such participation
is more effective (McMillan, 1975; Likert and Likert, 1976; Mohrman
et al, 1978; Bullock, 1980; Gehrke and Parker, 1981). Alternatively,
ineffective participation has been associated with activities which
are perceived as "not within" the staff's domain (Kunz and Hoy, 1976;

Apart from the question of legitimacy, a reluctance to participate
on other grounds has been noted. Mohrman et al commented on the

"paradoxical situation of teachers desiring greater participation
in an area in which they apparently derive little satisfaction
from such participation".

(1978, p.26)

Frustration over a lack of skill in participating (Blumberg et al, 1974;
Seldin and Malloy, 1979; Bullock, 1980), and a feeling that the "real"
decisions had been made elsewhere and that participation was therefore
no more than tokenism (March and Olsen, 1976; Firestone, 1979; Duke
et al, 1980) have also been found to be factors inhibiting particip-
ation.

Firestone has recorded a further potential outcome of participation.

"Participation may reduce resistance to change, but it does so by
implicitly inviting normally silent groups to speak up. This
possibility involves risks for already influential actors, who
may find their own influence jeopardised. Yet, if the new partic-
ipants do not gain influences, they may feel that their particip-
ation is not real and frustration may arise".

(1979, p.184)
Eide (1973) issued a similar caveat, based on an extensive review of work undertaken in Europe.

The research findings listed do not exclude participation as a strategy to assist implementation, but rather point to the need to exercise discretion in its use to ensure that the context is one in which staff see participation as a legitimate role, and a desirable activity. Where such a context does not prevail a more appropriate strategy may be to ensure adequate opportunities for consultation, interaction, and feedback from those affected by the proposed change.

Planning has similarly been a widely advocated strategy for implementation and in at least one change model it has been asserted to be

"The sine qua non of successful adoption, implementation, and institutionalization of change".

(Zaltman et al, 1977, p.127)

The Rand study's observations related to planning emphasized the planning process rather than the content of planning. The study's primary researchers stated

"well implemented innovations (resulted from) ... planning that established channels of communications, set forth initial goals and objectives with a representative group of prospective project participants, and maintained a continuous process of planning".

(Berman and McLaughlin, 1976, p.360)

a perspective which implicitly recognized, in part at least, the importance of sharing and developing understanding by those involved. Fullan develops the notion of process further when he examines why planning frequently fails to lead to successful implementation.
"In short, one of the basic reasons why planning fails is that planners or decision-makers of change are unaware of the situations which potential implementations are facing. They introduce change without providing a means to identify and confront the situational constraints, and without attempting to understand the values, ideas and experiences of those who are essential for implementing any changes".

(1982, p.33)

In effect Fullan is arguing not only for planning which addresses the mechanics of a planned change, and the concomitant constraints as they appear, but rather planning which allows the implementers to exchange their realities, and to review and alter them when the need is felt. To these ends Fullan argues that planners need a theory and understanding of the change process (1982, p.96)

Most studies which have identified inadequate planning as being linked with implementation failure have given little consideration to the human process perspective and instead have emphasised failure resulting from what are essentially mechanistic causes. Gross's summary of the case studies of the Experimental Schools project is representative of this view:

"(The administrators) planning efforts typically failed to consider that the way an innovation is initially presented to members of a faculty can have a critical bearing on their reactions to it and their motivation to implement it. They gave little thought to anticipating the types of obstacles that could arise during different phases of the change effort and to mechanisms that could be established to identify and overcome them. They usually failed to consider role definition and role overload problems and failed to provide teachers with professional services and support needed for implementation".

(1979, p.29)

While not questioning the accuracy of such observations, the conceptual framework which underlies this study would suggest that adequate attention must also be given to the social interaction aspects of planning. The adoption process was judged by the Rand study to be one of the
most predictive determinants of implementation outcome. Five patterns were identified by which projects were initiated and of these two predominated: A problem solving orientation which emphasizes search and selection procedures, and, opportunism, or the availability of outside dollars. The latter pattern was almost never associated with successful implementation:

"projects generated by opportunism were characterized by a lack of interest and commitment by participants, indifference to activities and outcomes, and little serious change was ever attempted or occurred".

(Greenwood et al, 1975, p.19)

Clinton has captured the stark reality of the cynicism and opportunism which can accompany the adoption process. An application for funding for an Experimental Schools project, rated by Washington officials "to be of such educational significance ... to warrant selection", was described by its initiator, the local Superintendent, as

"... bullshit put together by master bullshitters ... besides it's the in-phrase, it's where the money is".

(1979, p.222)

Other empirical studies which have reported on the effects of an imposed, top-down decision process, have generally reported its association with implementation failure (Bredo and Bredo, 1975; Packard and Joviak, 1978; Von Eschenbach, 1979).

While it is true that research rejects the notion of a bureaucratically oriented adoption process, neither does it endorse participation in the adoption process as necessarily leading to effective implementation. Fullan (1982) cites research by Rosenblum and Louis and a review by Giacquinta in support of this and proceeds to argue,
"The solution is not that everyone should participate in planning - a clear impossibility. Rather it is the quality of the planning process which is essential: the degree to which a problem-solving approach at the adoption stage is combined with planning ahead for implementation .... More important for change in practice, however, is implementation-level participation in which decisions are made about what does work and what does not".

(1982, pp.64-65)

The general content of the preceding paragraphs served to guide this study in the consideration of planning as a determinant of implementation, however, it is apparent that there are research gaps in establishing definitive relationships between different modes of planning and effective implementation.

Organizational climate has been frequently reported as a determinant of the implementation process (OECD/CERI, 1973; Goodlad, 1975; Evans and Sheffler, 1976; Miskell, 1980). The concept, however, is rarely defined with any rigour and the somewhat amorphous terms which are used make it difficult to determine exactly what has been related to success or non-success. The Rand study is a fair example. In its ultimate volume it links together "organizational climate and leadership", and concludes that

"Three elements of a school's organizational climate powerfully affected the projects' implementation - the quality of working relationships among teachers, the active support of principals, and the effectiveness of project directors".

(1978, p.30)

This study would accept that the "quality of working relationships", properly defined, is an element of organizational climate. However, the inclusion of what is generally accepted as an indirect factor in organizational climate, "support of the principal", and of another factor which at best would have tenuous claims to inclusion as an
element of organizational climate, emphasizes the lack of rigour with which the term is used.

Numerous attempts have been made to define the dimensions of the construct (Halpin and Croft, 1963; Kimpston and Sonnabend, 1975; Miles, 1975; Likert and Likert, 1976), but as McGeown (1979, p.252) has written,

"there is little consensus regarding the dimensionability of the construct, the number and designation of elements postulated, their interaction, salience, determinants, and correlates".

There are also numerous authorities who adopt a phenomenological perspective which serves to deny the existence of organizational properties, such as climate, independently of participants' "construction of reality". This viewpoint is epitomized by Johanesson's (1971, p.30) assertion,

"there are potentially as many climates as there are people in the organization".

However, as Hellriegel and Slocum (1974, p.256) have concluded from their analysis of 31 separate studies, there are

"climate consistencies which would be difficult to explain as representing only a process of averaging extreme individual differences".

Further, an intensive field test and comparison of the two most widely used models of the construct, those of Halpin and Croft, and of Likert and Likert, found a "positively significant" relationship between the two, thereby lending support to the concept, as well as to the comparability of these two.
Although organizational climate has been linked to successful implementation it is of interest that \textit{Louis and Rosenblum's (1978)} study which specifically investigated the relationship of school culture (climate) and implementation in the Experimental Schools program found that schools which were characterized by high tension, disputes, and high dissatisfaction among staff with their influence on education decisions, were also the schools which implemented changes at the greatest level.

Similar conflicting outcomes led \textit{Pullan and Pomfret} to conclude in their review,

"... there are major unresolved issues ... even if there is a relationship between leadership and peer relations on the one hand, and effective implementation on the other hand, we are left with the question of what factors are related to those social system characteristics in the first place".

\cite{Pullan1977}(p.384)

This study sought to explore the first of these relationships, of leadership and peer relations to effective implementation, but has not attempted to investigate the elements which underly these social system characteristics.

\textit{Environmental support} has been subdivided into two components in this study. The first of these, peer support, which is partly emotional, "providing a hug at a difficult moment" \cite{Reinhard1980} and partly practical, "approval of peer elites" \cite{Pincus1975,p.120} has been extensively discussed in an early segment of this chapter. In that discussion it was evident that the Rand study lent empirical support to the notion that peer support is a key determinant of the implementation process. Other empirical studies, notably \textit{Miles et al}, \cite{Miles1978d} and \textit{Rosenblum and Louis (1979)} strongly confirm this relationship.
The degree of peer support necessary has also been the subject of some research. The Rand study concluded that peer support must constitute a critical mass to ensure success (Berman and McLaughlin, 1978, p.30) and one of the researchers involved in the study has specified

"that usually meant not fewer than 20-25 per cent of the school's staff".

(Mann, 1976(a), p.327)

The support of the principal is similarly seen as critical to success. Again, as vividly recorded by Mann,

"... every project identified the system's principal as a critical force ... In those few cases where the principals did support the projects the changes were as swift and dramatic as a proposal writer's fondest dream".

(1976(a), p.332)

More sedately the Rand study's ultimate volume concluded

"the importance of the principal ... can hardly be overstated ... Projects having the active support of the principal were most likely to fare well. In general, the more supportive the principal was perceived to be, the higher was the percentage of project goals achieved".

(Berman and McLaughlin, 1978, pp.30-31)

Other major field studies have reached similar conclusions. (Miles et al, 1978(d); Emrick and Peterson, 1978; Gross, 1979).

In reaching this conclusion a number of studies have noted both the relative lack of involvement of principals in planned change efforts and their lack of skill in managing the change process. Fullan attributes these characteristics to a lack of preparation for the role.

"What the principal should do specifically to manage change at the school level is a complex affair for which the principal has little preparation. The psychological and sociological problems of change which confront the principal are at least as great as those which confront the teachers".

(1982, p.71)
The critical role of peer and principal support in the implementation process has been attributed to the notion of "legitimacy" (Berman and McLaughlin, 1978; Miles et al, 1978(d)), however there appear to be no studies which have specifically and rigorously investigated the notion of legitimacy in relation to implementation.

Peer and authority relationships. Although very similar to peer and principal support, it is differentiated because it is more concerned with the quality of the relationships.

Successful implementation ultimately depends on social interaction and shared understandings, or, as it has been described elsewhere in this thesis, the organization's theory-in-use. Social interaction in turn depends on the quality of peer and authority relationships. Where this quality of relationship has not developed there is evidence of inhibiting influences on the implementation process. Sarason states the case succinctly. He notes that teachers are frightened to question because

"they fear (it) will be construed as a lack of intelligence and competence".  

(1966, p.16)

and because of

"the tendency on the part of administrators and supervisors to relate to teachers in a way conducive to one-way conversations".  

(1966, p.16)

Stake and Easley (1978) reached the same conclusions in their Case Studies in Science Education.
Open and receptive peer and authority relationships provide both the basis for two-way communication and a "security for making mistakes" (Fleming, 1978, p.32). However, Miles et al, (1978(d)) caution that where close "open and receptive" relationships exist only within the group it may serve to make the group insular and unprepared for the realities of the external environment.

"one suspects that the faculty used techniques such as the "communication workshop" to reassure themselves and avoid contact with growing community disfavour. While the mechanism had the effect of integrating the planning group, it ill-prepared them for the later onslaught of parental criticism". (1978(d), p.12)

A typical assumption of much of the organizational behaviour literature is that power equalization is a valuable strategy through which to promote healthy peer and authority relationships (Bartunek and Keys, 1980). However, there is evidence of considerable individual differences in the way teachers relate to different power structures or applications of power (Warren, 1969; Isherwood and Hoy, 1973; Miles et al, 1978(d)). This would appear to reinforce the previously expressed caution of ensuring that participation based strategies are used with discretion.

**THEORY-IN-USE**

The second major group of concepts introduced in the preceding chapter is the notion of "theory-in-use" and the following section refers to the research literature in this area. Organizations were identified as existing at two levels; a formal level, described by an organization chart, hierarchy of authority, aims and objectives, lines of command, and integrating processes, and labelled by Argyris and Schön (1978, pp.14-15) as the "espoused theory", or "theory-of-action";
and a second level, the reality of what actually takes place, a reality that is the product of a tacit agreement between the individual members of the organization. This level Argyris and Schön labelled the "theory-in-use" (1978, p.15).

Most of the literature related to the existence of the two levels, and the nature and formulation of theory-in-use is conceptual, although much of it is also simply assertion or assumption. What research evidence does exist is generally incidental to some other major research focus.

The theoretical position of the existence and nature of the two levels of organization has been well stated by Blau and Scott (1962):

"It is impossible to understand the nature of a formal organization without investigating the networks of informal relations and the unofficial norms as well as the formal hierarchy of authority and the official body of rules, since the formally instituted and the informally emerging patterns are inextricably intertwined. The distinction between the formal and the informal aspects of organizational life is only an analytical one and should not be reified; there is only one actual organization".

(1962, p.6)

This position is broadly endorsed in other theoretical studies (Immelmann and Pilecki, 1970; Simon, 1973; Carlisle, 1976; Huse and Bowditch, 1977; Kast and Rosenzweig, 1979; Boje et al, 1982) and appears as an assumption in numerous field studies (Giacquinta, 1975(b); Hanson, 1976; Feitler, 1980; Firestone, 1980). Empirically it is less in evidence, although the two levels have been explicitly identified or described in a number of studies (Sarason, 1971; Hanson and Brown, 1977; Burlingame, 1980; Deal and Celotti, 1980; Popkewitz, 1982; Popkewitz, Tabachnick, Wehlage, 1982).
Similarly, there is little apparent direct research evidence related to the role of shared expectations as an influence on behaviour in schools, although again it is the frequent subject of theoretical studies. French and Bell (1978) have theorized the relationship of shared expectations to behaviour as,

"first, much individual behaviour is rooted in the norms and values of the work team. If the team, as a team, change those norms and values, the effect on individual behaviour is immediate and lasting. Second the intact work team possesses the reality configuration of relationships that the individuals must in fact accommodate to and learn to utilise and cope with. That is to say that many of the "significant others" of the individuals work world are in the work group ... Third, the reality configuration of organizational dynamics that the individuals must accommodate to are found in the work team. By this we mean that the work team is the source of most of the individual's knowledge about organizational processes such as communication, decision making, and goal setting. These are the processes that most influence the individual's behaviour".

(1978, p. 83)

Elsewhere Schmuck (1979), a widely experienced and possibly the most respected organization development interventionist in schools, has written,

"the tenacity of a systems culture lies in the power of norms, how well they are adhered to, and how resistant they are to change. Norms are shared expectations, usually implicit, that help to guide the psychological process and behaviours of group members ... this definition of norms emphasizes sharing ... when a norm is present, most people know that their view of things is also held by others and that the others expect them to have the same viewpoint and to behave accordingly".

(1979, p. 62)

The pervasive influence of shared expectations is also argued or assumed in other studies (Cartwright, 1965; Lawrence and Lorsch, 1969; Hellriegel and Slocum, 1975; Popkewitz, 1977; Cartwright and Lippitt, 1978; Willower, 1979) although a number of studies specifically attribute it little influence, particularly on instructional practices at
the classroom level (Bidwell, 1965; Meyer, 1975; Pellegrin, 1975; Pajak, 1979).

Several research studies also provide evidence of the operation of group sanctions within schools, and these studies make it clear that the sanctions operate from a base of shared expectations. One study reported

"here the strong social sanctions of the schools as a small band of professionals exerted itself very strongly. An occasional maverick could buck these sanctions and implement the changed behaviour in isolation. But mostly the schools singled out these rate busters and deprecated or ostracized them until they regressed to the mean".

(Mann, 1976(b), p.327)

Another study quoted a "common" response from teachers when describing their ability to reject a group project as,

"basically yes, except the fact that the philosophy isn't that way. If you do it that way somehow there will be pressure - either from other teachers or the principal. Maybe the pressure will come in an indirect way, but there will be a lot of pressure".

(Hanson, 1976, p.32)

Inbar (1980) specifically investigated the role of shared expectations and found that they are not narrowly prescriptive of behaviour, but rather encompass a space of acceptable or satisfying behaviours which vary between different organizations. Other studies have also found that the effect of shared expectations on individual behaviour may be contingent on the nature of the group (Bidwell, 1965; Warren, 1969; Festinger, 1978) although Deutsch and Gerards' (1972) research indicates that group's influence may operate regardless of normative influences.
Theory-in-use: Formulation and Change

Again there is a dearth of direct research evidence and a relative abundance of theorizing as to the formulation and change of theory-in-use. The concept, as developed in this study, holds that individual realities are shaped during social interaction and from this is developed a shared, or interactive, set of group expectations. At a theoretical level two major protagonists, Greenfield (1980) and Griffith (1978) have engaged in an extended debate over the role of multiple individual realities in shaping organizations, with the view prevailing that the realities exist and that reconciling them is central to organizational behaviour. With specific reference to an educational planned change context, Fullan (1982) states,

"that educational change is a process of coming to grips with the multiple realities of people who are the main participants in implementing change".

(1982, p.82)

Other theorists, notably Lawrence and Lorsch (1969), Argyris and Schon (1978), and Koch and Deetz (1980) have explicitly argued that the process through which shared expectations are developed is one of social interaction.

There is relatively little research evidence. Taylor (1980) found some support for shared public symbols among multiple individual realities, although her analytic methodology (a three mode factor analysis) is acknowledged to have limitations. Nevertheless it represents a promising beginning in an area previously thought to be bereft of research (Willower, 1979). From a different perspective McGeown (1979) concluded from an analysis of a number of organizational climate studies that differential perception, or multiple realities, exist within what is
essentially an interactively developed set of expectations.

Research evidence from educational contexts of the interactive development of expectations is sparse, but a recent review of research in non-education settings found that most of the studies surveyed lent support to the contention that individual positions were developed through interaction and shared understanding (Davis, Laughlin, and Komorita, 1976). From purely educational contexts, Griffin (1979) indicated in his study that there was a growth in expectations within a group where a highly interactive change strategy was employed. More significant was House's (1974) study of the introduction of PLATO to a number of Community Colleges in Illinois. House concluded that for planned change to be successful it must be accompanied by personal contact, two way questioning, persuading, and intense interaction, all of which are indicative of the interactive development of shared understandings and expectations. Lighthall (1973), in his critique and re-analysis of the Smith and Keith (1971) case study, highlighted and emphasized the negative effects derived from an absence of interaction and the limited sharing of private realities. Elsewhere, studies by Hanson and Brown, (1977) and Hughes (1974) have illustrated the interactive processes through which shared expectations are developed.

Shared expectations ultimately depend upon dynamic individual perceptions and a number of studies have examined the role of external factors in contributing to individual perceptions. Among the external factors identified have been professionalism (Firestone, 1980; Hoy et al, 1980) and the primacy of teacher-student relationships in teacher reward (Lortie, 1975; Duke et al, 1980; however, note also Sergiovanni, 1969; Miskell et al, 1980).
Planned Change and Theory-In-Use:

A number of theorists have explained the transition of an idea from private perception to shared reality as a function of interactive communication (Argyris, 1970; Lighthall, 1973; Allen and Silverweig, 1976; Gray, 1978). There is a body of research which supports this relationship (Valentine et al, 1975; Festinger, 1978) and other studies have provided evidence of means by which the interactive sharing processes may be enhanced (Watson and Johnson, 1972; Breda, 1977; Duckworth and Jovick, 1978).

However, the transition is a function of more than a process of communication alone. A number of studies have reported a reluctance or resistance to change because organization members are anchored deeply in existing attitudes and practices (Gross et al, 1971; Klein, 1976; Mann, 1976(b); Goldman and Gregory, 1977; Seldin and Malloy, 1979; Crane, 1980), or that the process of change itself creates resistance (Giacquinta, 1973) because it ultimately runs counter to the organization's theory-in-use. In either case, to deliberately and systematically change the theory-in-use is a matter of power, influence, and politics.

The literature contains numerous studies which illustrate the processes of power and politics at work. House (1979), in a review of curriculum innovation over the past ten years, identified three dominant change paradigms which had operated during that period. 'Politics and power' was one of these models. Research studies such as that by Rand, or Farrar et al (1980), or those studies which have assumed processes of mutual adaptation, also provide an implicit recognition of the role of power and politics.
Other studies have recognized the role of power and politics more explicitly. *Miles et al*, *(1978(d), p.6)* in summarizing the results of the six case studies they supervised, concluded,

"all organizational change requires the mobilisation of power and legitimacy".

*Gideonse* *(1979, p.317)*, reviewing case studies of the Experimental Schools programme, commented emphatically,

"If these five case studies tell us anything, they tell us that change is a political process".

*Felker* *(1979, p.125)* attributes the outcomes of her research into participation and change to her failure to come to grips with the concepts of power and conflict.

Examples of the use, or attempted use of power in a variety of political contexts can be found throughout the research literature, *(Pollard and Mitchell, 1978; Hanson and Brown, 1977; Hughes, 1974)*, but it is rarely the primary target of research. However, three studies have researched the use of power in schools. *Warren* *(1969)*, in addition to noting the circumvention of the power to coerce and to materially reward also noted that the effectiveness of different power bases differed with the nature of the group. *Mowday* *(1978)* found that individual characteristics of the person(s) exercising power and influence, and their perceptions of the potential effectiveness of the method they chose, was more important in selecting that method than organizational norms governing influence processes. *Mowday* did not research environmental effects, such as the nature of the group, but did note the importance of strategic choices, or political methods, in reaching the decision. *Robitaille* *(1980)*, investigating the implementation of "new maths"
curriculum in British Columbia, concluded that the two change strategies employed, power-coercive and pressure-coercive, had both been unsuccessful in promoting change.

Other studies, less explicitly concerned with power, have nevertheless recorded pertinent observations. *House* (1974) concluded that implementation would not be successful unless the planned change gained the support of an advocacy group. This finding has been supported by the results of studies in non-education contexts (*Moscovici and Faucheux*, 1972; *Nemeth, Swedlund, and Kanki*, 1974). *Miles et al* (1978(d)) observed the presence of a number of political processes during implementation, including circumvention, co-optation, bargaining, coalition building, and buffering. *Conway* (1978) found that the management of change in English secondary schools focussed on the control of human resources, a finding which reflects the operation of processes of power and politics. *Seldin and Malloy* (1979) reported that staff recognized the key role of power and politics in the running of schools, but also that they were loathe to become involved in these processes.

While recognizing the role of power and politics in the planned change process, it is also necessary to differentiate between attitudinal compliance and behavioural compliance. The latter, which implies unwillingness, has been found to require high visibility surveillance to ensure conformity (*Warren*, 1969) and may generate a wide range of dysfunctional responses (*Argyris and Schon*, 1978).

In relation to schools, the most definitive piece of research is that by *Warren* (1969) who investigated peer group - power base relationships. His major findings, that job specific peer groups did not respond with
attitudinal conformity to any power base; that consensual peer groups responded with attitudinal conformity to all power bases, including coercive and reward; and, that the use of coercive and reward power may promote behavioural conformity in all groups, are of relevance to the implementation of planned change.

Organization Development

The third major group of concepts introduced in the previous chapter was that relating to organization development. The literature on organization development is enormous, ranging from textbooks, through theoretical and empirical reviews, to studies or descriptions of individual interventions. However, enormous though the literature is, few studies other than Schmuck et al, (1977) have sought to relate the conceptual foundations of organization development to education, and only one (Pullan, Miles, and Taylor, 1978) of the many comprehensive overviews has addressed itself specifically to organization development in education.

Within the context of this study the organization development intervention undertaken had two goals, to increase the potency of, and the range of functions included within the theory-in-use, and to enhance the organization's facility with the use of power. In turn, it was held, the attainment of these goals would enhance the organization's ability to implement planned change.

There are numerous studies of organization development interventions in educational institutions which support the attainment of these goals.
Marguiles, commenting on the experience of one institution, wrote

"it learned that it was possible to resolve issues heretofore in the 'too-hard basket' if those issues could be surfaced and addressed".

(1972, p.51)

Other studies have reached similar conclusions with respect to the increase in the range of functions subject to organizational introspection as a result of an intervention (Posmire et al., 1971; McElvaney and Miles, 1971; Schmuck et al., 1971; Feitler and Lippitt, 1972; Bassin and Gross, 1978; Cohen and Cadon, 1978; Keys and Bartunek, 1979). However, note also Gordon and Hagstrom (1971) who reported that the increase in the range of functions was temporary, and Flynn (1971) who reported a lack of success in increasing the range of functions after one year, although in a subsequent paper Flynn (1976) indicated that the intervention had been successful in the longer term in opening up new issues for organizational consideration.

Increased facility in the use of power, manifested through enhanced problem solving capability and improved decision making, is also widely reported. Flynn's (1971, p.109) observation, that

"previous norms were disturbed, however, to the point where staff members were beginning to influence decisions in new ways"

illustrates the process through which theory-in-use changes to accommodate a greater familiarity with, and facility in, the use of power. Other studies have recorded more specific outcomes. Runkel and Schmuck (1976) cite a wide range of effects from the various interventions (some twenty studies in all) in which they have been involved, including heightening of the principal's influence without reducing the influence of the staff, and vice-versa, and altering attitudes and other morale
factors towards more harmonious and supportive expectations. The outcomes suggest an enhanced ability in the use of power. Other studies have reported improved problem solving and decision making processes (Fosmire et al, 1971; Schmuuck et al, 1971; Bassin and Gross, 1978; Crawford et al, 1979), while intervention strategies which have been specifically designed to address the issue of power relationships have similarly reported enhanced abilities in the use of power. (Cohen and Gadon, 1978; Bartunek and Keys, 1979; Keys, 1979). Elsewhere, in a comprehensive review of the effectiveness of 34 organization development interventions, (the great majority of which were in non-educational settings), Porras and Berg (1978(b)) found differential effects at the sub-group and total organization levels. Their review concluded that interventions gave rise to strong positive effects on the social interaction process at the level of subgroups, although somewhat surprisingly the studies they reviewed indicated no growth in peer support. In contrast, at the organizational level the changes recorded were in leadership and decision making practices. Their analysis is not explicit in terms of the particular changes, nor directions of change, which occurred within each of these factors.

The enhanced implementation of innovation as a result of organizational changes brought about during an intervention has also been claimed, (Flynn, 1976; Bassin and Gross, 1978; Keys, 1979; Scheinfeld, 1979). The first two of these studies have simply asserted the relationship and have not substantiated the claim. The Scheinfeld (1979) study provides some qualitative evidence, but the design of his intervention is complex and extends beyond organization development to include specialist advisory teachers and augmented school-community relationships. The Keys (1979) study is well documented, although the focus is
on innovativeness rather than implementation. Finally, *Miles, Fullan, and Taylor* (1978(c)), in a survey of organization development interventions in 76 school districts found that some changes had occurred in output, educational programs, and structure. One third of the schools surveyed indicated that the intervention had caused many other change efforts to take place and in their summarizing volume *Miles, Fullan, and Taylor* conclude,

"Finally it was very clear that the OD programs were associated with an increased rate of educational change (implementation of instructional innovations) in the district". (1978(e), p.6)

Much of the research evidence on organization development outcomes must be treated with caution. Many of the studies are qualitative reports and are entirely lacking in empirical data (*Marguiles*, 1972; *Feitler and Lippitt*, 1972; *Flynn*, 1976; *Bassin and Gross*, 1978; *Scheinfeld*, 1979). A number of reviews which have analyzed reported organization development interventions have commented on the quality of the reports. These comments have included, "not ... rigorous enough" (*Morrison*, 1978, p.42); "little research ... that can withstand rigorous testing" (*Marguiles et al.*, 1977, p.428); "systematic research ... has been appallingly slim" (*Pate et al.*, 1977, p.449); or "the unavailability of high quality research ..." (*Fullan et al.*, 1981, p.44).

Although these criticisms may have been based on expectations associated with traditional research paradigms and statistical analysis, nevertheless the caveat *re* caution remains.

**Organization Development, Australia**

The first organization development intervention in an Australian school appears to have occurred in 1975 (*Mulford*, 1977), however, in the years since then there have been relatively few reported studies. The outcomes of
the reported interventions, in terms of successful and unsuccessful, are mixed. *Mulford, et al (1977)* have reported on two apparently successful interventions, one in a large private school, the other in a state primary school. Both interventions followed conventional organization development principles (*as outlined in Chapter 4*), although the long term results reported are based on data collected within seven months of the workshop stage of the intervention at a time when the implications of the intervention were "... still working themselves through" (*Mulford, et al, 1977, pp.233-4*). *Meggitt (1978)* has also reported an intervention which is described as a "success story" (*p.34*). This intervention, in a single state secondary school, similarly followed conventional organization development principles and practices, but again the conclusions re outcomes are based on a very short time frame, in this instance three months from the commencement of the intervention. The intervention evaluated and reported by *Inquavson (1981)* is described as "disastrous" by those who participated (*1981, p.64*). *Inquavson* notes numerous deficiencies in the intervention design and implementation, however, the centralised nature of the educational system in which the intervention occurred leads him to predict that

"... even if OD techniques had been faithfully implemented its effects would have been superficial."

(*1981, p.64*)

Finally, *Ogilvie (1977)* has reported on a quasi experimental design study involving interventions in four state secondary schools and a control group of two state secondary schools. The interventions were based solely on the collection and feedback of organizational data, a methodology strongly endorsed by *Bowers and Franklin (1977)* although *Mulford, et al (1977)* have referred to it simply as "an excellent preparation
technique for a full OD project" (p.222).

Ogilvie cites numerous changes which occurred in the four experimental schools, but he also notes that similar changes occurred in the two control schools. He also noted a number of significant changes (alpha = 0.05) in organizational variables, although in one of the experimental schools the changes were in the opposite direction to what might have been expected from a successful organization development intervention (1977, p.49). He concludes that

"as the changes in the control schools were very similar to those in the experimental schools, characteristics of principals appear to be more important in accounting for these than the feedback program."

(1977, p.48)

No firm conclusions are warranted from such a small sample of reported interventions, however, some lessons in terms of technique can be drawn from each of the studies. Mulford, et al, have noted the uniqueness of the Australian schools (1977, p.212). In particular they have noted the constraints posed by the time required for intervention workshops (1977, p.224); the relative lack of interaction and verbal skills in Australian teachers (1977, p.225); the traditional Australian emphasis on evaluation or assessment rather than on assistance (1977, p.228); and, the critical need of active support by the principal if the intervention is to succeed (1977, p.223). They have also asserted the need for a "drastic modification" of North American questionnaires if these are used for data collection purposes (1977, p.230).

Both Ogilvie (1977) and Ingvarson (1981) comment on the highly centralised educational system. Ogilvie believes that the "active support and encouragement of the senior state departmental officers" is an important
pre-requisite of a successful organization development intervention (1977, p.50). However, Ingvarson views the centralised system as less conducive to successful organization development and expresses the belief that

"This kind of change (power re-distribution) could only be brought about by changes in the Regulations of the Victorian Education Department."

(1981, p.65)

The relatively small number of published studies on organization development intervention in Australian Educational Institutions indicates the need for further comprehensive and detailed studies which will provide a more substantial basis for evaluating the effectiveness of the technology.

**Organization Development Methodology**

Most of the contentious issues and ambiguities surrounding organization development concern the intervention methodology (Fullan, Miles and Taylor, 1978(b)). Because intervention methodology is a contentious issue and because the particular methodology used in this study is also in effect, the experimental treatment, consideration of the methodology and of the relevant literature has been left to the following chapter which is devoted solely to these issues.
CHAPTER 4
ORGANIZATION DEVELOPMENT - METHODOLOGY

The practice of organization development varies greatly from one context to another, and from one practitioner to the next, to the extent that there exists considerable confusion as to exactly what is, or is not, organization development (Miles, Fullan, Taylor, 1981). The purpose of this chapter is to establish in detail the methodology used in this study with particular reference to the sequence, strategies, and tactics employed.

In broadest outline the rationale underlying the methodology and some of its essential characteristics have been established in an earlier chapter. These require that the intervention be structured as a reflexive, analytic response to the organization's own perceptions of its problems, and that it be directed at increasing the organization's adaptability and improving the quality of work life. The intervention strategy is a largely normative/re-educative process, as defined by Chin and Benne (1976), and includes a long-term, planned approach based on intact working groups from within the organization. Further, it is a multi-dimensional strategy in that it may use a number of concurrent tactics, and simultaneously approach a number of intervention targets either directly or indirectly.

These essential characteristics constitute the broad framework of the methodology used. They reflect the theoretical position adopted by this study with respect to theory-in-use and its centrality in the change
process, and of the time involved to change normative structures. The operational details related to strategies and tactics are derived from the literature (Schmuck et al, 1977; Burke, 1978; Burke and Goodstein, 1980) and from experience gained by the author during interventions into similar organizations within the same education system. (Henderson, 1981(a), 1981(b)).

Stages in the Intervention

There is a broad consensus that organization development interventions proceed in stages or phases, although there is some contention as to the exact number and nature of the stages. In a comprehensive review of organization development in schools, Fullan et al, (1978(a)) analysed a number of case studies using a three stage framework of "entry and start up", "transition", and "maintenance". Similarly French and Bell (1978) recognize three stages, "diagnosis", "action", and "process - maintenance". On the other hand Lippitt and Lippitt (1978), in a manual on consulting techniques, list six major stages: initial contact or entry; formulating a contract and building a helping relationship; problem identification and diagnostic analysis; setting goals and planning for action; taking action and cycling feedback; contract completion - continuity, support, and termination. Case study reports, such as those of Bassin and Gross (1978), Coughlan and Cooke (1974), and Mohrman et al (1977), while incorporating most of the above have also included practical issues with an emphasis on implementation and evaluation. All of these perspectives were considered in devising the seven phase intervention process which was employed in this study and which included: 1. Entry 2. Data Collection 3. Feedback 4. Planning and developing strategies 5. Executing strategies 6. Evaluation 7. Maintenance.
Guiding Principles of Intervention

In addition to a recognition that there are stages to an intervention, there is also broad agreement on a number of principles which serve to guide the methods employed. Genuine collaboration, between the organization and the interventionist in determining the nature and course of activities, is universally endorsed and has been identified as a determinant of successful intervention in a major review of case studies (Dunn and Swierczek, 1977). Elsewhere, in a comment which succinctly captures the motives underlying the collaborative principle, Weisbord (1978, p.17) has written,

"... feelings of competence and self-worth derive from what you have done, not from what someone else has coerced you to do, or done for you".

(1978, p.17)

Similar motives underly the second principle, the organization's control and initiative at all times over the course of the intervention. Widely endorsed in the literature (English, 1975; Bartee and Cheyunski, 1977; Kozoll et al, 1978; Burke and Goodstein, 1980), application of the control and initiative principle serves also to build confidence and trust among participants that they are not about to be "used".

The third principle is that the interventionist's role is that of a facilitator. This principle is closely linked to the preceding. Care should be taken to avoid any suggestion that the interventionist's function is to change the organization. Such a suggestion infers that there already exists an agenda which pre-empts diagnosis and organizational initiative and assumes an interventionist's role of "change initiation", a role which does not rightfully belong to them (Argyris, 1970; Walton and Warwick, 1973; Burke and Goodstein, 1980).
The principle of critical mass is also widely endorsed (Goldman and Moynihan, 1972; Beckhard and Harris, 1977; Schmuck et al, 1977; Goodlad, 1975) on the grounds that unless there is an evident willingness and commitment to proceed, generated from informed consent and without suggestion of coercion, the intervention is unlikely to succeed.

A further principle endorsed and employed in this study is that of psychological safety (Schein and Bennis, 1965). The entire exercise should take place in an environment which is non-threatening and conducive to openness. The ability to promote such an environment has been described by some authorities as the critical role of the interventionist (Argyris, 1970; Nadler, 1977; Weisbord, 1978). An environment which in any sense suggests punitive or retributive consequences is unlikely to promote a searching analysis and diagnosis of the present state of the organization by the participants. As Hoffman (1979, p.387) observed,

"an invitation to be open and honest in an organization in which power plays and deceit are the rules is often fatal to those who accept it".

An open and healthy environment cannot be prescribed by edict, but is a state or condition towards which the intervention must be consciously directed from the moment at which entry commences. Until it is achieved the interventionist must exercise restraint and avoid unnecessary risk to the organization's members.

The final principle of intervention utilized by this study and universally endorsed in the literature is that of self-diagnosis (Beckhard, 1969; English, 1975; Likert and Likert, 1976; Schmuck et al, 1977; Bartee and Cheyunski, 1978). Self diagnosis serves many roles. Schmuck
et al (1972), observed that self-diagnosis eliminated suspicion that the consultant had a covert evaluative role, and in consequence led to reduced anxiety. It has also been observed to promote the ownership of decisions and thereby to generate commitment (Beckhard, 1969; Friedlander and Brown, 1974; Golembiewski, 1975; Watkins and Cladwell, 1978), although there is also considerable evidence that mere "participation" will not achieve this (see Chapter 3). Further, self diagnosis has been found likely to promote a feeling among the organization members that the information generated is genuinely relevant to their work, worthy of their attention, and a good basis for action (Bowers and Franklin, 1977; Nadler, 1977; Schmuck et al, 1977). Finally, as Golembiewski has cautioned,

"consultants seldom will succeed ... by seeking to remedy evils and rectify wrongs that have priority only (or largely) within their own framework for interpreting reality and in terms of their own values".

(1978, p.38)

The six principles listed served to guide the process and events at all stages of the intervention in this study, although some are more applicable to particular stages than to others.

Stage 1, Entry: The entry phase has been variously described as "one of the two most crucial steps" (Bassin and Gross, 1978, p.11); as "complex and critically important" (Berg, 1977, p.34); and as containing "the seeds of success". (Halford, 1977, p.12). Throughout the literature it is accorded a central importance in the intervention process, as was the case also in this study.

Patience, or the provision of as much time as the organization sees fit to familiarise itself with the concepts and implications of organizational development before reaching a decision, (Goldman and Moynihan,
1972), and a willingness to reiterate an explanation of what might be entailed as often as required (Runkel and Schmuck, 1976; Schmuck et al, 1975) have been identified as fundamental characteristics of entry. Similarly the marginal role of the external consultant, or interventionist, necessitates the development of trust, rapport, legitimacy and credibility between the consultant and the organization as a basic requirement of entry (Goldman and Moynihan, 1972; Marguiles, 1978; Schmuck et al, 1977). In particular, clarification of the question of whose interests are being served by the consultant (Bassin and Gross, 1978; Crockett, 1978; Golembiewski, 1978; Marguiles, 1978) and an emphasis on the confidentiality of data generated by the intervention (Golembiewski, 1978; Lewicki and Alderfer, 1977; Mirvis and Berg, 1977; Schmuck et al, 1977) are especially pertinent to this study as guidelines to methodology. There is also a need to avoid "over selling" during entry and to maintain realistic expectations of potential outcomes, (Pfeiffer and Jones, 1978; Mirvis and Berg, 1977; Nisberg, 1977; Walton and Warwick, 1973). Finally, practice indicates that the support and involvement of the top management of the organization is essential (Bassin and Gross, 1978; Beckhard, 1969; Cohen and Gadon, 1978; Kozoll, 1978; Milstein, 1978; Mulford, 1977) although Kahn (1974, p.488) labels the latter a "nontheoretical slogan" and questions its validity.

It is also during the entry stage that the guiding principles of collaboration between organization and interventionist, of organization control and initiative over the course of the process, and of the facilitating function of the interventionist, are established. At the same time the first steps are taken to build a non-threatening and open environment which will provide for the psychological safety of organization members. The application of these principles underlies,
in varying degrees, the different entry behaviours and characteristics listed. Concurrently, the exercise of patience, the development of trust and rapport, and the meeting and dispelling of all individual concerns, serve as means of developing a critical mass.

Stage 2, Data Collection: The collection of valid organizational data is at the heart of every organization development program. In some programs, in conjunction with the feedback of the data collected, (generally labelled "Survey-Feedback" programmes), it constitutes the sum total of the intervention (Bowers and Franklin, 1977) an approach which some researchers have found to be the most effective (Bowers, 1973). Elsewhere it has been considered as a particularly appropriate methodology for educational systems (Coughlan and Cook, 1974; Mohrman et al, 1977; Zaltman, Florio, and Sikorski, 1977). However, most interventions utilise data collection as a central and essential characteristic which provides the basis for diagnosis, action planning, and remediation activities, and that is the perspective adopted in this study.

The concepts and theory of organization development emphasize that the data collection should focus on the whole organization, its subsystems and processes (Lawrence and Lorsch, 1969; French and Bell, 1978; see also Chapter 2 of this study) and that it should seek to provide a complete picture of the organization's functioning and processes (Boje et al, 1982). Incomplete data collection can stimulate a dysfunctional concentration of energy and resources in those areas where data are collected, as opposed to those areas which are excluded, (Nadler, 1977). Data collection also stimulate other behaviours because of perceptions of how the data collected may be rewarded or punished. Nadler (1977) provides research evidence which suggests
that expectations held by individual organization members about who
will have access to the data and of possible future uses of the data
can be critical determinants of ongoing behaviours and may lead to
dysfunctional outcomes such as a reduction in the availability of valid
information, misdirected energy, and defensive behaviour  (Nadler, 1977,
p.63). Similar outcomes have been reported by Argyris and Schon (1978),
Caro (1972), and Katz and Kahn (1978).

The success of an intervention depends both on the collection of valid
data and on the involvement and commitment of organization members.
Therefore, the data collection must be accompanied by clear and accepted
understandings concerning the confidentiality of data  (Bowers and
Franklin, 1977; Nadler, 1977; Schmuck et al, 1977) and the way in
which it will be used (Nadler, 1977; French and Bell, 1978). The role
of the consultant in this process, as a facilitator of the collection
of valid and reliable data rather than as a facilitator of change
(Argyris, 1970) needs also to be carefully spelt out. It is part
of the ongoing function commenced during entry of developing trust,
rapport, legitimacy, and credibility between the consultant and the
organization, and within the organization itself.

Stage 3, Feedback: During feedback the data which have been collected
and collated are returned to the organization members for diagnosis.
This stage has been alternatively described as "the most potent and
direct use of data for change", (Nadler, 1977, p.67); that the sub-
sequent diagnosis and use of the data is "basic to all goal seeking
behaviours", (French and Bell, 1978, p.60); or, that feedback is
"the basis for changing organizations in ways that are responsive to
needs for improved functioning, and ultimately, survival", (Bowers and
Franklin, 1977, p.90). Each comment points to the basic importance of
feedback and diagnosis to the organization development process, and it is incumbent upon the interventionist to ensure the optimal usefulness and impact of the data feedback.

At the core of the process is the presentation of data to individuals. This should be as simple, clear and straightforward as possible (Bowers and Franklin, 1977). A number of specific practices appear to facilitate the optimal effectiveness of feedback. These include, the consultant personally presenting the feedback to as many organization members as possible (Klein et al, 1971; Bowers and Franklin, 1977); the feedback following the data collection as soon as is practicable (Bowers and Franklin, 1977); and, the feedback received in "family" or intact work groups (Runkel and Schmuck, 1976; Bowers and Franklin, 1977; Nadler, 1977; but note also Mohrman et al, 1977).

Diagnosis flows from feedback and its purpose is to create a new level of awareness within the system (Bartee and Cheynski, 1977; Nadler, 1977). In turn awareness serves to energize and direct new patterns of behaviour. In terms of the organization development process, feedback and diagnosis which indicates a performance gap between the existing theory-in-use and what is perceived to be actual behaviour, is most likely to energize further intervention activity.

If the feedback and diagnosis stage is to produce valid and useful information which will in turn provide the basis for further decisions re the direction the intervention is to take, then it is of particular importance that the principles of psychological safety and of self-diagnosis be operative by this phase.
Stage 4, Planning and Developing Strategies: If feedback and diagnosis have identified a performance gap which the organization then seeks to resolve, a strategy for learning or remediation must be developed. The design and development of this strategy should continue to employ the principle of collaboration. In this collaborative arrangement the consultant provides the methodological expertise, the background knowledge and skills in behavioural science theory and practice, and the authoritative knowledge of the theory, research, and practice of organization development (Burke, 1977). However, the desire for change, and the form that the re-education is to take are decisions for the organization members to make (French and Bell, 1978).

What must result is a genuine collaborative relationship between organization and consultant, the outcome of which is an action strategy uniquely tailored to the needs of each organization.

No practitioner appears to refute the uniqueness of each re-educative action plan as a characteristic of organization development. The mainstream of thought openly endorses the concept (Lake and Callahan, 1972; Derr, 1974; Franklin and Pecorella, 1975; Golembiewski, 1975; Dunn and Swierczek, 1977; Nisberg, 1977; Schmuck et al, 1977) while the failure to tailor the intervention to the needs of the client has been condemned as "unethical practice" (Walton and Warwick, 1975). The concept of a unique design is reinforced by the trend observed by Burke (1977) away from a concept of a "best" style of leadership, such as those advocated by Likert and Likert (1976), Bowers and Franklin (1977), or Blake and Mouton (1968) towards the contingency approaches of Lawrence and Lorsch (1969), Hersey and Blanchard (1977), or Hedberg et al (1976).
In planning and developing strategies a number of considerations are of particular importance. Derr has defined organization development from the perspective of "improving the human side of organizational life" (1974, p.11), and Tichy's (1974) research indicates that most organization development consultants have a value orientation which supports this "human process" emphasis.

This personal values orientation is frequently reflected in the practice of organization development. The first target of an intervention identified by many consultants, and sometimes the only target advocated, is the psychosocial subsystem of the organization (Schein, 1969; Buchanan, 1972; Hedberg et al, 1976; Runkel and Schmuck et al, 1977; Mohrman et al, 1978; Hoffman, 1979).

Research evidence does not support such practice. It is true that a number of human process issues which inhibit group effectiveness have been identified (Zand, 1972; Likert and Likert, 1976; Argyris and Schon, 1978; Benne and Shepard, 1978; Hoffman, 1979) and similarly it is true that the major contention of this study holds that organizational change results from changes to theory-in-use, a uniquely human process concept. However, neither of these necessarily supports an initial intervention into the psychosocial domain. Rather, two major reviews of organization development studies, which specifically compared the effectiveness of an initial intervention into the psychosocial subsystem against an initial intervention with a clear task orientation, both unequivocally come down in favour of the latter. Porras (1977, p.10) concluded that a task orientation was clearly superior, while Kaplan (1979, p.554) found that not one study supported the effectiveness of a process-oriented initial intervention.
A task oriented intervention is also supported by the frequently observed "practical/immediate importance" orientation of school personnel (Lippit, 1974; Derr, 1976; Taylor, 1978; Berman and McLaughlin, 1978), an attribute identified by Bassin and Gross as a

"... lack of tolerance and time among inner city school personnel for activities that do not generate immediate tangible results".

(1978, pp.3-4)

Although this factor has been identified in U.S. schools where the vulnerability of schooling to external pressures is a force in shaping teacher behaviour (Bidwell, 1965; Sieber, 1975), nevertheless, as will be explained later, there is reason to believe that a similar practical/immediate importance orientation exists within the organization central to this study.

Other factors also enter into the development of a strategy. Intact work groups are strongly favoured rather than cross-sections of the organization, both on theoretical grounds, (see Chapter 2), and because of the experiences of a number of consultants (Beckhard, 1969; Runkel and Schmuck, 1976; Schmuck et al, 1977; French and Bell, 1978). However, it is recognized that the nature of schooling and the teaching function can seriously limit the availability of staff (Blumberg and Schmuck, 1972). Time is also an important constraint, both in terms of the total organization development process, which is most frequently given as 2-3 years, (Beckard, 1969; Miles and Schmuck, 1972; Raia and Marguiles, 1974; Huse and Bowditch, 1977), and for the application of specific strategies in training sessions. The desirability of extended training and involvement in organization development activities, and the dysfunctionality of short training sessions,
is frequently mentioned (Derr, 1974; Runkel and Schmuck, 1976; Bassin and Gross, 1978; Fullan et al, 1978(b); Porras and Berg, 1978). Of the short training sessions, Runkel and Bell have observed in relation to their own practice,

"in practical terms this result means that the isolated two day workshops that are only too common as laboratory training for organization development will probably have moderately destructive results".

(1976, p.132)

Further strategy constraints are imposed by the need for relevance and for some early success. One of the earliest authoritative works on organization development stressed that it should proceed on the basis of "identified problems" (Bennis, 1969), a plea for relevance which has since been reiterated frequently (Klein, 1971; Derr, 1974; Raia and Marguiles, 1974; Kimberley and Nielson, 1975; Bassin and Gross, 1978; French and Bell, 1978). Similarly the need for early success, particularly in organizations which exhibited a past record of failure, has been identified as important by practitioners (Likert and Likert, 1976; Bassin and Gross, 1978; Cohen and Gadon, 1978; French and Bell, 1978) as well as having widespread support in learning theory.

Stage 5, Executing Strategies: The manner in which strategies are executed depends essentially on the nature of the strategies, however, to the extent that they depend upon some type of formal training there is some guidance provided in the practice and theory literature.

Although the initial strategy emphasis is directed towards task, nevertheless process considerations may be addressed concurrently. This is the basis of Bassin and Gross’s (1978) apparently successful organization development methodology and is consistent with an intervention
focus which is both relevant, deals with "real" organizational problems, while at the same time acknowledges the centrality of organizational processes. Therefore, as the task/planning cycle unfolds it is accompanied by training in process issues such as communication, goal identification and clarification, conflict management, decision making, and group dynamics.

The execution of strategies should seek to co-ordinate and integrate all activities in such a way that they are mutually supportive and reinforcing (Derr, 1974; Schmuck et al, 1977; French and Bell, 1978). Consequently a single intervention activity, although specifically directed at one organizational subsystem, may be designed to simultaneously effect all other subsystems.

An almost universal characteristic of organization development interventions is an emphasis on experience-based learning activities (Harvey and Brown, 1976; Schmuck et al, 1977; French and Bell, 1978; Sherwood, 1978), an approach and emphasis which is supported by substantial research evidence (Roskin, 1976). Organization development inevitably involves large scale resocialization as fundamental changes take place in the theory-in-use. These changes may include new structures, processes, roles, and role relationships. The execution of strategies aims to provide, through experienced learning, a psychologically safe environment through which resocialization and its attendant re-learning process can proceed. Experienced learning also maintains an emphasis on a shared responsibility of organization members and consultant for the progress of what is happening. The consultant, through his expertise and knowledge, sets up the experiential learning activities, but at the same time the responsibility for learning is placed directly on the organization members. As has been observed
it is

"only by actually trying out new role behaviours and by reflecting on the generalizations and conclusions that they produce can individuals make cognitive or behavioural changes in their interpersonal competencies".

(Schmuck et al, 1977, p.421)

Stage 6, Evaluation: The need to evaluate organization development interventions is widely supported in the literature, (Lawrence and Lorsch, 1969; Miles and Schmuck, 1971; Barnette, 1977; Beckhard and Harris, 1977; Schmuck et al, 1977; French and Bell, 1978), however numerous reviews also suggest that insufficient efforts have been expended on evaluating the outcomes of interventions, or that the quality of such evaluations is suspect (Strauss, 1973; Kahn, 1974; Alderfer, 1977; Porras and Berg, 1978; Kaplan, 1979).

Evaluation of the intervention was accorded a central role in this study, and a wide range of techniques were used, including repeated surveys, self reports, interviews, document analysis, and participant observation. The particular techniques, and the theory and research evidence which underlay their use, is discussed at length in a subsequent chapter.

Stage 7, Maintenance: A central aim of organization development is adaptability, defined as the ability of an organization to renew itself through ongoing adaptation to change. The consultant's role is to assist the organization reach this stage, to where it can renew itself without an ongoing dependency on the consultant. In a sense the organization needs to institutionalize, or make part of its theory-in-use, the functions performed by the consultant, but from within its own resources.
Institutionalizing the change role, and the consultants withdrawal from the client organization, are endorsed as standard practice in the literature, to the extent that it has been described as

"withdrawal from the target system as quickly as possible is the primary task of the OD specialist".

(Derr, 1974, p.12)

Although this particular emphasis on the speed and the primary nature of the need for the consultant to withdraw does not appear to be supported elsewhere, nevertheless there is a broadly expressed concern for institutionalization and the avoidance of a dependency relationship by the organization towards the consultant (French and Bell, 1978; Lippitt and Lippitt, 1978).

Although maintenance is listed and accepted as the "ultimate goal" of the organization development process (Bassin and Gross, 1978, p.75) there is little suggestion as to how this might be achieved, other than from the group of practitioners associated with the Centre for Educational Policy and Management at the University of Oregon. This group strongly advocates the development and training of cadres of internal organization development specialists in each organization and recommend a specific training program to achieve this. There is some evidence of the success of their methods (Runkel and Schmuck, 1976; Schmuck et al, 1977; Arends, 1979).

In the chapter which follows the specific context in which the intervention took place, the process and events of the intervention and an explanation of the processes and likely causality between processes and events is examined in detail.
CHAPTER 5

THE INTERVENTION

The organization development intervention described in this chapter extended over a period of twenty four months, included 124 hours of workshop with five separate groups, 36 separate interactive meetings with intact workgroups, attendance by the interventionist at 11 meetings in the role of process consultant, 8 structured interviews with staff, and countless informal discussions with groups and individuals. The purpose of this chapter is to establish in detail the institutional environment, processes, events and outcomes of this intervention.

Context of the intervention described in this study

The nature of the host environment for an organization development intervention is of particular importance. Not only does it serve to uniquely determine the strategies and tactics employed, but it also interacts with those strategies and tactics to produce the final outcomes.

The general context in which this study took place, TAFE in Western Australia, has been previously identified (Chapter 1), however, some particular features of both the general context and of the particular college that was the focus of the intervention require elaboration.

The intervention took place during a period of rapid growth for TAFE as a whole, but of decline for this particular college. When the intervention commenced there were fourteen TAFE colleges in Western Australia and this had grown to seventeen colleges two years later. Part of this growth was in absolute terms, but partly it represented a redistribution
of students away from older and frequently overcrowded colleges. The college which was the focus of this study was both older and overcrowded, and over the three years of this study its student enrollment declined incrementally in each year.

The college was unusual in TAFE, Western Australia, in that unlike any of the other colleges it catered only for the trained manpower requirements of a single industry, the automotive industry, although it was not the only college involved in that industry. As such it was something of a venerable institution, pre-eminent and respected in its field by all of TAFE's professional staff concerned with that industry.

This accepted pre-eminence within its particular field gave the college considerably more influence over its study area than occurred in other colleges, however, the college was still subject to a number of highly prescriptive centralised controls in certain of its operations. These prescriptive controls included the allocation of funds to and within the college, the monitoring of expenditure, the number and composition of staff, and many of the administrative procedures and policies.

The highly prescriptive, centralised control of administrative procedures and policies is particularly evident at college level in the content and structure of syllabi and in the allocation of staff. The syllabus in many courses is presented as an exact sequence of content presentation and prescribed assignments. At the same time teaching staff have prescribed minimum hours of attendance at the college each week (30 hours), prescriptively allocated into a precise number of hours of teaching and hours of "duties other than teaching". The exact division of hours depends upon the individual's status.
Status also determines, by decree, the level of intellectual difficulty of subjects taught by each individual. There are four levels of intellectual difficulty and a staff member of a particular status can expect to teach a set number of hours at one level, a set number at another level, and a set number of hours at "duties other than teaching".

Any hours taught in excess of the standard allocation attract additional payment, in effect an overtime payment. The overall impression is one of a tightly coupled, centrally controlled administrative process. Within these formal restraints, however, the individual colleges have considerable autonomy and flexibility. Although each college receives an externally determined funds allocation each year, there are areas of discretionary expenditure, particularly for amenities, minor works and consumables. The acquisition of major capital items, although ultimately determined by the central administration, nevertheless is primarily influenced by the priorities established and the case argued by individual colleges. Similarly, although constrained by staff allocated and their status, colleges have freedom in allocating staff to subjects and timetables as they see fit. Many classes are run in the evenings, equated as "time and a half" for calculating hours worked, and this, combined with a heavy reliance on part-time staff for teaching specialist and/or surplus classes, provides colleges with opportunities for real flexibility in allocating and timetabling staff. Most staff expect and receive large blocks of free time when they are not required in the college. Many staff receive a considerable supplement to their base salary through working additional hours.

Curriculum development also provides opportunities for college autonomy and initiative. The impetus for syllabus change is generally initiated at college level and individual teaching staff are heavily involved
in the redesigning and/or rewriting of syllabuses. Further, many courses are unique, or specific, to Western Australia, the outcome of either legislation requiring registration in order to practice, or of negotiation and agreement between a particular industry and TAFE. The specialised textbooks used in these courses are generally written and periodically revised by TAFE teaching staff.

Finally, although there is a strong centralised administration of this TAFE system, it exercises very little line control over the internal affairs of colleges. Colleges, mainly, but not entirely, through their principals strongly assert and seek to preserve non-interference in internal affairs, a position which appears to be respected by the central administration. Consequently the management style and organizational dynamics of the individual colleges have the potential to vary greatly across the colleges. Colleges which could be described as benevolent or benign autocracies are common. In such colleges the principal is firmly in command and is autocratic to the extent it suits him. (All colleges at the time of this intervention had male principals.) On the other hand a very small number of colleges could be described as democratic with broadly based participation in college affairs and decision making.

The college which was the subject of this intervention was clearly of the autocratic model. The principal, who is further described in Chapter 6, dominated the college. He appeared quite arbitrary in making decisions, whether they were about particular courses of action, or of which people to be involved in what. Senior Staff meetings, irregular and intermittent, but rarely more than two per semester, were essentially occasions where the principal advised senior staff of what he had decided. In turn these senior staff frequently followed a similar pattern. Of
the thirteen staff with supervisory or managerial functions, casual observation indicated that five were autocratic and largely arbitrary. The remainder were to various degrees less autocratic and less arbitrary, but none met with their respective staffs at any time on a scheduled basis where decisions were made. Reinforcing this management model were the patterns of communication and the distribution of largesse. With the exception of the rare senior staff meetings formal communication was almost non-existent.

The informal network, while generally impressive with its speed and coverage, nevertheless suffered from the defect that in order to be informed, staff needed to "know" someone, thereby re-inforcing the arbitrary nature of the system, as well as being rumour-prone. The distribution of the college's largesse was similarly autocratic and arbitrary. As a large trade training centre the college used a considerable flow of 'live' work, or automobiles in actual need of repair in its training program. It was possible to have one's automobile repaired, overhauled, renovated, panel beaten or repainted, all at minimal cost, as part of the live work program. However the decisions of whose vehicles would form part of this work appeared also to invariably reflect patronage and arbitrary decisions, and contributed to the image of an autocratic institution.

TAFE Teachers and their work

A recent major evaluation of TAFE staff throughout Western Australia, commissioned by the TAFE administration, but conducted by an independent external evaluation agency (Gaites and Ryan, 1980), has provided a comprehensive picture of TAFE staff and their activities.

The great majority (82%) hold the status of "lecturer". Above them
within each college there is an hierarchy of positions which includes
Senior Lecturer, Head of Department, Deputy Principal, and Principal.
In general the staff constitute a mature teaching force in terms of
age, industrial experience, and experience in TAFE. Of a total profes-
sonal teaching staff of 1200, 45% have twenty one years or more of total
work experience, while a further 37% had between ten and twenty years
of total work experience. In terms of TAFE experience, 46% had taught
for six years or more.

The classes they teach are generally small. Of all classes 20% had
from 6-10 members and a further 44% had from 11-15 members. The small
class sizes are even more pronounced among trade classes where 25% of
classes had 10 members or less, and a further 58% had 11-15 members.
Although small, the sizes are not unusual given the practical nature
and frequent use of workshops which is explicitly part of many courses.
Practical, or workshop, sessions occupy up to half of the instructional
time in some teaching areas, although in other areas it is less. The
remainder of the instructional time is spent in theoretical presentations
of some type which tend to be didactic in the extreme. In the Gaitses and
Ryan study, staff were asked details of their professional and classroom
activities. Lecturing to the whole class was ranked by 60% of staff
as the most important classroom activity. The blackboarding of notes
was a regular feature of more than half the trades lecturers, while
the most important aids or supplements to these teaching activities
were the use of textbooks, by 81% of staff, and of duplicated handouts,
by 71% of staff. The limited use made by teaching staff of professional
journals (16%), videotapes (4%), student journals (2%), displays/exhibits
(18%), photographs/pictures (4%), audiotapes (13%), and slides/filmstrips
(18%) led Gaitses and Ryan to conclude that

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"... the use of supplementary teaching aids .... appears to be somewhat unadventurous".  

(1980, p.82)

As a corollary to this, student activities basically include listening, note taking, discussion with the teacher, and answering questions.

The student body to whom this teaching is directed is male dominated, in line with the types of industry serviced. Just over 60% of the students are under 21, although most classes other than trades apprentices typically exhibit a wide age range. Staff described the students as showing good motivation and interest, average ability, but inadequately developed study skills. Problems associated with control, discipline, and motivation of students are ranked as of low importance and of irregular occurrence in classrooms.

These staff, student, and teaching characteristics are representative of the particular college which was the subject of the intervention. Other pertinent characteristics which may also have influenced the intervention, including the location, buildings, facilities, amenities, and some individual personalities, are included in Chapter 6.

THE INTERVENTION

The intervention: Stage 1, Entry Entry is a critical stage in every intervention. It is the stage when the interventionist must establish himself in terms of trust and credibility if the intervention is to proceed beyond an initial encounter. In this intervention the entry was poorly handled and the opportunity to engage in an organization development intervention was almost lost. Fortunately a second opportun-
ity to effect entry was offered and this was successful.

The first contact and thereby the initial point of entry in this intervention was the outcome of a seminar on organization development conducted for the principals of all TAFE colleges in Western Australia. At the conclusion of the seminar, the dynamics of which are described in Chapter 7, the principals were invited to consider participation by their college in a "college renewal" program. Subsequently two principals expressed such an interest, including the principal of the college that is the subject of this study. This decision, "to consider the matter further", was made by the principal after a brief consultation with the college deputy principal who had also attended the seminar. As was later revealed in an informal conversation that decision derived at least in part from a challenge by the deputy principal that the possibilities were "interesting" and that to consider it further "couldn't do any harm". However, it was also made clear in the same discussion that the principal was a willing participant in the decision.

Entry at this point was an invitation to discuss college renewal with the college staff, to the end that they might participate in an intervention program. The entry strategy adopted was to work directly and exclusively with all those who held administrative or managerial positions within the college, a group of 17. In turn members of this administrative group were to discuss the proposals with their own work groups in order that any further decision on whether or not to proceed would reflect the broader college view.

The dynamics of the two sessions during which the administrative staff considered the question of participation in an intervention program are detailed in Chapter 7. At the heart of the discussion and decision
making were two issues, issues that in substance if not form have been common to all interventions with which I have been associated. The first issue was the question of what an intervention might involve, both in terms of process and outcomes. The subject matter in this case directly confronted the organization's culture, or theory-in-use. If there is no such confrontation, if the potential outcomes of an organization development program and the existing theory-in-use are congruent, then any intervention is a redundancy. However, where there is confrontation between the two the question of whether or not to proceed with an intervention is not simply the outcome of a rational decision making process. As has been argued in Chapter 2 the process is essentially political and the consultant's presentation of the message requires a delicate balance between objectivity and emphasizing the potential positive outcomes of an intervention program. In essence, it is important to provide sufficient material to allow the existing theory-in-use to be tested thoroughly, but at the same time to avoid "overselling".

The second issue was that of trust. The confidentiality of data both within and without an organization is always an important concern, regardless of the status of the interventionist. In the case of this particular organization (and one other with which there was a concurrent intervention) the issue was magnified by the status of the interventionist. I was a senior officer in TAFE's hierarchy, physically located at and closely associated with the central office. The related questions of confidentiality and of who or what was intended to benefit from an intervention were particularly critical elements in the issue of trust and unquestionably made the task of entry more difficult. In subsequent interventions in other colleges in the same TAFE system the same questions of trust have invariably been raised, but never again to the same degree nor with the same intensity as with those first two colleges.
The role of the internal consultant in this system now has marked advantages in terms of access to the colleges concerned as well as an in-built credibility based on demonstrated past success within the same system.

In the event the entry strategy worked well with the targeted group, the administrative staff, but failed totally with the remainder of the college. The first attempt to collect data through questionnaires resulted in an almost nil return from non-administrative staff. Inquiry into the reasons quickly established that successful entry had only been made with the administrative staff. Other college staff did not reject the notion of college renewal, but at this point nor had it been accepted. This initial failure at entry led to a considerably increased and much more broadly based effort to effect entry in which the entire staff were given the opportunity to discuss college renewal in relatively small, intense, face to face meetings with the interventionist. When the data collection process was again put into effect the response was completely acceptable. The precise reasons for the change in behaviour are not clear. There is every indication that most, if not all, of the administrative staff had discussed the proposals with their respective groups and that in broad terms the proposals were understood. Further, there is no reason to believe that the administrative staff had failed to consult with their groups before the decision to proceed with an intervention program was made. It is more likely that the intense interaction that occurred when entry efforts were renewed provided a sense of involvement and a full accounting of the individual worth of each person. The changed behaviours are also supportive of the contention of this study, argued in Chapter 2, that the theory-in-use of an organization is a function of shared understanding by all members of an organization and cannot be simply imposed.
In retrospect, and somewhat paradoxically, the initial failure to effect entry appears to have been an important factor in the ultimate success of this particular intervention. The substantially increased efforts to effect entry strongly reinforced three of the principles which guided the intervention, the principles of genuine collaboration between organization and interventionist, of the control and initiative over the course of the intervention resting with the college, and, that the interventionist's role is purely that of facilitator, not change agent. The three principles acquired a new status. No longer were they theoretical slogans that were talked about and that hopefully would apply. Instead, they were principles that had been seen in action, and in the future they were to serve as visible reference points on numerous occasions as tensions inevitably appeared both within the college and between the interventionist and college.

The intervention: Stage 2, Data collection Data collection in this intervention followed the pattern suggested by the literature analysis in Chapter 4 as faithfully as possible. The entire thrust of the subsequent diagnosis and remediation activities depended upon valid and reliable data to provide as complete a picture as possible of the entire organization and its sub-systems.

The design and development of the data collection instrument, a questionnaire, of the instrument distribution and collection procedures, and of the levels of participation/return by staff, are fully documented in Chapter 6. It is sufficient to note at this point that every care was taken to ensure the collection of valid and reliable data.

Although the design and development of the instrument was a critical element of the data collection process, nevertheless it was also relat-
ively mechanistic. Equally important as considerations, but more fluid and dynamic, were the cultural or theory-in-use dynamics of data collection. Specifically, time after time during the entry stage questions were asked and doubts expressed as to the confidentiality of data and of the use of the data. In the light of the questions raised, doubts expressed and the accompanying implicit attitudes, there was no real doubt in the author's mind that these were the two critical issues that had to be addressed and resolved to the satisfaction of the entire staff if valid data were to be collected.

The question of confidentiality included three recurring themes. Foremost for some members of staff was the confidentiality of their own responses. There was a fear expressed that these individual responses might become known to superiors in the hierarchy. Parallel to this was a concern one step removed from the individual, that data relating to sub-groups would become known to the remainder of the college. Finally, there were very strongly expressed concerns relating to external access to any data, regardless of whether it originated from individuals, sub-groups, or the total college. The concern, clearly expressed, was that the information would be channelled back to the central office.

At times the concern with confidentiality appeared to border on the paranoid and the concerns with internal confidentiality were indicative of some of the college's problems, but to the many individuals the concerns were real and as such had to be carefully addressed. During entry in this intervention a very large proportion of the time, perhaps 80 per cent, was explicitly directed at developing trust, and of this time probably 50 per cent was directly concerned with issues of confidentiality. In broad terms this expenditure of time achieved its objectives. Trust was established and entry gained, but part of the trade
off included a number of physical constraints on data collection that precluded some of the methods of statistical analysis planned.

The second set of objections concerned the use of data. A commonly reiterated belief was that the data was to be used in some way for the interventionist's purposes, to reshape the college according to some private agenda, or, as was expressed often enough, to some central office agenda. Ultimately there is no counter argument to these fears, and valid data can only be collected and the intervention proceed on the basis of trust.

The intensity with which these issues were raised at all levels within the college provided a turbulent environment in which a high degree of trust gradually evolved. The process of frequent reiteration of basic principles also led to what appeared to be a more comprehensive understanding of the nature and process of an intervention. It is the belief of the author that these two factors, trust and understanding, combined with the procedures to ensure the anonymity of individual questionnaire returns, ensured the collection of valid and reliable data.

The intervention: Stage 3, Feedback

The feedback process employed in the study closely adhered to the procedures suggested in the previous chapter. The data were presented in a simple, clear and straight-forward manner, and in most instances was delivered to intact work groups by the interventionist himself. The data collection had been structured to permit feedback to and diagnosis by the organization's sub-groups. The first sub-group to receive the data feedback was the administrative group who were presented with the questionnaire results as they related to the entire college and the results which related to the individual's own specific sub-group. The data were presented in the same statistical
form as that used in Table 8:2, however, in spite of the interventionist's perception of simplicity, the data presented required considerable additional explanation. The basic purpose of the session was to present and explain the data. No attempt was made at diagnosis, although the opportunity was taken to remind the group of the principles of self-diagnosis and of organization initiative and control. The administrative group's reaction, once they had assimilated the material, appeared to be initially one of relief which then gave way to near exuberant behaviour. Contrary to the group's earlier demands for the confidentiality of sub-group data, individuals readily shared information relating to their sub-group, sharing "scores" and profiles.

The collective reaction suggested that this group had felt a considerable threat from the intervention processes up to then and that the generally favorable data collected had removed much of the threat and its attendant anxiety. However, this evident sense of relief contained ambiguities. Not all of the questionnaire data were equally favorable to all of those present, but in the general euphoria that had followed the data feedback there were no discernible differences in behaviour between those with more and those with less favorable data profiles. The reason for the apparent sameness of reaction is not known, however, it is possible that the considerable tensions generated at the commencement of the intervention were broken by the feedback of any data.

The feedback session adjourned with an understanding that it would reconvene in two weeks to consider the "entire college" data, with an expectation that each person present would take the data they had received back to their own sub-group, and with a request from the interventionist that he be invited to participate in as many of these sub-group data feedback sessions as possible.
When the administrative group reconvened for the diagnostic session the various alternatives which the group might consider were carefully detailed by the interventionist. These alternatives ranged from participation in comprehensive remediation/training programs to the complete withdrawal of the interventionist. Every effort was made to present the alternatives objectively and again the principles of the intervention were clearly stated.

The principal also addressed the group. His power and influence within the college was enormous, as is described later in this chapter and in Chapter 7. He exhorted all present to speak their minds freely and without fear of retribution. The principal concluded with the statement that he intended to remain neutral and take no part in the diagnosis and consideration of alternatives that was to follow, but assured the group that he would abide by their decision regardless of what it might be.

Discussion of the data was wide ranging and extended, although nobody appeared to be prepared to take a stand, nor to invest any strong personal feelings in any particular piece of datum or any issue. Collectively there were broadly expressed feelings of unease about the state of the organization, as revealed by the data, and in particular the lack of teamwork, the insularity of the college from its environment, and the impotence of those present to influence what happened in the college were brought forward. The group then proceeded to consider the future directions of the intervention. Approximately two thirds of those present spoke and all but one of the speakers favoured a residential workshop. The lone opponent spoke strongly against the proposal and expressed his satisfaction with the existing state of the college, but the group accepted the workshop proposal and appointed a small committee to collaborate with the interventionist in designing the program.
The diagnostic session had proceeded logically and fulfilled its function in that it made a decision with respect to the future direction of the intervention with this particular group, but it also raised a number of questions and pointed to a number of future issues. First, the session and its attendant decision making appeared to be a little too tidy and rational to reflect any real shift in the theory-in-use. My belief, essentially intuitive, was that the group had made a decision without real internal commitment to that decision. This belief derived in part from the overly rational and almost superficial discussion of the data, but also from a feeling that the decision to proceed was made because of some expectation that the group would make that decision.

A further distinct feeling was that at least some of those present who had not spoken did not favour the workshop approach. Second, the session clearly demonstrated that the group were not yet prepared to discuss issues openly and fully, in spite of what appeared to be a considerable degree of trust in the interventionist and in spite of the principal's initial exhortation.

Throughout the diagnostic session the principal remained silent, but there was an inescapable impression that his was the dominant presence. In an informal conversation with him immediately after the session concluded he asserted his strong support for the decision that had been taken and indicated that it fitted exactly with his own views, but, almost as if in anticipation of my thoughts, added that he had said nothing before the meeting which might have influenced the decision. Between the time of the first and second meetings with the senior administrative group, and again after the second meeting, feedback sessions were held with other sub-groups in the college. All but three of these were presented by the interventionist. One sub-group did not receive
data feedback at all during this period, although strong representations to receive the data were made to the interventionist by members of the group concerned. This group had generated the least flattering data on their group's processes and leadership, but it proved impossible to obtain the group leader's agreement to a feedback session. This failure to effect a feedback session generated considerable ill-feeling, both towards the leader concerned and towards the notion of college renewal. Members of the group expressed their belief that they had been duped and that the college renewal program was not capable of delivering the potential it had suggested. It was a difficult burden for the interventionist to bear. The data clearly belonged to the total sub-group, but without the leader's involvement there were no apparent benefits to be gained simply from feeding the data back to the other group members. Ultimately, several months later, a data feedback session with this group did occur, but it was in a situation where the leader was in effect forced to participate by the group and did so unwillingly. There were no immediate outcomes of this session, but shortly after the leader concerned took extensive "sick leave" and then resigned from the college. It was certainly not an outcome that was desired in any sense by the interventionist and resulted in a long hard look at his values and at the ethics of organization development programs.

The sub-group data feedback sessions were all conducted using an almost identical process with that used by the administrative group. Most groups received the feedback and decided on no further particular action at that point, but four of the groups did decide on further action ranging from a full residential workshop to a series of half way workshops or seminars.

Without exception the diagnostic sessions which took place with these
other groups in the college were much more animated and open than that which had taken place with the administrative group. At these meetings staff argued strongly and often emotionally from value laden positions and the decision making processes were invariably political. These behaviours appeared to have derived in part at least from the outcomes and subsequent events of the administrative group meeting. Knowledge of the decision taken by the administrative group and subsequently of the principal's open support for that decision disseminated rapidly throughout the college. Frequent references were made to that decision and to the principal's position at the other diagnostic sessions and it was evident that in some sense the whole notion of college renewal, introspection and remediation, had been legitimated.

The intervention: Stage 4, Planning and developing strategies During the data feedback the administrative group diagnosed problems that they believed derived in large part from their own behaviour as a group. Accordingly, the committee that was formed from their ranks was briefed to design a remediation program only for the group itself.

The raw materials from which the program was designed were provided partly from the questionnaire data, particularly the open ended Question 112 that had invited respondents to comment on any aspects of the organization that they believed to be pertinent. Other raw material was obtained from interviews and discussions held with members of the administrative group.

The design of the program was genuinely collaborative, but not because of insistence from either side. By this time the principle of collaboration had been firmly embraced, at least by the appointed members of the small committee. On technical issues they invariably accepted
the interventionist's expertise although at the same time they generally sought to understand why. In determining the content of the program they played a much more active role. Some of the raw material from interviews and discussion was obtained by members of the committee. Similarly, the committee members carefully perused the questionnaire written data, data that had been transcribed from the original and carefully edited where necessary to preserve the promised anonymity. The perceptions of non-administrative staff of how the college was managed and was performing appeared to astonish the committee members. Although in basic terms the committee did little more than reinforce the diagnosis that the administrative group had already made, the richness with which some comments were made and the different perspectives they brought to bear on the issues appeared to considerably enhance the committee's understanding of the problems that needed to be addressed during the workshop.

The raw material suggested many directions for program development, but the committee were firm in their belief that the program undertaken must seek tangible practical outcomes to what they perceived as real college problems, a belief congruent with the interventionist's own beliefs. Consequently the program was developed in this direction, however, it also sought to address a number of psychosocial issues that the committee believed were less tangible, but nevertheless important to the ultimate functioning of the college.

The committee members influenced the program in other ways. The program was structured for three days utilising one work day and the two days of the weekend. This structure partly resulted from the constraints of time imposed by a busy college, but also because it was argued within the committee that the use of "own" time would increase the group's
commitment to whatever were the outcomes of the workshop. The final
draft of the program was taken back to the full group where approval
to proceed was given with a minimum of comment, although comment and
discussion were invited and encouraged. The behaviour of the full group
was in marked contrast to that of the committee. Whereas the committee
had been active, had questioned and discussed, often in a most animated
manner, the group as a whole were passive in comparison and again I
sensed less than total commitment to the decision.

The remediation programs for the other groups that had decided upon
further action were designed through similar processes, the primary
difference being that in every case the entire group concerned deliber-
erated on the program, its direction and content. This operational
difference arose solely from considerations of size. Whereas the admin-
istrative group consisted of seventeen members and the appointed com-
mittance of four members, no other group that participated in a remediation
program contained more than seven members.

The process of designing and developing a workshop program with the
administrative group underwent a second cycle seven months after the
first. Although the processes remained essentially the same as in the
first cycle the dynamics were entirely different. For no specifically
articulated reason the process was carried out by the entire group work-
ing together rather than through a committee. Discussion was animated
and the reaction to the ultimate workshop design conveyed an impression
of commitment and enthusiasm. The group as a whole appeared to have
developed in a direction that expected all group members to be heard.
The program designed by the group, which addressed the question of a
formal power redistribution, reflected this apparent change of attitude.
The role of the principal also exhibited a marked change. During the first cycle of program acceptance he had again reiterated an intention to abide by what the group decided and he had essentially acted as a passive observer. The only active role that he had played was to ensure that "due process" had been observed in the collaborative work between interventionist and the committee. In contrast, during the second cycle of program development he was an active, but not dominant participant. It might be concluded from this that either the principal was concerned or worried about the direction of the program, or that he had learnt to work with his staff. While both conclusions may contain an element of truth, I believe them to be overly simplistic. During the entire first cycle of data feedback, diagnosis and workshop design I harbored a strong feeling that the principal was a somewhat cynical observer watching his group at play. During the second cycle he was no longer that.

The intervention: Stage 5, Executing strategies. The workshop design, an outline of which is shown in Table 5:1, provided a heavy emphasis on experiential learning and this emphasis was maintained in practice throughout the three days. On the Friday morning that the program commenced the group gathered in ones and twos as commencing time approached. Of the seventeen members of staff identified as eligible to attend three failed to appear and subsequently lodged notes to the effect that they had been sick. All three were among those who had not spoken when the decision to proceed with the workshop had been taken.
<table>
<thead>
<tr>
<th>Date/time</th>
<th>Intervention activity</th>
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| Friday       | **Participants' expectations. Consultant's expectations. Discussion**  
08.30 - 09.30 | Program structure - discussion re possible revision.  
09.30 - 10.15 | Trust and openness in organizations. TORI instrument.  
10.30 - 12.30 | Problem "College Communication"  
13.30 - 17.30 | . Identification and definition - Nominal groups  
                          Sub groups  
                          Whole group  
                         . Particular interest working groups - action plans  
19.00 -       | Particular interest groups complete action plans.  
                          Plenary session, presentation/discussion of action plans, revision/modification.                                                                 |
| Saturday     | **The quality of communication**  
08.00 - 12.30 | . Transactional Analysis - film; identifying levels of transactions; relevance to the college.  
                          . One way - two way communication - structured exercise.  
                          . Listening and responding skills.  
13.30 - 17.30 | Problem "College Facilities"  
                          . Identification and definition of the problem  
                          . Particular interest work groups prepare action plans  
                          . Plenary session, consideration of action plans  
19.00 -       | Problem solving - technique and practice  
                          . Problem identification ("Hip Pocket Guide" model)  
                          . Generating alternatives - Brainstorming  
                          . Application and discussion  
                          (i) Lego Bridge (problem identification)  
                          (ii) Murder Ten (communication in problem solving)  
Note: Problem identification and generating alternatives were originally scheduled for the preceding night, but did not take place because of the time over run on College Communication.  

(continued)
<table>
<thead>
<tr>
<th>Date/time</th>
<th>Intervention activity</th>
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<tbody>
<tr>
<td>Sunday</td>
<td>Interpersonal relations - Johari Window</td>
</tr>
<tr>
<td>08.30 - 12.00</td>
<td>INTERPERSONAL RELATIONS - JOHARI WINDOW</td>
</tr>
<tr>
<td>13.00 - 14.00</td>
<td>TORI and discussion of results</td>
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<tr>
<td>14.00 - 15.30</td>
<td>TEAMWORK AND TEAM DEVELOPMENT - &quot;Bolero&quot;</td>
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<tr>
<td>16.00 - 17.45</td>
<td>TEAMWORK AND TEAM DEVELOPMENT - &quot;Bolero&quot;</td>
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Table 5:1 Intervention activities, first three day residential program, Administrative sub-group

Progress through the program worked much as had been scheduled. The expectations of those present were listed, presented, and occasionally clarified. In aggregate, and on the surface at least, they represented a reasonably optimistic, but nevertheless realistic framework for the three days. The session also served the not so public agenda of beginning to relax the participants, to ease anxieties they may have brought to the workshop and to commence the processes of open interaction.

The second session followed a similar pattern. Members of the committee that had collaborated in the design of the program presented the raw material on which their design decisions had been based. The object of this session was to provide an opportunity for the problem foci of the intervention to be changed from those programmed if necessary, as well as to consolidate the open interaction commenced earlier. In the event there was animated discussion and considerable probing of the raw material, but the central thrusts of the program were not seriously questioned nor challenged.
The third and final session before lunch on the first day was spent exploring the relationship of trust and openness to interpersonal relations and to the effective operation of the college. Discussion was stimulated through the use of an instrument TORI (Pfeiffer and Jones, 1975) which sought to provide some measure of existing levels of trust and openness as the foundation for discussion.

The "real" problem focus of the workshop commenced immediately after lunch. The designated problem, College communication, had been widely identified as a major college problem. The program committee had judged that the mechanistic aspects of communication, memos, instructions, notice boards, meetings, and similar, represented a problem with which the group might make considerable progress. In turn the psychological success derived from successful problem solving would provide the foundation for the continuing success of the intervention workshop. The problem was defined and its elements determined by the total group and then, using the nominal group technique, individuals ranked the problem elements in terms of importance. Three sub-groups then formed to consolidate the individual rankings and finally a plenary session determined precisely which elements of the problem were to be confronted and for which solutions would be generated. This structure and organization was designed to serve a number of purposes other than simply the generation of a solution to the problem posed. It provided individuals with experience of working in different groups and with the experience of making their own unique contribution to the group's output. The opportunity was also taken as the three sub-groups worked to halt each group in turn and to focus on processes and individual roles within the group. Finally, the total exercise was intended to provide raw material on problem solving and teamwork for future sessions of the workshop program.
With the elements of the problem to be solved identified, the large
group divided into three interest groups to work through particular
aspects of the problem. Potential solutions were generated, constraints
examined and action plans for the implementation of the chosen solution
were drawn up. Finally, a single group was reconvened and the action
plans formulated by each group were presented, the merits of each dis-
cussed and argued, and the total group then agreed upon the final versions
that they, as the administrative group, would seek to implement in the
college. It was 10.30 at night and had been a long day, but the group
then collectively socialised for a further hour before retiring for
the night. The results of the day were satisfying in that an actual
college problem had been addressed, an apparently satisfactory set of
solutions had been agreed upon, and the group, whether in total or in
sub-groups, appeared to have worked effectively and efficiently. However,
at the same time both facilitators agreed that the group processes they
had observed did not appear as genuine as they would have liked. There
remained an unease, a tension, unexpressed anxieties, that effective
group practices failed to conceal.

The second day devoted the entire morning to psycho-social processes,
and in particular interpersonal communication. The session was based
on transactional analysis, drew on experiences and observation from
the preceding day, and included structured experiences in communication.
The last segment of the morning related these essentially qualitative
aspects of communication to the work and solutions of the previous day.
The afternoon and early evening sessions addressed a further "solvable"
problem, the physical facilities of the college, using the same methods
and with the same emphasis as on the previous day. Finally the day
concluded with a lengthy session on problem solving, partly theoretical
in the sense that a model was presented, but primarily experiential
in that a number of structured experiences were utilized that emphasized working and communicating in groups.

The session ran late into the night, but the group participated enthusiastically until the final discussion, at about 11.15, and then continued to socialise for a further hour. The day had been fruitful in that a considerable program had been efficiently worked through and that the group processes had shown improvement over those of the previous day. On the negative side, the processes continued to appear just a little too facile, too mechanical to have really touched the depths of the group. When either of the two facilitators had stopped a group at work to focus on the processes and roles the responses had been a little too defensive. The trust and openness at an intra-group level, which the intervention was seeking to develop, had not yet fully emerged.

The program for the third and final day was designed solely around psychosocial issues and was scheduled to commence with a Johari Window exercise. It was the turning point of the intervention. One feedback comment suggested that the principal used too many of the college's (relatively) scarce resources for his own personal ends. A member of the group commented on the item, to the effect that although he didn't know who had written the comment, nevertheless it was true. The principal responded that he had written it himself. The group sat in stunned silence for perhaps ten seconds and then, literally, every member of the group opened at once. Through the remainder of the morning, lunch time, and into the afternoon openness and honesty prevailed as the group collectively exposed their buried agendas relating to others' behaviours which had accumulated over the years. The session was never heated and never acrimonious. No one made any promises about future behaviours, but at the end of that long exercise there was unspoken understanding that
the college would never be the same again.

The TORI instrument used on the first day was re-administered at the conclusion of the Johari Window session, and although no particular faith was placed in its reliability on the indices it purported to measure, nevertheless it indicated substantial increases on all four scales (Trust; openness; realization; interdependence) at both the individual and group level.

The final session of the program, on teamwork/teambuilding, designed around the film "Bolero", was excellent and contained thoughts and discussion of the highest order, but nevertheless was an anticlimax. It was long past the scheduled close when the group finally dissolved and headed home.

Remediation programs were also undertaken with four other groups from the college. One of these included a small group of five that participated in a three day residential workshop very similar in design and structure to that undertaken by the administrative group in that there was a focus on tangible problems combined with a substantial element of psychosocial issues. On the campus this group operated in a grossly cramped and overcrowded work situation and this they had identified as their fundamental problem. However, the questionnaire data had also indicated problems in teamwork and by agreement elements relating to teamwork were included in the workshop program.

On the first day of the workshop the group followed a program similar to the administrative group. Individual expectations were discussed and the TORI instrument administered and discussed - two exercises which served their explicit public agenda as well as rapidly stimulating and
developing participation by all members of the small group.

The afternoon session commenced with a tangible problem, seeking a practical solution to a relatively small issue that had been identified during the planning stage. The problem, how to ensure comparability in grading and recording student work, lent itself to a relatively mechanistic solution given the highly prescriptive nature of the curriculum. Nevertheless, to this group it was a real problem, lent itself well to the development of problem solving techniques and ensured an early psychological success for the group. During the remainder of the afternoon the group examined interpersonal communication, and shared communication in problem solving. In both of these the group worked through a number of structured exercises. This first day ended late, but as with the administrative group the processes and outcomes were not entirely satisfying. On the one hand the group had worked smoothly and successfully through a number of group exercises, however this facility with group work did not conceal an underlying tension within the group, a tension evidenced primarily through body language, but occasionally through speech.

The program for the second day was designed to address the major problems of working conditions and teamwork, commencing with the somewhat complex problem of working conditions. However, because of my perceptions of continuing tension during the previous day the program was re-arranged to provide a build-up towards the major problem. During both morning and afternoon sessions the group engaged in extensive problem solving and teambuilding exercises that sought to emphasize the importance of each individual and of their potential as contributors within the group. As the sessions progressed events and group behaviours appeared to confirm the success and wisdom of the re-arrangement. The exercises used all
proved to be suitable choices for experienced learning and discussion, but were also greeted with considerable enthusiasm by the group. By the end of the afternoon session the group appeared to have established a good level of understanding and teamwork, as well as having developed a number of problem solving skills.

The evening session was then scheduled exclusively for the "real" problem, that of finding a solution to the cramped and overcrowded working conditions. The problem was intricate and as the hours lengthened tensions were again evident, although the actual process of seeking a solution continued smoothly. A draft solution emerged after almost three hours and as a final step confirmation was sought from each member of the group. One by one the group signified their endorsement until the last and most junior member. After a pause of perhaps half a minute, which gathered tension with every passing second, he finally voiced his rejection of almost everything the group, including himself, had proposed. His basic contention was that the proposed solution was inequitable, to himself in particular. Further, he continued, so also were the entire relationships and procedures within the small group back in the work situation.

In the uproar that followed two other group members expressed their dissatisfaction with what they regarded as inequities to themselves and all group members rejected the proposed problem solution they had so recently endorsed, although for different reasons. In the following hour the real agenda, the group pecking order and the inequities it had produced, was hammered out in a blunt and forthright exchange.

The group continued to work at the original problem that night and made considerable progress before adjourning near midnight. On the following
morning the process recommenced and in a mood of real teamwork and consensus the group produced a number of innovative solutions to their problems. These solutions, which included the use of office space, a redesign and rescheduling of teaching space, a massive cleanup of used materials (which on the night before during the initial problem solving had been judged to be "indispensable"), a redistribution of storage space, and a completely re-vamped method of storing raw materials, were all ultimately implemented. In the months that followed the group performed with a tremendous team spirit.

Clearly the rejection of the proposed solution was the critical incident and turning point of this intervention, but the reason why it should have occurred when it did is less clear. It is possible that the structured exercises contributed, in that much of the de-briefing and discussion explicitly addressed the importance and uniqueness of each individual's contribution within the group. However, it is also likely that fortuitous timing played an important role. The events occurred very late in the evening after two long days of forced interaction, a situation where tensions and tiredness alone may have stimulated the behaviour. The author has observed similar open behaviour during times of tiredness and stress during other interventions and training programs.

Three further groups held their remediation programs in the form of either full or half day workshops. In one of these, group leadership issues finally emerged as the workshop focus, but not until after a slip of the tongue by one group member that exposed the group's hidden agenda. In particular, the group leader's confrontation style, almost exclusively competitive and very successfully practised, was the cause of much discontent. The learning session that followed was sufficiently encouraging that the group requested an additional workshop for the
following week to concentrate exclusively on conflict management.

The two other groups were college service units, both of which complained that they were neglected and unimportant in the mainstream of college life. With one group, the library, a refinement of Blake and Mouton's intergroup conflict resolution technique, described in Johnson and Johnson (1975) was used. The library staff constituted one group. A second nominal group was formed from senior volunteer members from each of the nine major teaching sub-groups within the college. The exercise proved to be a powerful two way learning experience. The library group took the feedback they received on others' perceptions of them as a group and used this as the basis for an action plan to upgrade their image and to publicise their potential contribution to the college's learning programs. The individual members of the nominal conflict group in turn took the feedback they had received back to their own work groups. Before the end of the year the library had been accepted as an integral part of the college mainstream and was playing an active role in the college learning program.

The final group, the college technicians, were an arbitrary grouping of a small number of staff who performed similar functions. The group members were geographically dispersed around the campus and they had no apparent concept of themselves as a "group". The simple activity of meeting together regularly with the college Deputy Principal, with no particular action plan, appeared to give them all the stimulus that was required.

The five interventions described above all occurred within nine weeks of intense activity after the initial data feedback session. It was the belief of the interventionist that at least two other groups would
have benefitted considerably from remediation activities of some type. However, neither group elected to undertake further action after receiving their feedback data and the principles of self initiative and self determination prevailed. Nevertheless, in these two groups and all others less intense and more indirect activity by the interventionist continued. Numerous discussions occurred with administrative staff during which their management and leadership were dissected. Acting on the consultant's advice, five of these staff attended extensive management development programs at considerable personal cost in terms of time and effort. While the transferability of learning from such programs may be the subject of conjecture, the attendance of five staff provided a solid self supporting nucleus to attempt to apply what they had learned. The concept of regular staff meetings at all levels of college operation was also developed and encouraged, an encouragement that was greatly assisted by the action plan developed at the administrative group workshop. Many of these meetings were attended by the interventionist in a "process advisor" capacity and the advisory suggestions made frequently resulted in more democratic procedures being adopted.

At the end of six months a second data collection - feedback cycle occurred. On this occasion at the diagnostic session the administrative group readily agreed upon the need for a further intensive workshop and collectively shaped a workshop program that was to focus on college governance and on the future teaching programs of the college.

The workshop, held at the same venue and under the same conditions as the initial workshop, was fully attended and worked with intensity and effectiveness. Whereas the first workshop had dealt with real issues and action plans that were largely directed at the present and which served as a means of reaching into the psychosocial, the second workshop
concentrated primarily on issues that were directed at the future. The direct outcomes included an action plan to institute new broadly based governance mechanisms which, in intention and ultimately effect, sought a substantial re-distribution of power within the college. A further action plan included the development of new teaching programs within the college and the development of closer relationships with industry and community. Less directly, the intervention continued the processes of team development that had commenced with the earlier workshop.

The intervention: Stage 6, Evaluation Evaluation was accorded a central role throughout the duration of the intervention. The data collection methods used and the quantitative analysis were both exhaustive and rigorous, while the qualitative analysis sought to apply exemplary practices identified in the literature. At the most simplistic level this rigour was required to satisfy the requirements of a formal academic study, but in practice the use of evaluation in this and other interventions plays an important functional role in the process of organization development.

From during the entry stage, and thereafter, data on processes and outcomes were collected, analysed and subjected to reflexive evaluation. Remedial actions to correct organizational deficiencies identified during the evaluation followed. These processes, the collection of valid, relevant data, reflexive evaluation and remediation are the very essence of an organization development intervention. Concurrently, they provide an ongoing continuous record of the progress of the intervention.

During the course of the intervention data were collected through repeated survey questionnaires, self reports, interviews, document analyses and participant observation. These data were subjected to both quantitative
and qualitative analysis. The particular techniques and the theory and research evidence which these techniques were based on are discussed at length in Chapter 6.

**The intervention: Stage 7, Maintenance** The ultimate aim of this intervention was that the college would embrace continuous self renewal as part of its theory-in-use, that is, that it should be able to maintain by itself the work commenced in collaboration with the interventionist.

This intervention did not specifically seek to train and develop a particular cadre of internal organization development specialists for this task. Principally this was because of the content and outcomes of the second intervention workshop held with the administrative group. This workshop focussed attention on the future directions of the college, and the need for the college to systematically renew itself was a recurring theme throughout the three days. Behaviours observed by the interventionist subsequent to that workshop, at meetings and through actions taken by the college, confirmed that introspection had not ceased with the workshop and that an essentially pro-active attitude prevailed.

In the months that followed the second workshop for the administrative group the college initiated major educational program changes in the form of transition education programs and short courses directed specifically at industry's needs, (both programs are detailed in Chapter 8), was used as a research centre to trial new counselling techniques, commenced a shopfront operation for students and organized two highly successful industry - education forums for the trade areas covered by the college. These continuing organizational behaviours were sufficient indications that the ethos of college renewal had penetrated the college and implanted itself in the theory-in-use. Consequently the decision
was taken by the interventionist and the college not to proceed with a formal institutional structure of trained internal consultants.

Instead the withdrawal - maintenance strategy was based on a gradual reduction of visits to the college by the interventionist and a gradual disengagement from process consultation within the context of the reduced visits. The correctness of this strategy was still being tested when the period covered by this study came to an end. At that time there was still some reliance on the interventionist to act as a catalyst for some initiatives, but in broad terms the college appeared able to handle the processes of renewal for itself. Paradoxically, perhaps the best indication that staff were prepared to maintain the momentum of the intervention was the now increasingly common assertion that the college renewal program hadn't really changed anything, but rather that "this was the way we have always done things here". If that was to continue as the prevailing understanding then the interventionist's task was clearly finished.
CHAPTER 6

RESEARCH DESIGN

The fundamental design of this research is a case study. That is, n=1, although to state it as such, which infers traditional experimentalism and psychometric analysis, is misleading. At all times the organization is the focus of study, and in this study there is only one organization. The purpose of the study is to ascertain the facts and to describe as accurately as possible the events which took place through the efforts of organization members. The study is not concerned with individuals within the organization, of how they behave, react, or change in response to the treatment, nor does the study seek to generalize the results beyond the single case study.

Case Studies Descriptive studies of individuality, such as a case study, have been labelled "idiographic" (Kerlinger, 1979) and have generally been assigned a lowly status in educational research. The design has been widely described as weak, and the value of the approach typically assessed as:

"Case study evaluations are seriously defective in a number of ways. At best they are vulnerable to the threats of history, maturation, selection, and mortality ..... case studies accumulate a huge bulk of data, much of which is irrelevant and all of which is difficult to organize. And, of course, there are no baseline measurements with which to determine change or growth. But more serious are the problems of bias and subjectivity that are endemic to the case study approach."

(Rose and Nyre, 1977, p.35)
In contrast, "nomothetic" research, which seeks to construct hypotheses and predictive theories (Kerlinger, 1979) has been described as strong with the greatest accolades reserved for designs which are experimental and which incorporate control and treatment groups, pre- and post-measures, controlled variables, and random sampling.

Campbell and Stanley (1962, p.2) state unequivocally that they are

"... committed to the experiment: as the only means for settling disputes regarding educational practices, as the only way of verifying education improvements, and as the only way of establishing a cumulative tradition in which improvements can be introduced without the danger of faddish discard of old wisdom in favour of inferior novelties."

It is a view that is widely supported, to the extent that it dominates both research and evaluation in education (Eisner, 1979).

While in the broadest sense it is true that case studies lack external validity, and hence generalizability in the traditional nomothetic mould, nevertheless it can be argued that generalization of a non-statistical, but still logical type can be made. Eisner (1981) argues

"generalization is possible because ... the general resides in the particular and because what one learns from a particular one applies to other situations subsequently encountered."

(1981, p.7)

Elsewhere Stake and Easley (1978), in stating the rationale which supported their case study approach to the evaluation of science education, wrote,
"we looked for a kind of generalizability based on deep understanding of phenomena which increases one's opportunity to recognize similarity and analogy."

(1978, p.C:26)

The inference of these and similar arguments is that there exists a potentiality that case study findings may ultimately be linked together to form theories. MacDonald and Walker (1977, p.182) contend that in case studies

"... through the portrayal of a single instance locked in time and circumstance, (the researcher) communicates enduring truths about the human condition."

To the extent that the case shares common relevant attributes with the population to which it is intended to make inferences or to form theories, and that unique attributes of the case are relatively few, the "enduring truths" can be used to construct theory or generalizations. Kennedy notes that in the clinical and legal fields the major applications of generalization

"are done by the user of the case data rather than by the person who originated the case data. And the generalization is not from a case to a population, but rather from a case to another case."

and argues that this approach

"seems appropriate to the field of education."

(1978, pp.21-22)

It is a major concern of this study that it contributes to that potentiality for generalization, that it conveys the configuration or pattern of events, experiences, behaviours, relationships, and consequences
in such a manner that it can be compared to configurations obtained in other cases and in other contexts. However, at the same time that it seeks to report on these phenomena and processes it seeks also to report on the outcomes. As Weiss (1972) has argued, critical though it is to learn more about the process and dynamics of a program it is nevertheless critical to determine its outcome. Weiss’s orientation is not novel. Cronbach (1963) stressed the need for evaluating the interactive events or “processes” of the classroom in addition to the learning outcomes. Similarly, Stake’s (1967) “Countenance Model” includes process, labelled as “transactions”, in addition to outcomes.

In reporting on both process and outcomes there is no restriction on the use of either qualitative or quantitative data. The nature of the data collected is independent of the size of the sample, and both qualitative and quantitative data can be collected in either single case or multiple case studies. The ultimate aim is to illuminate or portray, accurately and expressively, the complex realities of change, and in particular the relationship between change to particular aspects of an organization and subsequent changes in the ability of the organization to implement planned change. The remainder of this chapter is devoted to an examination of the research methodologies employed in the study of these two components.

ORGANIZATION DEVELOPMENT - THE FIRST ORDER CHANGE

"Organization development" is the generic label for the treatment used in this study. There are a number of reasons for examining the nature of the treatment and its organizational outcomes in detail. In itself the use of the treatment technology, organization development, both
within the particular educational environment in which it was applied and within Australia, is relatively rare and largely unreported. Further understanding of the technology and its applications may result from this study. At the same time there is considerable evidence of a high proportion of failure in attempts to apply organization development, a proportion estimated by authoritative sources to be as high as 50% (Runkel and Schmuck, 1976; Miles, Fullan and Taylor, 1978 b). Therefore there is a real need to show clearly what changes, if any, have resulted to the organization as an outcome of the intervention.

Finally, the nature and direction of the posited causality in the model make it imperative that the first order outcomes be clearly established. If the treatment is not in place, or, if it fails to effect changes in the theory-in-use, then there is little point in pursuing the second order change. In such a situation, without the outcomes established, the research runs the risk of appraising a non-event (Charters and Jones, 1973).

Research Methodologies The basic research design is a case study and within this design a number of methodologies are used. In the first phase of the study, first-order change, two methodologies are used, a quasi-experimental time series which is a modification of Campbell and Stanley's (1963) design 7, and a descriptive account of events in a style and manner Eisner (1977) has labelled "educational connoisseurship".

The time series may be schematically represented in a simplified manner as \(0_1, X, 0_2, 0_3\), where 0 is an observation and X the experimental treatment. It varies from the Campbell and Stanley paradigm in that it includes only one pre-treatment observation. The implications of this,
particularly as they relate to internal validity, will be considered later. The above schematic representation is simplified in that in practice the treatment is not a single event, but rather an ongoing interactive process which extends longitudinally throughout a stream of events, as shown in Figure 6:1.

![Diagram of treatment intensity over time](image)

**Figure 6:1** Diagrammatic representation of research design showing relationship of relative treatment intensity and observations over time.

The physical involvement of the researcher/consultant, and the explicit intervention activities commenced with $0_1$ at time $T_0$, the $0$ subscript indicating the order in which formal recorded measurements of organization variables were made, and the $T$ subscript indicating elapsed months from the project's commencement.

Between $T_0$ and $T_6$, when $0_2$ was made, treatment activities rapidly escalated to a peak with numerous laboratory type workshops and then gradually
diminished. However, significant laboratory type activities occurred at $T_7$, and to a lesser extent at $T_{18}$, while other intervention activities continued from $T_0$ through to $T_{24}$. Direct campus contact by the consultant was maintained throughout the intervention, initially at two days per week and gradually tapering to one day per two weeks over the 24 months. Activities during this on-campus contact included counselling and providing feedback from process observation. During the same period six (of fifteen) of the administrative staff attended courses and workshops in management or administration to develop individual skills in areas suggested as deficient in the data collected and analyzed.

This particular methodology, and indeed the overall case study design, was in part obliged by the nature of the intervention and the environment in which the study was conducted. The energy and direction of the intervention relied to a great extent on instrumentation which, as will be discussed in a subsequent section, is believed to be reactive. This property precluded its use in a pure experimental design. The initial measurement of a control group, at $0_1$, would have provided a valid comparative measure, but subsequent measurements at $0_2$ and $0_3$ would no longer have been with a true control group. At the same time there was a marked reluctance by other TAFE colleges to become peripherally involved in the project. All other colleges were aware of the aims, goals and nature of organization development, at least in a general sense, and wished either to be totally involved or totally uninvolved. This pragmatic emphasis, of wanting to "get something useful" from an organization development program, has been recorded also by Friedlander and Brown (1974). Under such conditions research is clearly assigned a secondary priority.
Nevertheless, the design utilized is not uncommon in organization development research. \textit{Porras and Berg (1978(a))} in a detailed review of evaluation methodologies used in organization development research, identified 9 empirical studies (of 35 reviewed) which used essentially the same modified time series design as used in this study. Similarly, \textit{White and Mitchell (1976)} in a review of research content and design in organization development interventions identified 12 of 44 studies as being based on some variation of the time series.

\textbf{Sample} There was no sample as such, only a single case, a TAFE college, throughout the study. However, although a single college was the focus of study, the composition of its membership did change, both in total size and in individual participation, during the two years of the study. The changes are shown in Table 6:1. The changes, which were unavoidable, resulted from two sets of factors. First, two new TAFE colleges were opened during the period of the study with the explicit intention of relocating some students and staff from particularly overcrowded sections of the college in which the intervention took place. This factor was largely instrumental in the reduction of professional staff from 73 to 59. The second factor contributing to the turnover of staff was the existence of an established system-wide convention of promotion and transfer between the various TAFE colleges, however, the effects of this were very limited. Of the 59 professional staff present at the completion of the study, 40 were present throughout the study, while during the same period changes in support staff personnel were minimal. In aggregate, approximately 75 per cent of the college staff were present throughout the study.
<table>
<thead>
<tr>
<th>YEAR STAFF JOINED COLLEGE</th>
<th>COLLEGE ACADEMIC YEAR</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1979</td>
</tr>
<tr>
<td>PROFESSIONAL STAFF</td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>72</td>
</tr>
<tr>
<td>1980</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td></td>
</tr>
<tr>
<td>Sub total</td>
<td>72</td>
</tr>
<tr>
<td>SUPPORT STAFF</td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>18</td>
</tr>
<tr>
<td>1980</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td></td>
</tr>
<tr>
<td>Sub total</td>
<td>18</td>
</tr>
<tr>
<td>Total Staff</td>
<td>90</td>
</tr>
</tbody>
</table>

Table 6:1  Staff turnover, professional and support staff, during the period of the intervention and study.
The critical issue is not that the changes occurred, but the effect of the changes on the validity of the data collected. In essence, do changes in the data collected reflect changed perceptions and behaviours by organization members in toto, or do they reflect primarily the different perceptions and behaviours brought to the organization as a result of changed membership? It is the contention of this study that the turnover and reduction of staff which occurred did not affect the validity of the data collected. With the exception of the two outcome variables, group process and satisfaction, all other variables about which data were collected relate directly to the theory-in-use. Further, as has been argued in Chapter 2, group processes and satisfaction are deeply rooted in behaviours in which theory-in-use is instrumental. Although theory-in-use is developed interactively and does depend upon group membership, nevertheless there is reason to believe that the effects of changed group membership in this situation were minimal. Over the 24 months of the study there were only 19 new arrivals and these fall into two categories, either those who were already experienced teachers, or teachers newly recruited into TAFE. Of the former, there were 11 experienced teachers who joined the college after the study commenced, however with few exceptions they were teachers who had been based at this college on some previous occasion. Literally, they were returning "home" after serving a period teaching at some other college, usually in a rural district. The teachers newly recruited to TAFE, eight in number, had all been appointed to temporary positions and most of them aspired to a permanent, tenured position. The relative smallness and the nature of both groups strengthens the belief that they were more likely to accept and be acculturated to the existing group members' perceptions of theory-in-use rather than the reverse.
Research variables  Organization development interventions are designed and developed in response to the particular needs of the subject organization. In this study the diagnosis of those needs and the identification of the research variables was made with reference to the two dimensional model of organizational structure which was developed in the second chapter (See pp.61-64 and in particular Fig. 2:2). The two dimensions, and their constituent elements, are listed in Table 6:2.

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>ELEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Generic subsystem</td>
<td>A.1 Aims and mission</td>
</tr>
<tr>
<td></td>
<td>A.2 Technical</td>
</tr>
<tr>
<td></td>
<td>A.3 Managerial</td>
</tr>
<tr>
<td></td>
<td>A.4 Structural</td>
</tr>
<tr>
<td></td>
<td>A.5 Psychosocial</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Interface relationship</th>
<th>B.1 Organization/environment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B.2 Intergroup</td>
</tr>
<tr>
<td></td>
<td>B.3 Intragroup</td>
</tr>
<tr>
<td></td>
<td>B.4 Individual/organization</td>
</tr>
</tbody>
</table>

Table 6:2  Two dimensional framework for organizational diagnosis and/or for identifying research variables.
These two dimensions and their constituent elements together define 20 distinct and mutually exclusive cells of organizational operation and function. Potentially each cell constitutes a target for an organization development intervention, or might serve as an independent variable in a research study such as this. In practice, the actual number of cells, or variables, used in this particular study for both diagnosis and research was considerably reduced after a preliminary analysis.

From the dimension "generic subsystem", element A.2, the technical subsystem, was eliminated, while elements B.1, organization/environment interface, and B.2, the intergroup interface, were eliminated from the dimension of "interface relationship". The technical subsystem was eliminated because of the almost total lack of college control over this element. Similarly the organization/environment interface was removed from consideration because again the college exercised so little control over this element. Although interaction at this interface was an occasional cause of concern to some organization members, the actual structuring of the interface was determined by the TAFE central organization and college participation was both predetermined and controlled by this structure. Finally, the intergroup interface was eliminated from consideration because of an apparent absence of importance of organizational intergroup relationships. A number of distinct work groups did exist, but their distinction was largely arbitrary and based on administrative convenience. Such intergroup interaction as did occur was heavily overshadowed by the monotechnic nature of the institution and by a commonly shared access to and use of college resources.
<table>
<thead>
<tr>
<th>Defining elements</th>
<th>Independent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1 B.3</td>
<td>Organization's aims and mission subsystem at the intragroup interface</td>
</tr>
<tr>
<td>A.1 B.4</td>
<td>Organization's aims and mission subsystem at the individual/organization interface</td>
</tr>
<tr>
<td>A.3 B.3</td>
<td>Organization's managerial subsystem at the intragroup interface</td>
</tr>
<tr>
<td>A.3 B.4</td>
<td>Organization's managerial subsystem at the individual/organization interface</td>
</tr>
<tr>
<td>A.4 B.3</td>
<td>Organization's structural subsystem at the intragroup interface</td>
</tr>
<tr>
<td>A.4 B.4</td>
<td>Organization's structural subsystem at the individual/organization interface</td>
</tr>
<tr>
<td>A.5 B.3</td>
<td>Organization's psychosocial subsystem at the intragroup interface</td>
</tr>
<tr>
<td>A.5 B.5</td>
<td>Organization's psychosocial subsystem at the individual/organization interface</td>
</tr>
</tbody>
</table>

Table 6:3  Independent variables, first order change, as defined by generic subgroup/interface relationship
The elimination of these three elements led to the reduction of diagnostic foci/research variables from a potential 20 to an actual 8. These 8 research variables are listed in Table 6:3. In explanation, the aims and mission subsystem incorporates the mechanisms by which the organization determines its future direction, both at the total organizational level (the individual/organization interface) and at the small group level (the intragroup interface). The managerial subsystem refers to the mechanisms of control, direction, and integration, again as exercised within both the total organization and the small group; the structural subsystem refers to the mechanisms of control, direction, and integration, again as exercised within both the total organization and the small group; the structural subsystem refers to the established means of communication, similarly reporting at the same two levels of operation; finally, the psychosocial subsystem refers to the human system and is concerned with motivation, status, role, group dynamics, values, and attitudes.

A major concern of the study is to establish through appropriate dependent variables that there has been a change in the functioning of the organization as a result of the intervention and in particular that there has been some shift in the theory-in-use. It has been the practice of other researchers to use the same data gathering instrument both for diagnostic purposes and to gather data to allow measurement of the change generated by the intervention (Lindell and Drexler, 1979). This practice is illustrated in the following quotation by Bowers and Franklin (1977):
"A thorough evaluation of development progress must also occur. This takes the form of a re-administration of the questionnaire from nine to twelve months after the first questionnaire data were gathered. Data from the second questionnaire administration are then compared with those data from the first to determine progress in the development report".  

(1977, p.128)

That practice, which is relatively standard among interventions which may be generically described as "survey guided", was followed in this study. Therefore the dependent variables used need to serve not only as comprehensive measures of change in the organization, that is, of change in the dependent variables, but equally to serve the function of providing a model for feedback to organization members which is readily comprehensible.

There are a number of theoretical constructs of organizational functioning which would adequately fulfill this dual role. That selected for use was the Likert and Likert (1976) model, which in turn was a refinement of an earlier Likert model. Developed from sustained research undertaken by the Institute for Social Research, Michigan, the theory has evolved, developed and been tested on the results of several hundred completed studies, with data obtained from "more than 20,000 managers and 200,000 employees" (Likert and Likert, 1976, p.16), and it provides the theoretical and conceptual foundations for a number of widely used data collection-survey feedback instruments, notably that developed by Taylor and Bowers (1972).

The Likert theory, as adopted by this study, seeks to measure and report on twenty two dependent variables as listed in Table 6:4, and detailed in Appendix A. These include group variables which tap directly into various aspects of organization attitudes, structure, processes and
Table 6:4  Dependent variables of the organization development intervention

products. Their posited relationship to the independent variables is shown in Table 6:5, but more important than the specific relationships is the aggregate view provided by the twenty two dependent variables. Together they furnish a comprehensive image of any changes which might result from an organization development intervention.
<table>
<thead>
<tr>
<th></th>
<th>Aims and mission</th>
<th>Managerial</th>
<th>Structural</th>
<th>Psychosocial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intragroup Interface</strong></td>
<td></td>
<td>2c*</td>
<td>1a, 1b,</td>
<td>1c, 1d, 3a,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2a*, 2b*, 2c*, 2d,</td>
<td>4a, 4b,</td>
<td>3b, 3c, 3d,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4a, 4c, 4g.</td>
<td>4d.</td>
<td>4d, 4e, 4f,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4g, 5a, 5b.</td>
</tr>
<tr>
<td><strong>Individual/Organization</strong></td>
<td>2c</td>
<td>1e, 2a, 2b, 2c,</td>
<td>1a, 1b,</td>
<td>1c*, 1d*</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td></td>
<td>4a.</td>
<td>4a, 4b.</td>
<td>4e, 5a, 5b.</td>
</tr>
</tbody>
</table>

Table 6:5 Independent/dependent variable relationships, first order change.

Note: Where dependent variables appear in more than one cell the stronger relationship occurs in the cell marked with an asterisk.

**INSTRUMENTATION**

Within the first phase of the study two distinctive data gathering, data presentation methodologies were employed: a formal questionnaire, and a qualitative, participant observation approach.

The formal questionnaire through which data were gathered served a dual function. Its first function was to collect data on the dependent variables on a number of occasions during the longitudinal study in order that changes could be measured and recorded. The use of the same instrument through successive time periods, as in this study,
introduces the risk of "instrument decay" (Campbell and Stanley, 1963). However to change the instrument poses greater problems. The same authorities caution that with a time series design

"one would be wise to avoid shifting measuring instruments at the same time as he shifts policy. In most instances, to preserve the interpretability of a time series, it would be better to continue to use a somewhat antiquated device than to shift to a new instrument". (1963, p.41)

Therefore, although the caveat of possible decay was borne in mind, only a single instrument was designed and used.

The second function of the instrument was to collect data for organizational feedback and diagnosis. Results from other studies indicate that organizational feedback is, in itself, sufficient to stimulate a considerable organizational reaction (Bowers, 1973; Nadler, 1977). That is, the instrument is reactive, an outcome which is anticipated and which forms part of the total treatment. Although the use of a survey-feedback instrument to this end was desirable in this study, in the sense that it was intended, the reactivity was also a key factor in precluding the use of a control group in the research design. On the other hand, Angrist's (1975) argument that any organizational data collection induces a reaction, unless it is post hoc, casts doubt on the reliability of any control group repeated measures.

The instrument by which data were collected and measurement effected is attached at Appendix B. It contained 111 items, of which 79 related to the first order change phase of the study. The remaining 32 items collected data related to processes associated with the implementation of planned change by the organization. Each item required the respondent
to rate a behaviour, process, attitude, or structure on an eight point, equal interval, Likert-type scale, with each pair of points tied to a verbal descriptor. An example of a typical item was,

"To what extent are staff involved in making decisions which affect them?"

<table>
<thead>
<tr>
<th>very little</th>
<th>some</th>
<th>considerable</th>
<th>very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

In addition, a single open ended question solicited any further pertinent information on the organization's functioning which the respondent believed was not adequately conveyed by the existing items.

Considerable guidance in the construction of each item was drawn from existing questionnaires, particularly the Survey of Organizations, (SOO), (Taylor and Bowers, 1973), the Profile of School Climate Questionnaire, (PSCQ) (MacKillican, 1979), and System 4T, (Likert and Likert, 1976). These sources were frequently used as models for the development of particular items, although each item was also developed with reference to the context in which it was to be used. From all sources a total of 123 items were developed.

Using Likert and Likert's (1976) definitions, as included in Appendix A, the author categorized and grouped each item as relating to one of the twenty two dependent variables. A similar procedure was carried out independently by two of the author's co-workers, both senior researchers, and the results of the three groupings compared. Discrepancies were jointly discussed and as a result a number of items were discarded and others modified.
The above procedure resulted in 91 items each of which, by consensus, was believed to relate to one or other of the twenty two dependent variables. These were then pilot tested on a group of 13 staff from a similar organization. Staff ratings of the group of items associated with each dependent variable were then tested for reliability, as measured by Cronbach alpha, using the Statistical Package for the Social Sciences (SPSS) program RELIABILITY. As a result of this a small number of items were reworded and others eliminated to leave a final total of 79 items relating to the 22 dependent variables. These items, identified by item numbers against dependent variables in Table 6:6, together constituted the basic data gathering instrument for organizational feedback and for the assessment of change. In this form the items were administered to a separate TAFE college which was commencing an organization development intervention. Reliability, again calculated as Cronbach alpha using the SPSS package, was most acceptable. These reliability coefficients are shown in Table 5:7. Finally, the same basic questionnaire, with minor modifications of expression and wording, was then used with the TAFE college which is the subject of this study.

As indicated in Table 6:6, of the 22 dependent variables, one is measured by six separate items, seven are measured by five items, three are measured by four items, and six are measured by three items. This use of multiple specific items was designed to induce a fixed frame of reference, increase the reliability of the instrument, and to decrease random measurement error, (Lindell and Drexler, 1979), as well as to avoid the use of universal, wholistic-judgment type items. In the event, two variables were measured by a single item each. Both of these variables permitted a very direct and specific question and were
<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Questionnaire Item Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Organization Climate</strong></td>
<td></td>
</tr>
<tr>
<td>a Decision making practices</td>
<td>1-5</td>
</tr>
<tr>
<td>b Communication flow</td>
<td>6-10</td>
</tr>
<tr>
<td>c Motivation</td>
<td>11-13</td>
</tr>
<tr>
<td>d Lower level influence</td>
<td>14-18</td>
</tr>
<tr>
<td>e Technological adequacy</td>
<td>19-20</td>
</tr>
<tr>
<td><strong>2 Supervisory Leadership</strong></td>
<td></td>
</tr>
<tr>
<td>a Support</td>
<td>21-25</td>
</tr>
<tr>
<td>b Teambuilding</td>
<td>26-30</td>
</tr>
<tr>
<td>c Goal emphasis</td>
<td>31-34</td>
</tr>
<tr>
<td>d Help with work</td>
<td>35-38</td>
</tr>
<tr>
<td><strong>3 Peer Leadership</strong></td>
<td></td>
</tr>
<tr>
<td>a Support</td>
<td>39-43</td>
</tr>
<tr>
<td>b Team building</td>
<td>44-48</td>
</tr>
<tr>
<td>c Goal emphasis</td>
<td>49-51</td>
</tr>
<tr>
<td>d Help with work</td>
<td>52-54</td>
</tr>
<tr>
<td><strong>4 Group Process</strong></td>
<td></td>
</tr>
<tr>
<td>a Planning together</td>
<td>55-57</td>
</tr>
<tr>
<td>b Quality of decisions</td>
<td>58-61</td>
</tr>
<tr>
<td>c Knowing job</td>
<td>62-63</td>
</tr>
<tr>
<td>d Sharing information</td>
<td>64</td>
</tr>
<tr>
<td>e Wanting to meet objectives</td>
<td>65-67</td>
</tr>
<tr>
<td>f Confidence and trust</td>
<td>68-69</td>
</tr>
<tr>
<td>g Ability to meet unusual work demands</td>
<td>70</td>
</tr>
<tr>
<td><strong>5 Satisfaction</strong></td>
<td></td>
</tr>
<tr>
<td>a Personal</td>
<td>71-73</td>
</tr>
<tr>
<td>b Group</td>
<td>73-78</td>
</tr>
</tbody>
</table>

Table 6:6 Dependent variables and related questionnaire items, first order change
<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Cronbach Alpha.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision making practices</td>
<td>1-5</td>
<td>.89</td>
</tr>
<tr>
<td>Communication flow</td>
<td>6-10</td>
<td>.84</td>
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<tr>
<td>Motivation</td>
<td>11-13</td>
<td>.84</td>
</tr>
<tr>
<td>Lower Level Influence</td>
<td>14-18</td>
<td>.83</td>
</tr>
<tr>
<td>Technological adequacy</td>
<td>19-20</td>
<td>.26</td>
</tr>
<tr>
<td>Leadership support</td>
<td>21-25</td>
<td>.91</td>
</tr>
<tr>
<td>Leadership teambuilding</td>
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<td>.94</td>
</tr>
<tr>
<td>Leadership goal emphasis</td>
<td>31-34</td>
<td>.90</td>
</tr>
<tr>
<td>Leadership help with work</td>
<td>35-38</td>
<td>.90</td>
</tr>
<tr>
<td>Peer support</td>
<td>39-43</td>
<td>.91</td>
</tr>
<tr>
<td>Peer teambuilding</td>
<td>44-48</td>
<td>.89</td>
</tr>
<tr>
<td>Peer goal emphasis</td>
<td>49-51</td>
<td>.93</td>
</tr>
<tr>
<td>Peer help with work</td>
<td>52-54</td>
<td>.92</td>
</tr>
<tr>
<td>Planning together</td>
<td>55-57</td>
<td>.87</td>
</tr>
<tr>
<td>Quality of decisions</td>
<td>58-61</td>
<td>.85</td>
</tr>
<tr>
<td>Knowing job</td>
<td>62-63</td>
<td>.83</td>
</tr>
<tr>
<td>Sharing information</td>
<td>64</td>
<td>-</td>
</tr>
<tr>
<td>Wanting to meet objectives</td>
<td>65-67</td>
<td>.81</td>
</tr>
<tr>
<td>Confidence and trust</td>
<td>68-69</td>
<td>.84</td>
</tr>
<tr>
<td>Ability to meet unusual work demands</td>
<td>70</td>
<td>-</td>
</tr>
<tr>
<td>Personal satisfaction</td>
<td>71-73</td>
<td>.48</td>
</tr>
<tr>
<td>Group satisfaction</td>
<td>74-79</td>
<td>.92</td>
</tr>
</tbody>
</table>

Table 6:7  Questionnaire pilot test, Cronbach alpha reliability coefficients
included because of their perceived value to the feedback session, and therefore to the intervention, although their usefulness as a measure of change is necessarily limited.

The participant observation methodology through which data were collected and expressed was similarly designed to serve a dual purpose. In the first instance it would either confirm, or disconfirm, the data collected through the questionnaire. However, equally important, at the same time it would also capture more clearly and bring to life the feeling of being inside the organization as the intervention took place.

Data collected and expressed through the method of participant observation are far removed from the traditional educational research paradigm of experimental models such as those outlined by Campbell and Stanley (1963). As a generalization qualitative methodologies such as participant observation have been assigned little credibility. Jeffreys (1961) provides an expression of the traditional view.

"No matter what the subject matter, the fundamental principles of the method must be the same. There must be a uniform standard for validity for all hypotheses, irrespective of the subject. Different laws may hold in different subjects, but they must be treated by the same criteria; otherwise we have no guarantee that our decisions will be those warranted by the data and not merely the results of inadequate analysis or of believing what we want to believe".

In turn the traditional view is reflected in the published research. Eisner (1977, p.349) noted the overwhelming preponderance (97 per cent) of quantitative, psychometric type research published in the American Education Research Journal, 1974-76, a proportion which was reproduced almost identically by the same journal, 1978-80.
There are, however, indications of a challenge to this traditional relationship. Stake (1967, 1975), MacDonald (1976), Parlett and Hamilton (1977) and Stenhouse (1979) have developed objections and listed notable shortcomings of the traditional paradigm. Specifically these objections include, its divorce from the study of the real world, its failure to allow for the adaptation of process, the rejection of salient data because they are subjective or impressionistic, insensitivity to local perturbations and evanescent qualities, and a frequent inability to meet the concerns and questions of participants and other interested parties. At the same time Smith and Keith (1971) and Shipman (1974) have demonstrated how organizational change may be portrayed from a purely qualitative perspective. At the doctoral research level a survey of Dissertation Abstracts, 1975-80, identified thirty eight studies in which organization development was the subject. These are listed in Table 6:8. Of the thirty eight studies, seventeen employed purely quantitative, statistical designs and methods, two combined both quantitative and qualitative methodologies, three were purely conceptual, while in five the abstract was too imprecise to determine the source of the data. The remaining eleven appear to have relied exclusively on qualitative data.

In a sense this substantial reliance on qualitative data is not surprising. Although organization development has clear aims, much of the actual process employed is responsive to needs which emerge and frequently disappear again within the course of the intervention. As such it lends itself to a research methodology which, through the direct and vicarious experience of the researcher, can report these subtle intricacies and nuances of process. That is what the qualitative, participant observation methods of this study seek to reveal. Through "educational
connoisseurship" and "educational criticism", terms distinguished by Eisen (1979, p.193) as the "art of appreciation" and the "art of disclosure" respectively, the study aims to portray the essential character of the persons, programs, and events of the intervention. The approach is aesthetic, designed to focus on the unique qualities of the treatment process and its interaction with the subject, and serving the functions of: illuminating the treatment's uniqueness among others; assisting the perceptions of readers by pointing out new facets and disclosing patterns inherent in the materials; communicating the implicit or explicit judgments and reactions of the writer; and, helping to create a stylistic ordering of the treatment in a way that is useful for practical situations (Vallance, 1975, p.77). The same methodology has elsewhere been described as a means by which the researcher may

"reveal, unveil, divulge, impart, and bring to light - in short, to disclose - important, otherwise undetected aspects".  
(MacCutcheon, 1976, p.1)

In fulfilling these functions the critical description should be vivid, vernacular, non-discursive, and make liberal use of metaphor (Eisen, 1979), and in the process

"should reflect a critical aesthetic perspective which sees the (treatment) not as a means to a goal, but as an experience in itself".  
(Vallance. 1975, p 77)

It is essentially methods of this nature which have made possible Shipman's (1974) "looking inside", MacDonald's (1976) "portrayal" or Parlett and Hamilton's (1977) "illumination", and it is to achieve the same outcomes that the methodology is employed in this study.
<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>INSTITUTION</th>
<th>YEAR</th>
<th>METHODOLOGY</th>
<th>DATA COLLECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ault</td>
<td>Texas</td>
<td>1974</td>
<td>Experiment.</td>
<td>Ethnographic</td>
</tr>
<tr>
<td>Arends</td>
<td>Oregon</td>
<td>1975</td>
<td>Case</td>
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</tr>
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<td>Bassin</td>
<td>Columbia</td>
<td>1976</td>
<td>Descriptive</td>
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<td>1977</td>
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</tr>
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<td>Brotherston</td>
<td>Georgia</td>
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<td>Quantitative</td>
</tr>
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<td>Bowens</td>
<td>Harvard</td>
<td>1975</td>
<td>Case</td>
<td>Ethnographic</td>
</tr>
<tr>
<td>Cassill</td>
<td>Ohio State</td>
<td>1977</td>
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<td>-</td>
</tr>
<tr>
<td>Coad</td>
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<td>1973</td>
<td>Case</td>
<td>-</td>
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<td>Case</td>
<td>-</td>
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<td>1977</td>
<td>Case</td>
<td>-</td>
</tr>
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<td>Conceptual</td>
<td>-</td>
</tr>
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<td>Quantitative</td>
</tr>
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<td>-</td>
</tr>
<tr>
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<td>Quantitative</td>
</tr>
<tr>
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<td>Case</td>
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<td>Samuelson</td>
<td>Indiana</td>
<td>1976</td>
<td>Conceptual</td>
<td>-</td>
</tr>
<tr>
<td>Sturdevant</td>
<td>Ohio</td>
<td>1978</td>
<td>Case</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Tull</td>
<td>Kansas</td>
<td>1973</td>
<td>Case</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Wyant</td>
<td>Oregon</td>
<td>1974</td>
<td>Experiment.</td>
<td>Quantitative</td>
</tr>
<tr>
<td>Walsh</td>
<td>Boston</td>
<td>1976</td>
<td>Case</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 6.8  Summary of methodology and data collection methods used in all "organization development" dissertations listed by Dissertation Abstracts, 1975-1980.
The participant observation methodology through which data were collected is of relatively recent origin in education research, although it has a longer tradition in anthropology and sociology. Various guidelines for its practical application (Centre for New Schools, 1977; Smith and Schumacher, 1977; Dasho, 1978; Tikunoff and Ward, 1978), and of ethical issues involved (De Voss et al, 1980), have recently appeared, along with analysis and discussion of some of the methodological/validity issues (Everhart, 1977; Dawson, 1979; Rist, 1980). The actual methods used to enter and establish the researcher role, the data collection procedures, means of maintaining objectivity, and the analysis of data are examined in subsequent sections.

**Data collection** Data were collected through the questionnaire on three occasions, at the commencement of the intervention, at six months, and at fifteen months. A planned fourth collection of data, at twenty four months, did not eventuate. College staff expressed the belief that they would derive no additional benefits from a further round of the questionnaire and formally rejected the collection of further data through this method.

For each of the three data collection rounds each member of staff, both professional and support, received a copy of the questionnaire through an established college committee which was responsible for the co-ordination and administration of all staff training and development activities throughout the college. A pre-addressed envelope was provided for the return of the questionnaire.

At the commencement of the first round of data collection resistance to completing the questionnaire was expressed by some members of staff. Consequently a series of meetings with small groups of staff were held
at which the function and purpose of the questionnaire was further elaborated upon. Thereafter an acceptable return rate of the questionnaires was achieved. The second and third rounds were distributed and returned in the same manner, and on both occasions an acceptable return rate was achieved without reminders or prompting. Throughout all these rounds exacting standards of anonymity and confidentiality were maintained. The distribution and return of the questionnaires is summarized in Table 6:9.

Data collection through participant observation continued throughout the twenty-four months of the study. During this period the writer maintained a close ongoing interaction with members of the college from every level of authority and every set of functions. In addition to explicit intervention activities, such as the survey-feedback sessions and formal development courses, the writer also attended numerous work group meetings, both formal and informal, he frequently shared time and conversation over coffee breaks and lunch in the staff room, he formally interviewed cross-sections of staff, he informally interacted with almost every member of staff over a period of two years, and he had access to reports, statistics and other college documentation. Over the entire period extensive field notes were maintained, documentation collected, and interviews recorded.

Throughout this process of data collection two key issues remained in constant focus: the maintenance of maximum objectivity, and the ethical issues inherent in the collection of data and its use when there is a close, ongoing, interactive relationship between interventionist/researcher and his clients.
<table>
<thead>
<tr>
<th>Data collect. round</th>
<th>No. of questionnaires distributed</th>
<th>No. of questionnaires returned</th>
<th>per cent returned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>prof. staff</td>
<td>support staff</td>
<td>total staff</td>
</tr>
<tr>
<td>1</td>
<td>86</td>
<td>18</td>
<td>104</td>
</tr>
<tr>
<td>2</td>
<td>79</td>
<td>18</td>
<td>97</td>
</tr>
<tr>
<td>3</td>
<td>76</td>
<td>18</td>
<td>94</td>
</tr>
</tbody>
</table>

Table 6:9  Distribution and return of questionnaires over three rounds, professional and support staff

The first issue was resolved by consciously and continuously seeking representative sampling among those interviewed and spoken to and avoiding a single perspective or viewpoint. Simultaneously, because of the empathy developed with the college staff and the intimate knowledge developed of the college environment, observed events could be interpreted and recorded within the context in which they occurred. This conscious self-discipline, or "disciplined subjectivity", (Wilson, 1977), resulted in the perception of subtleties and nuances within behaviours and relationships which, when synthesized, revealed what the organization "felt like" as it was subject to the treatment, while at the same time retained the objectivity expected of research.

The second issue, that of ethics, was also consciously promoted throughout the period of the intervention. College staff were continuously aware of, and approved of, the data collection activities throughout
the study and no effort was made to surreptitiously collect nor conceal data. Further, the rigorously observed standards of anonymity and confidentiality afforded additional maintenance of ethical standards. However, as MacDonald and Walker (1977) have intimated, much can be said and done which, although protected by confidentiality is regretted in retrospect. To minimize intrusion of this nature all materials relating to the processes and outcomes of the intervention which were prepared for public distribution, including two discussion papers, (Henderson, 1981 a; 1981 b), and the draft and final copy of the following chapter, were read and commented upon by a wide cross-section of the college staff.

IMPLEMENTATION OF PLANNED CHANGE — THE SECOND ORDER CHANGE

The change model investigated in this study hypothesizes a causal relationship between changes made to an organization and subsequent changes in the organization's ability to implement planned change. The preceding pages have considered the research design with respect to the first element of this relationship, change to the organization, or, as it has been labelled in this study, first order change. The research design with respect to the second element of the relationship, change by the organization or second order change, will be examined in the following pages.

Research variables The practical implication of the causal relationship model with respect to the research design is that the dependent variables of the first phase of the study are the independent variables of the second phase of the study, as is shown schematically in Figure 6:2. These variables have been discussed at length in the earlier
PHASE ONE - FIRST ORDER CHANGE

INDEPENDENT VARIABLES

Generic subsystem /
Interface relationship

DEPENDENT VARIABLES

Organizational Characteristics

Org. develop. intervention

Planned change implemented

Determinants of implement. /
Fidelity of implementation

PHASE TWO - SECOND ORDER CHANGE

INDEPENDENT VARIABLES

DEPENDENT VARIABLES

Figure 6:2  Schematic representation of causal relationship research model
part of this chapter.

The identification of appropriate dependent variables for the second phase of the study was less straightforward. The major complication was the absence of any organizational planned change in the college concerned, either when, or in the months before, the intervention commenced. There were numerous innovative activities and there were extensions to existing activities of a nature which could be described as innovative, but there was no single, organization-wide project which could serve as the subject of study. A long, cumulative planned change commenced at the same time and as part of the organizational development intervention, but it had a long gestation period. The first organization-wide planned change did not appear until ten months had elapsed from the commencement of the intervention.

Although this absence of a planned change project either in process or recently completed before the intervention commenced precluded the use of a pre- and post-intervention research design for this phase of the study, nevertheless a number of measures of the organization's ability to implement planned change were devised. These included measures which were based on the use of dependent variables which tapped indirectly into the implementation of planned change, as well as measures based on dependent variables which tapped directly into the planned change process.

Those variables which tapped indirectly into the implementation process were those variables which theory and research indicated are determinants of the implementation process, and which have been discussed at length in Chapter 2 of this study. That is, they are variables which
reflect the operation of factors which are believed to influence the implementation process, rather than the process itself. The variables, which are listed in Table 6:10 together with the questionnaire items relating to each variable are concerned in particular with determinants of implementation relating to the organization's use of strategies, the attention paid to the characteristics of potential planned changes when making adoption decisions, and to a number of characteristics of the organization.

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Related questionnaire items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1c Resocialization</td>
<td>105</td>
</tr>
<tr>
<td>1d Compatibility</td>
<td>92, 104, 108</td>
</tr>
<tr>
<td>2a In-service</td>
<td>97, 103</td>
</tr>
<tr>
<td>2b Resource support</td>
<td>95</td>
</tr>
<tr>
<td>2c Feedback</td>
<td>88, 89, 107</td>
</tr>
<tr>
<td>2d Participation</td>
<td>83, 85, 86</td>
</tr>
<tr>
<td>2e Planning</td>
<td>98, 109, 110, 111</td>
</tr>
<tr>
<td>3a Adoption process</td>
<td>80, 94, 106</td>
</tr>
<tr>
<td>3b Organizational climate</td>
<td>81, 90, 93, 96, 100</td>
</tr>
<tr>
<td>3c Environmental support</td>
<td>99, 101, 102</td>
</tr>
<tr>
<td>3e Peer and authority relations</td>
<td>82, 84, 87, 89</td>
</tr>
</tbody>
</table>

Table 6:10 Dependent variables and related questionnaire's items used to reflect the operation of the implementation process.

Note: Dependent variables have been listed and numbered as per the author's listing in Table 2:1, Chapter 2.
Although the variables listed are all determinants of the implementation process rather than elements of the process itself, nevertheless it is the contention of this study that any changes recorded in these variables will reflect changes in an organization's potential capacity to implement planned change.

The dependent variables which tap directly into the planned change process are based on the five dimensions of fidelity of implementation, as first defined by Fullan and Pomfret (1977), examined in some detail in Chapter 2, and listed in Table 6:11. This model is one of a number of multi-dimensional models of implementation developed in recent years. Other notable models include one from Hall and Loucks (1978), one from Leithwood and Montgomery (1978), another from Leithwood (1981), and another from Heck et al (1981). That developed by Leithwood and Montgomery substantially overlaps and displays marked similarities with the Fullan and Pomfret model. The Hall and Loucks model does not specify a fixed set of dimensions, but the variables they cite in their "configurations", for example, materials, grouping, and testing or assessment procedures do not conflict with the Fullan and Pomfret model.

<table>
<thead>
<tr>
<th>Subject matter or materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational structure</td>
</tr>
<tr>
<td>Role/behaviour</td>
</tr>
<tr>
<td>Knowledge and understanding</td>
</tr>
<tr>
<td>Value internalization</td>
</tr>
</tbody>
</table>

Table 6:11  Dependent variables for the evaluation of fidelity of implementation
Apart from these similarities, or compatibilities, of models, the Fullan and Pomfret model meets other criteria which make it acceptable for use. First, those implementing the change can readily identify with the dimensions they propose. The dimensions are generally very practical and are cast in terms of what materials the teacher used, of how they organized themselves and their classes, and of how they behaved. This frame of reference is very much concerned with the here and now, a characteristic which, as previously expressed, is believed to pervade the attitudes of TAFE staff. Second, Fullan and Pomfret's dimensions appear to be sufficient and appropriate to describe the critical aspects of most planned changes. Both Leithwood and Russell (1978), and Heck et al (1981), emphasize the need for a set of dimensions which balance a concern for fidelity against a concern for the integrity of the planned change. It is believed that Fullan and Pomfret's dimensions, in combination with the assessment procedures used, create this balance. Finally, the Fullan and Pomfret dimensions were derived from a rigorous and fully documented review of a number of implementation studies, as well as from a previous study by Fullan (1972). As such they possess a sound theoretical and conceptual base, which, in combination with the preceding properties, renders them suitable for use in this study.

**Instrumentation** Data on the second order change were gathered through three distinctive methodologies: questionnaire, "levels of use", and participant observation. The first and last of these are essentially the same in operation as the methods previously described in the first phase of the study. The questionnaire, consisting of 32 items, was distributed as part of the basic organizational development instrument. It was designed to collect data on the determinants of implementation. The variables and the relevant data collection items have been previously listed in Table 6:10.
Although the items have been categorized against particular dependent variables each item was processed separately in an attempt to maximize the usefulness of the data collected. The procedures used to generate the initial list of items, to select and categorize from this list, and in trialling the items were essentially the same as those used in the first phase of the study. Initially a list of 39 items was generated, in part drawn from a questionnaire designed and developed by Coughlan et al (1972), and in part based directly on the concept and theory of implementation determinants developed previously in this paper. This list was subsequently refined to the final 32 items. Similarly, the participant observation methodology employed techniques of data collection which were the same as those used in the first phase, however, the data is presented in a documentary style in contrast to the "educational criticism" style used in reporting the first phase of the study.

The major difference between data collection in the first and second phases of the study was the use of an adaptation of the "Levels of Use" (LoU) methodology developed by Hall and colleagues at the University of Texas. Conceptually LoU is part of the Concerns Based Adoption Model (CBAM) which integrates two perspectives of implementation: Stages of Concern about the innovation (Hall and Rutherford, 1976) and Levels of Use of the Innovation (Hall, Loucks, Rutherford and Newlove, 1975). The LoU methodology has been used primarily to determine the level of use of an innovation with a view to facilitating the development of implementation (Hall and Loucks, 1977, pp. 264-5). However, it has also been used to relate the level of implementation to achievement outcomes, (Hall and Loucks, 1977; Reidy and Hord, 1979), as a summative evaluation tool, (Okpalobi, 1979), and for formative evaluation purposes (Roecks and Andrews, 1980).
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The LoU methodology uses a "focused interview" technique, (Foster and Nixon, 1975), to determine the particular use a planned change is receiving during implementation. Eight sequential levels of use have been delineated and verified through a series of longitudinal and cross-sectional studies (Hall, 1977; La Shier, 1977; Loucks, 1976). The eight levels of use, which are determined by the behaviours of the users and non-users, have been operationally defined and developed with behavioural indices in order to increase reliability between the levels when used in different contexts and by different users. A validity study of the interview procedure, using ethnographic methods, has given a correlation of .98 between interview ratings and ratings from observation (Roeoks and Andrews, 1980). A study of traditional reliability coefficients between raters using the interview methodology gave interrater reliabilities ranging from .87 to .96 on the overall Levels of Use (Hall and Loucks, 1977).

The interview procedure is generic and can be used with different planned changes by changing the frame of reference. The schedule used in this study used the same structure and questions as that developed by Hall and colleagues and is included in Appendix C.

The interview schedule and the behavioural indices provide the methodology to be followed in gathering data and establishing levels of usage of the innovation, but the subject matter of the interviews is established with reference to the planned change undertaken within the context of Fullan and Pomfret's dimensions of implementation.

The specific planned change undertaken by the subject college was an educational program for unemployed youth in the 16 - 19 years age group. The program, which might be broadly described as a "transition" program,
was designed to provide some remediation in communications and literacy skills, to provide limited exposure to some trade skills, and to rebuild the student's self esteem. Students were selected by officers of a government agency, the Commonwealth Department of Employment and Youth Affairs, and students were offered a financial inducement to enroll and attend the program. All students were unemployed and in receipt of an unemployment allowance. Students were of both sexes.

Although similar programs were in quite common usage in other educational institutions, to this particular college and indeed to the entire TAFE system at that time, such a program was an innovation in every sense. The only students the college had previously enrolled and the only programs previously offered were all purely vocational. Similarly, all previous students had been employed and apart from those upgrading their qualifications at evening classes all were legally obliged to attend the college as part of their apprenticeship indenture. The planned change was clearly a major innovation, but one the college entered into voluntarily. Although such programs were endorsed and well funded by the Federal government, nevertheless the decision to participate in such a program, and the level of involvement if it did participate, was made entirely at the college level.

Within this context discussions were held with staff responsible for co-ordinating and giving guidance to the program in order to identify particular goals, objectives and criteria which might be associated with a successfully implemented program. Following the usage of Hall and Loucks (1978) these criteria were labelled as "critical" or "related". Critical criteria represent the primary program goals which must be met in order to implement the program. Related criteria included those regarded as important, but not essential, to implementation. The
criteria, labelled as critical or related, and categorized by the Fullan and Pomfret dimensions, are listed in Table 5:12.

<table>
<thead>
<tr>
<th>CRITICAL CRITERIA</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSION</td>
<td>CRITERIA</td>
</tr>
<tr>
<td>ORGANIZATION STRUCTURE</td>
<td>1 flexible scheduling of classes</td>
</tr>
<tr>
<td>ROLE/BEHAVIOUR</td>
<td>2 displays openness and receptiveness to student problems</td>
</tr>
<tr>
<td>VALUE INTERNALIZATION</td>
<td>3 values development of self esteem in students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RELATED CRITERIA</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT MATTER/MATERIALS</td>
<td>4 liaised with industry</td>
</tr>
<tr>
<td>ORGANIZATION STRUCTURE</td>
<td>5 utilized work related materials</td>
</tr>
<tr>
<td></td>
<td>6 students involved in community</td>
</tr>
<tr>
<td></td>
<td>7 interaction with students from other programs</td>
</tr>
<tr>
<td></td>
<td>8 integrated into ongoing college activity</td>
</tr>
<tr>
<td></td>
<td>9 teacher team effort</td>
</tr>
<tr>
<td>ROLE/BEHAVIOUR</td>
<td>10 accept student contribution to course design/content</td>
</tr>
<tr>
<td>KNOWLEDGE/UNDERSTANDING</td>
<td>11 advise on student personal issues</td>
</tr>
<tr>
<td></td>
<td>12 understand student backgrounds</td>
</tr>
<tr>
<td></td>
<td>13 differences in social and moral values</td>
</tr>
<tr>
<td></td>
<td>14 personal development orientation of program</td>
</tr>
<tr>
<td>VALUE INTERNALIZATION</td>
<td>15 commitment to individual students</td>
</tr>
<tr>
<td></td>
<td>16 surrogate parent role</td>
</tr>
<tr>
<td></td>
<td>17 a &quot;home&quot; within college</td>
</tr>
</tbody>
</table>

Table 6:12 Critical and related implementation criteria, categorized by Fullan and Pomfret's (1977) five dimensions of implementation
data collection  Questionnaire data was collected on three occasions, at the commencement of the intervention, at six months, and again at fifteen months, on each occasion in conjunction with the collection of organization development data and as part of the same instrument. Details of distribution procedures, number of questionnaires issued, and return rates are listed earlier in this chapter. Similarly, the procedures and practices used to gather data through the participant observation methodology are the same as those previously listed.

The interviews conducted to ascertain the level of use of the planned change were formal and were held with eight of the fifteen college staff members who were directly associated with the program. The in-college program co-ordinator was included by design. The remaining seven interviewees were chosen randomly and included staff whose teaching commitment to the program ranged from 20 per cent to 100 per cent of their scheduled teaching load.

The interviews took place during the time period $T_{26}$. The particular planned change which was the subject of the interviews had then been in process for 16 months. Interviews were held in the college in a small office provided by the college administration. Each interview lasted between 25 and 35 minutes and, with the consent of the interviewees, was recorded for later transcription. The LoU interview method used was adapted, or varied, from that advocated by Hall and colleagues in two important respects. In the first instance, although this study identified three critical criteria and fourteen related criteria, only one interview was conducted with each subject, whereas strictly speaking there should have been a separate interview with each subject for each criterion. The logistics of a separate interview for each criteria were impractical, but at the same time it was believed desirable that as much
information as possible be collected on the implementation of the criteria identified. The outcome in this study was a compromise, a single interview concerned primarily with the three critical criteria, but from which sufficient information was also obtained to establish usage levels for the related criteria. The second major variation from the standard LoU interview concerned the status of the interviewer. Interviewers conducting LoU are trained at an intensive course in the use of the technique. This interviewer had not undergone a formal training program of this nature, although he had had the benefit of working through a three day workshop on LoU with Hall. The interviews were thus conducted on the basis of understandings gained from this workshop, combined with the standard interview format, and the operational definitions and behavioural indices developed by Hall and colleagues. The initial part of each interview was devoted to establishing how well each staff member was meeting the implementation criteria. Once this was completed the standard LoU format of operational definitions and decisions was then used to determine the particular level of usage.

The results of these interviews, of the data collected by questionnaire, and of the data collected through participant observation, is presented in the following two chapters. The first of these chapters presents the material related to the organization development intervention as seen through an aesthetic approach which seeks to be vivid, vernacular, and non-discursive. The second follows the more conventional approach, both in the material, which is largely quantitative, and its presentation. It is believed that the two chapters complement each other in presentation and provide corroborative evidence in relation to the implementation of the intervention treatment.
CHAPTER 7

COLLEGE RENEWAL COMES TO CARLISLE COLLEGE

Introduction - The first impression is not inspiring. From the street it looks like any other factory in this part of the city. Serrated roofline; austere; orderly; manicured slash of green as a token gesture to nature along the most public profile; high wire mesh fence topped with multi-strand barbed wire encloses most of the perimeter.

Inside the orderliness disappears. An uncoordinated jungle of structures hustle each other, competing for every available space. Every building has an addition. Even the additions have additions. The prevailing architectural influence is clearly Early Australian Compromise, unified into a single concept by wall to wall asphalt. The only unpaved open space is the junk lot, an incredible conglomerate of scrap, discarded panels, worn motors, and a forlorn rusting bulldozer.

Venture inside the buildings in the complex and it's evident that it is not only the inanimate resources that compete for space. People do also. The narrow rectangular space between parallel buildings, spanned by a corrugated roof structure and enclosed at one end with a heavy gauge tarpaulin, houses two disparate workshop classes. Inside the workshops proper there are multiple classes everywhere. Forty seconds to pass from one end of a workshop to another, besieged by violent sounds, is not long enough to tell how it is managed, but long enough to convey the strong impression that at least at certain times teaching space is at a premium. Out of the workshops, across a postage stamp quadrangle and
past the canteen which operates from an open verandah. Each step reinforces the initial impressions: this campus is overcrowded beyond belief.

I'm here because I'm invited. A week ago I had arranged a seminar for the Principals of TAFE colleges to promote the concept of college renewal. This was to be voluntary, but endorsed by the chief executive in TAFE, and most colleges were represented. The college renewal model was presented, warts and all, with a heavy emphasis on the prolonged, painful nature of the process, and the caveat that the process should only be undertaken with a deep sense of commitment. A lively interactive session had followed which raised most of the doubts, objections and rationalizations that have since become almost standard dialogue whenever college renewal has been introduced for discussion and consideration. Who would collect the data? Who would control it? How would they know that the data collected was valid? Reliable? Meaningful? The Staff Development Section, in which I worked, was based at Head Office - who could guarantee that college renewal did not become a "pipeline" of confidential information to Head Office? Charges were levelled. Staff Development was acting as a thinly disguised evaluative/accountability agent for Head Office to give a "charge" or "needle" to colleges judged to be lacking in some sense. And what particular expertise did Staff Development believe they possessed on which to base their presumptuous offer of organizational assistance? Patiently the questions were answered, the charges replied to, the basic features of the model reiterated: college renewal would occur only on the basis of college initiative; colleges would have the right of termination of involvement at any time; the process was one of self-help, with Staff Development's role one of facilitating the college's optimization
of its own potential and processes; the entire process was subject to absolute confidentiality. Gradually the interaction slowed, and ended. A final thought was relayed to those present: "take the concept away, think about it, chew it over with colleagues, and contact Staff Development if you wish to consider it further".

An informal post-mortem between myself and two colleagues who had conducted segments of the seminar followed. Our pooled guestimates of possible outcomes of the day were generally pessimistic. The consensus was that I had probably scared our potential customers off by being too brutal as to the costs of participation. On the following morning two college principals contacted Staff Development and indicated that they wished to discuss the possibility of a program. One was this college, and that's my entrée.

**Entry** - This is where it all starts. And often ends. In the five days before my first appearance on campus I had largely come to grips with the formal organization. Middle sized as TAFE colleges go. About 90 professional and 30 support staff, storemen, technicians, clerical and janitorial. Unlike most colleges, it caters only for a single industry. The vast majority of students are trades apprentices, with a small number of part time evening students enrolled in technician courses and hobby classes. Professional staff are overwhelmingly male and, except for the library staff, from an exclusively trades background. Interesting, and mildly useful, but it's the informal organization that ultimately matters.

The Principal has scheduled a start from the deep end, a formal meeting with the entire administrative hierarchy of the college. I explain. They react. Slowly and suspiciously. The idea is obviously new to
them and like good professionals they're keeping a tight defence as they size up the new package. My offer to elaborate on any part of what is a pretty complex proposal goes largely unanswered. The few questions I prod out of them are peripheral, almost trivial, but another meeting for next week is arranged and agreed to before the session breaks up. The following week the action is much more fierce, similar to what I had experienced with the Principals. Some of the reactions and questions are very pointed, and I suspect are manifestations of suspicion, mistrust, or plain antagonism to my propositions and presence by a small minority of those present. Hang in there. Successful entry depends on meeting and allaying the maximum number of private agendas of concern and doubt. In the process the basic features of the college renewal model are reiterated yet again, from every conceivable perspective. The meeting terminates. The decision of what is to be done will be made privately by the college, by a process unknown to me. I am keen to proceed, and I sense that "proceed" will be the decision even though there has been some apparent opposition and little overt support.

Expectations are constantly being tested, verified, and re-shaped where necessary, but generally the process is quiet, subtle, and imperceptible. Short of rampant stress and organizational turmoil I don't believe there's any other way, but my guess is that it's being tested, openly and vigorously during this period. Reactions have shown that the concept is alien, and is perceived at least by some as being threatening. In the event, a week later the green light is given, a decision that I privately confirm as reflecting the views of nearly all the administrative staff. The private confirmation reflects my suspicions of the decision making processes within the college. The Principal had assured me that although he favoured proceeding with the intervention, the
college's decision would be arrived at democratically. His would be simply one vote among many. But TAFE college Principals can be omnipotent within their own domain, and I have rapidly acquired a perception that this one is. A huge physical presence, cynical in the extreme, facetious, and jesting remarks that contain a loosely concealed latent threat. When he facetiously remarks that he's democratic, provided everyone agrees with him, I'm inclined to believe him. So I privately confirm that the decision to proceed reflects the group view.

It does, but I think that the decision represents an addition to the theory-in-use rather than a change. The right to veto or terminate proceedings seems to have weighed heavily in reaching their decision, the exit through which they can retreat with apparent dignity.

**Data collection** — The intervention begins to move. Within a week I'm actively collaborating with a small sub committee of the administration determining what data will be collected and how it will be done. Collaboration is a bit strong. They identified the work groups from whom the data would be collected while I designed, developed and trialled a questionnaire to gather the data. When the document was completed I met with the committee and the Principal as they read through it. It was winter outside and I felt like winter inside as they silently read through the document and then returned them to me — without comment. Were they concerned, or threatened, or overwhelmed, or did they have implicit trust in my role as the expert? They were not about to communicate their feelings to me. This draft of the questionnaire was then considered and discussed at a meeting of the entire administrative group and myself. At this numerous modifications to the language and expression of questionnaire items were made — but no fundamental changes. No items were added, none deleted, nor was there objection to the nature
or thrust of any questions. This lack of objection evidently surprised both the Principal and Deputy Principal. It's clear from a private conversation with both persons at the conclusion of the meeting that they had anticipated considerable objection to the probing nature of many of the items. It wasn't until they articulated their surprise that my own thoughts focussed on the same perspective. I realise that I have just pushed through what is potentially a most threatening document.

Pushed is the operative word. I hadn't argued, explained, gone into the nuances of questions, nor reassured, but rather had used my role as an interventionist, legitimated by their decision to proceed, to present a document which I expected them to understand as I understood it. And having legitimated my role they complied. The questionnaire, bearing a clear endorsement by the college administrative staff, was printed and distributed throughout the college.

It was fortunate that I didn't wait with bated breath for the questionnaires to be completed and returned, for I would surely have expired. The questionnaire met with a wall of suspicion and resistance. Scarcely one was returned. Enquiries revealed a number of reasons, but at the most fundamental level, entry had been effected only at the administrative level. Few teaching staff appeared to have been adequately briefed on the purpose of the questionnaire nor on the college renewal process of which it was a part, briefings which had been entrusted to the administrative staff member of each group. Where briefing had occurred the most frequent response was cynicism, an expressed belief that the data would lead to no discernible change. To others it was simply one more questionnaire, part of a seemingly endless stream, generated by faceless people with nothing better to do. Yet others perceived it as the dead hand of Head Office with a further imposition - a perception guaranteed
to stimulate resistance.

And so the real work of entry began. My initial impressions of tight space and tight scheduling were not wrong. The college functioned to a cells and bells, prescriptive day by day syllabi, formulae which virtu-
ually precluded meeting with an intact work group except at obscure 
hours. And at obscure hours we met. During the next week a series 
of meetings, before (7.30 am) and after (5.00 pm) the day's classes 
and during lunch breaks, were held with the work groups who appeared 
particularly resistant. The times were inconvenient and resented ("This 
had better be bloody good"); the contact and interaction too short, 
generally a maximum of one hour; and some groups missed out. But 
questions were answered, doubts resolved, and fears allayed. A more 
broadly based entry was effected, my role further legitimated, and the 
questionnaires came in.

Feedback - Less than a month elapsed from the distribution of quest-
ionnaires to the first feedback session. From the attention I received 
and the enquiries made as to the timing and availability of data, I 
gathered that there was considerable interest and curiosity, some app-
rehension and tension, and a certain amount of malicious anticipation 
that some administrators were about to have their autocratic incompet-
encies exposed.

The strategy adopted was to run a feedback session of the data collected 
with the administrative group, with the data arranged to provide a total 
college profile as well as an individual profile for each separate work 
group. The session commences with what appears to be a considerable 
amount of caution. I've seen this group together frequently over the 
past few weeks and there's usually good natured bantering and joking.
But not today. First item to be considered: what is to be done with the data when it is received in a few minutes time? There's no real discussion. Without dissent they opt for what seems to be the safest alternative. Data related to individual work groups will remain confidential to that group. Only the senior administrative staff, the Principal, Deputy Principal, and two departmental heads will have access to all information.

The feedback is distributed and I speak briefly to it. I believe that I've taken care to keep the statistics few and simple, but I'm soon jerked back to reality. "What's it all mean?" "C'mon. You're not dealing with bloody mathematical geniuses". I explained further. They appear taut and a little overwhelmed by the statistical data they have received. There is a pregnant silence as they search the data feedback in the light of my further explanations. And then the silence escapes, collapsing under an audible collective relief. The tension crumbles, and a surge of collegiality engulfs the group as individuals scuttle around to compare and share their individual group's results. The agreement to retain confidentiality of data, reached only twenty minutes before, has been conveniently brushed aside, and the group appear to be quite oblivious of my presence.

Watching, I briefly ponder and speculate on the dynamics in operation. For the majority there is no problem. The feedback they have just received is complimentary, even flattering, of them and their work group. Sharing and comparing presents no threat to them. But what of the three or four who have received feedback on them and their work group which, I believe, is distinctly unflattering and uncomplimentary? As best I can tell they also are sharing and comparing. Do they really not understand? Or care? Or have they been swept along with the group norms
and expectations, unable to maintain their privacy?

Casual thoughts, soon lost. The feedback session gradually restores
to some semblance of relaxed order, and the group determine that further
feedback sessions of individual work group data will be held with the
group concerned. Each session will be held by either the administrat-
ive staff member concerned now present or myself, in either case at
the former's discretion. In the event all but three of the subsequent
feedback sessions are done by myself. I learn later that one group,
whose data indicated what I saw as considerable organizational problems
received no feedback at all.

The final matter raised at this initial feedback session is the question
of the future direction of the renewal program. They decide, using
the now familiar principle of group initiative and self determination
as their reference point, that each individual group has the responsibi-
ility to make its own decision on future action and direction after
it has received, analyzed, and diagnosed the data. That's progress, I
think. A quick coffee, then back to the office. I can't help but feel
pleased with myself. Perhaps smug. Certainly that profile of the
administrative group has given them something to think about. There's
an interesting aftermath soon to follow. Minutes after returning to
the office I receive a call from the college's Deputy Principal querying
whether or not I have made a mistake in identifying the work groups
from whom the data had been collected. I gather from his call that
a rapid post mortem cum analysis of the data is in process between
himself, the Principal, and the two department heads and it's evident
that they are surprised by some of the individual work group's profiles.
They were sufficiently surprised that they have asked me to check the
accuracy of my labelling, but there's no mistake. I can't help but
wonder how well they know their own college.

Two weeks later I'm present again, this time as a non-participant while the administrative group decide whether to proceed with some sort of training program to correct what they see as some of the organizational deficiencies which have been revealed. No outstanding argument supporting why the group should take this course is advanced. Rather there is a feeling of unease about the lack of teamwork, the insularity, the feelings of impotence to meaningfully contribute, and the lack of direction to college activity, which the data has indicated exists at this level. The Principal has expressed his desire to play an essentially neutral role during this process, and also his intention to abide by the majority decision. He also requests that those present speak their minds openly, although in general I don't think that they're prepared to do so. One person argues strongly against a training program. In earthy, colloquial language he expressed his satisfaction with the present state of the organization. Besides, there has been a suggestion that a training program would be residential and include part of a weekend and he is adamantly opposed to either. I sense that there is less than complete enthusiasm from some of the others, but they remain silent. From my rapidly accumulated knowledge of them I guess that they are unhappy over the prospect of a training program and even more unhappy over the prospect of it being residential and including part of a weekend, but they acquiesce and the decision to proceed with a training program is taken, subject to continued collaboration between myself and the sub-committee in designing the program. I believe their decision is another significant step towards redirecting the organization.

* * * * *

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Feedback sessions followed with a number of other work groups and in some of these groups organizational deficiencies were diagnosed. Decisions to proceed with a training program were made with four of these groups, however, in spite of these manifestations of progress with the intervention, I frequently experienced unease. My developing involvement with the groups, knowledge of their organizational profiles and of some of their problems inevitably led to me developing a mental picture of what I believed the groups should do. Frequently they didn't. They avoided confronting what I saw as problems, rationalized away what seemed like hard evidence, or flatly refused among themselves to respond to what they themselves had identified as significant problems. At the conclusion of one feedback session, during which participants spent the best part of two hours establishing conclusively to themselves that teamwork and morale are at rock bottom, B flatly asserts that he agrees that things are bad, but that he personally has no intention of doing anything to remedy the situation. And sufficient of the others follow suit that within a couple of minutes a promising initiative is dead. A second group, who were low profile in most dimensions of climate, among others, hasten to assure me that it's all the fault of "they" - they being the hierarchy - and therefore beyond their control or influence. I, administrative leader of the group I judge to have the least complimentary profile of any, reacts like a bucket of eels. I soon establish that his group have not received any feedback. Every time that I raise the issue of the need for feedback with him, he is totally accommodating with his responses - and as total in intent to do nothing about it! It's frustrating, and I have to remind myself frequently about the principle of self-determination we have worked to, and Chris Argyris' dictum, that it's not my function to change the organization.
Planning and developing, executing, and evaluating strategies -

Conceptually these are three distinct stages. In practice, with an intervention which extends over two years, they are inextricably intertwined and interact continuously in a moving stream of events.

We work collaboratively, collecting data on tasks and "real problems", partly through interview, partly from written submissions. The training programs are designed and developed around these problems. It's a time consuming process, but immensely rewarding. At the conclusion of the interviews my fieldnotes record my belief that only one staff member with whom I've had contact remains suspicious of my presence and motives. The process of seeing, meeting and talking also fills in many gaps in my understanding of what is the operating reality of this college.

The gross overcrowding is a prolific generator of problems and discontent which permeates the life of the college. The canteen, staff-room, parking, room allocation - all basic hygiene factors, and all affected. The practical solutions the college has adopted are expedient and ingenious, but divisive. Staggered breaks for morning tea and lunch time allow the canteen to manage a shoestring service, but this ensures that many staff rarely see each other; similarly the use of two lunch rooms allows each staff member to obtain a seat, but this procedure further divides the staff into "halves"; each lunchroom accommodates its measure only through refectory style seating. Raise your elbow more than a regulation two inches and it's into someone else's dinner. A partial solution to this is in sight, but is in itself a source instability. A new college is presently under construction which will accommodate a few of the staff and students from here, but uncertainty over who will go (no-one appears to want to shift personally, but all want the reduction in numbers) is a source of some personal fear and much demoralization. Most of the issues associated with overcrowding
are largely outside the control of the college, and depend on decisions made at Head Office. However, there are many immediate issues which are within the control of the college. The interview data, the written submissions, and the organizational profile data from the questionnaire provide a rich and varied synthesis of the organizational reality. When analyzed, it revealed problems other than those generated by over-crowding, particularly at the intergroup and individual-organization interfaces, and in the psycho-social, managerial and structural sub-systems. The training programs were developed around these issues.

* * * * *

Almost every training program with which I have been associated has had a critical incident or point. Before the incident occurs there appears to be smooth progress, but it lacks conviction. Issues are confronted, solutions proffered and problems disposed of, just a little too mechanically, too fluently. Intuition, born of experience, warns that the solutions are manifestations of all the coping behaviours the organization has engendered over time, and include no attitudinal change. It is only after a critical incident, when the participants break free of the old expectations which confine them, that real, if lumpy progress is made.

In the parlance of the corrida, the critical incident is the 'moment of truth'. With the administrative group the moment of truth arrived late in the three day, residential workshop. Relatively mundane but real issues had been worked through, with apparent success, at least on the surface. Similarly, and concurrently, organizational processes had been addressed, again with surface indications of success. However,
I retained a vague, intuitive sense of ill-defined unease. These real-life players had not yet looked their bull in the eye. On the morning of the third day a "Johari Window" was scheduled. From all the feedback comments offered, just one, an indirect and almost flippant observation on the Principal's behaviour, unleashed an incredible agenda, primarily concerning the Principal. It wasn't acrimonious, just blunt. Not one person present, as best I could judge, failed to speak out, openly and bluntly. Five hours later that college could never be the same again, and the intervention has proceeded meaningfully ever since.

In the case of a small teaching group, again a three day residential workshop, the incident came late at night on the second day. Using a teambuilding problem solving process, the group had tortuously and patiently negotiated a new work schedule over a period of three hours. Active participation and consensus decision making had been employed apparently throughout. As an ultimate step, final agreement was sought from each member of the group. All agreed, then one hesitated, and finally blurted out his near total rejection of all that had been determined. For a moment, in the deathly silence that seemed an eternity, the entire future of the workshop hung by a thread. Poor intra-group relations had been the hallmark of this group. The silence snapped and in something less than thirty seconds, by real consensus this time, they retraced their steps to commence the problem again. A classic "groupthink" was buried and the group performed with tremendous spirit throughout the remainder of the year.

A third group, a non-teaching service unit, mechanistically made their way through almost an entire agenda and two days until one member, through an apparent slip of the tongue, exposed a hidden agenda common to all. Considerable progress followed. More important, a group who
had been reluctant beginners in the training program were encouraged by their own efforts to extend their training into the following week to work on other problem areas.

* * * * *

During the months which followed the college appeared to perceptibly change. It "felt" different. I was frequently on site. During the first year there was contact at least weekly: as a process consultant to administrative staff; data gathering; providing feedback sessions on progress; designing and developing workshops; counselling staff on particular problems; often, no more than a friendly visit. Throughout, feedback on the college as an organization remained consistently favourable, whether measured formally by the questionnaire instrument, or from the multitude of informal measures available. The college breezed through six months of potential administrative disruption, the result of long service leave and secondment of senior staff, which affected ten of the thirteen administrative staff positions; a new set of student programs, transition courses for unemployed youth, the very antithesis of what most staff believed they were about, achieved attitudinal support and acceptance from most staff by the end of the first year; contacts with industry and community, although constrained by an externally imposed structure, were broadened and extended; new curriculum were produced; and an extensive program of new 'short' vocational courses, responding to and tailored to industry's needs, appeared. The list goes on. The college site is only marginally less crowded, and the same jungle of factory-like buildings remains. However, the junk lot has disappeared, replaced by a swathe of grass; prominently placed displays remind the students, "Your mother is not a student at this college. You will have to pick up after yourself", (and it's
so clean you would think mother was enrolled!); the public media cover-
age records a number of college construction projects donated to commun-
ity institutions; and, two hundred metres down the street a class of
students have opened their "own" shop front.

* * * * *

The progress spins off in many directions. To complement and re-inforce
the organizational changes many staff embark on programs of individual
development. Many of these are at considerable personal cost. Five
of the administrative staff emerge from under the paper warfare to attend
management development courses. Residential, and fifty hours of train-
ing, of which approximately eighty per cent is in their "own", time,
including weekends, attendance involves sacrifices never before con-
templated. At the end of the academic year, examinations completed,
stocktaking out of the way, traditionally a week of socializing and
sporting events, the college programs a sequence of in-service activ-
ities which involves every staff member in at least two, and frequently
three, full days of in-service activity in his teaching area. Mid-
year, and an already cramped timetable absorbs a further burden. A
group of staff unhappy with the validity and reliability of their test-
ing and examination procedures have devised and organized their own
workshop, spread over four weeks and employing a university lecturer,
to improve their test and examination setting techniques. Elsewhere
in the TAFE system the psychological counselling and guidance section
have a new set of methods they would like to trial and are looking for
a TAFE college which they believe will be receptive and supportive of
their endeavours. Their deliberate choice, based on a survey of all
colleges, is this college.

* * * * *

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Two years on, and I am threading my way through the college complex with two staff members, heading for the morning tea room. One of them raises the subject of college renewal. G______, the earthy languaged opponent of the intervention proceeding all those months ago, volunteers his judgement.

"Best bloody thing that's ever happened to this college, mate".

I question his reasoning.

"It's a different mood, mate".

Why?

"Well, when the Principal gave his opening address this year we asked him, 'What do you mean by all that?' And when he told us we asked him to explain it further. And then we told him 'That's no bloody good'. Would never have happened before mate. I can tell you that".

Maybe it isn't the best thing that has happened to the college. Certainly a number would dispute that. But G______ is right about one thing, the college has certainly changed.

**Maintenance** - The ultimate bottom line of any intervention is whether it will sustain itself. If I disappear will the project effects dissipate? At the moment, yes and no. Yes, because some college initiatives still appear to depend on my presence as a catalyst. My role has yet to be fully taken over by any person or group in the college, but importantly they are still consciously working towards that goal, and there is some progress. An increasing number of initiatives come from a broad base within the college, and I find out about them later.
No, partly because of the trend above, but mainly because the effects of the project have made their way into the college's expectations, into its very lifestyle. The norms that support the various roles, role relationships and power have re-aligned themselves, and have led to expectations which are perceptibly different. Every aspect of organizational functioning within the college is now regarded as the fair subject for enquiry and discussion at large. And, slowly but surely the college members have acquired skill and expertise at collectively working their way through problems, and in the process ensuring that everybody has the opportunity to be heard. These norms require continued support, but the longer they exist the stronger they will grow, and the more difficult to eventually shift.
CHAPTER 8
RESULTS

The study's results are reported and analyzed as they pertain to two distinctive stages. The first concerns the measurement of the progress of the first order change, change to the organization, over the period of twenty four months. The second stage is concerned with second order change, the organization's attempt to implement a particular change that it had initiated.

RESULTS OF THE ORGANIZATION DEVELOPMENT INTERVENTION

An expressive account of the progress of the intervention over the two years appears in the preceding chapter. The data for this was obtained through the participant - observer role. Other data, reported in Table 8:2 of this chapter, were obtained from the self-report questionnaire which was completed on three occasions, at T₀, T₆, and T₁₅.

Further data, on the relationship between the intervention, described in Chapter 4, and the outcomes referred to in Chapter 7 and this chapter, have come from observation, but are also based partly on inference.

The questionnaire results are reported as a mean and standard deviation for the entire college population for each dependent variable for each of the three rounds of data collection. These results stand alone. There are no statistical tests of significance which can be applied to the results because the respondents to each questionnaire round were a dependent sample, in the sense that there was a large overlap of membership from one sample to the next. Nor does the data collected
lend itself to an analysis of matched pairs, the customary treatment for dependent samples, because the conditions established by the college precluded any means by which individual returns could be identified.

However, the absence of statistical tests of significance does not prevent meaningful analysis and the drawing of conclusions from the results presented. To stand alone, and to permit confidence that changes in the aggregated data reflect real changes in the organization, requires only that the data collection instrument possess sufficient and acceptable reliability, and the instrument used in this study possesses that degree of reliability for the majority of the indices it seeks to measure. The previously listed Table 6:6 indicated that a high degree of reliability had been obtained with the instrument during pilot testing. This reliability was replicated by the actual instrument used, which contained minor variations in wording to the pilot instrument. The results are shown in Table 8:1. Of the twenty two variables measured, six had reliability co-efficients of 0.90 or greater, ten had reliability co-efficients between 0.80 and 0.89, and a further two had co-efficients of 0.78 and 0.74 respectively. Together these constitute eighteen highly reliable indices of change which are representative of the organization and its processes. As measured by these indices the data indicate that a considerable and broadly based organizational change occurred from the commencement of the intervention to the second collection of data, and that in large part this change was sustained, and in some instances enhanced, between the second and third collections of data.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Cronbach alpha</th>
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<td>1 Decision making practices</td>
<td>1-5</td>
<td>.91</td>
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<tr>
<td>2 Communication flow</td>
<td>6-10</td>
<td>.83</td>
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<tr>
<td>3 Motivation</td>
<td>11-13</td>
<td>.78</td>
</tr>
<tr>
<td>4 Lower level influence</td>
<td>14-18</td>
<td>.82</td>
</tr>
<tr>
<td>5 Technological adequacy</td>
<td>19-20</td>
<td>.30</td>
</tr>
<tr>
<td>6 Leadership, support</td>
<td>21-25</td>
<td>.90</td>
</tr>
<tr>
<td>7 Leadership, teambuilding</td>
<td>26-30</td>
<td>.88</td>
</tr>
<tr>
<td>8 Leadership, goal emphasis</td>
<td>31-34</td>
<td>.81</td>
</tr>
<tr>
<td>9 Leadership, help with work</td>
<td>35-38</td>
<td>.90</td>
</tr>
<tr>
<td>10 Peer, support</td>
<td>39-43</td>
<td>.90</td>
</tr>
<tr>
<td>11 Peer, teambuilding</td>
<td>44-48</td>
<td>.86</td>
</tr>
<tr>
<td>12 Peer, goal emphasis</td>
<td>49-51</td>
<td>.90</td>
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<td>13 Peer, help with work</td>
<td>52-54</td>
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<td>14 Planning together</td>
<td>55-57</td>
<td>.74</td>
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<td>15 Quality of decisions</td>
<td>58-61</td>
<td>.80</td>
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<td>16 Knowing job</td>
<td>62-63</td>
<td>.85</td>
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<tr>
<td>17 Sharing information</td>
<td>64</td>
<td>-</td>
</tr>
<tr>
<td>18 Wanting to meet objectives</td>
<td>65-67</td>
<td>.85</td>
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<tr>
<td>19 Confidence and trust</td>
<td>68-69</td>
<td>.89</td>
</tr>
<tr>
<td>20 Meeting unusual work demands</td>
<td>70</td>
<td>-</td>
</tr>
<tr>
<td>21 Personal satisfaction</td>
<td>71-73</td>
<td>.45</td>
</tr>
<tr>
<td>22 Group satisfaction</td>
<td>74-78</td>
<td>.92</td>
</tr>
</tbody>
</table>

Table 8:1 Cronbach alpha reliability coefficients, grouped questionnaire items, n = 86
Columns 1 and 2 from Table 8.2, which record the aggregated data from the first and second data collections, indicate changes in a favourable direction in each of the eighteen indices which have acceptable reliability of measurement. Columns 2 and 3, the second and third data collections, indicate that this change was reversed markedly for variables 1c, 2b, 2c, 2d, and 4a, and to a lesser extent for variable 3d; that the original gains were largely maintained for variables 1b, 1d, 2a, 3a, 3b, 4b, 4c, 4e, and 4f; that further small favourable changes occurred in variable 3c; and that larger favourable gains were recorded by variables 1a and 5b. The nett result from the first to the third data collections was a marked positive change in sixteen of the eighteen variables, and smaller but positive changes in the other two.

The two smallest changes were recorded in the variables "motivation" and "supervisory leadership support", with a nett increase of 0.19 and 0.20 of an interval respectively. At the other end of the scale seven variables, including "decision making practices", "supervisory leadership teambuilding", "peer support", "peer goal emphasis", "planning together", "quality of decisions", and "group satisfaction", recorded changes ranging from 0.65 to 0.90 of an interval. Although the magnitude of the changes appears small, nevertheless the reliability of each indice allows it to be stated with confidence that organizational changes did in fact occur.

This conclusion is strongly reinforced by the qualitative data obtained through participant observation and recorded in the previous chapter. This suggested unequivocally that major organizational changes occurred during the intervention and that these changes were still in place at the end of two years. In particular, the qualitative data reported major changes in decision making procedures, on-going efforts to build
<table>
<thead>
<tr>
<th>Organizational Variable</th>
<th>Round 1 (n = 86)</th>
<th>Round 2 (n = 71)</th>
<th>Round 3 (n = 72)</th>
<th>Diff. Round 2 from Round 1</th>
<th>Diff. Round 3 from Round 1</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>s.d.</td>
<td>Mean</td>
<td>s.d.</td>
<td>Mean</td>
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<tr>
<td>1 Organization Climate</td>
<td></td>
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</tr>
<tr>
<td>a Decision making</td>
<td>3.98</td>
<td>1.58</td>
<td>4.46</td>
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<td>4.83</td>
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<tr>
<td>b Communication flow</td>
<td>5.26</td>
<td>1.41</td>
<td>5.97</td>
<td>1.05</td>
<td>5.81</td>
</tr>
<tr>
<td>c Motivation</td>
<td>5.40</td>
<td>1.75</td>
<td>6.01</td>
<td>1.42</td>
<td>5.59</td>
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<tr>
<td>d Lower level</td>
<td>4.10</td>
<td>1.63</td>
<td>4.59</td>
<td>1.54</td>
<td>4.55</td>
</tr>
<tr>
<td>e Technological</td>
<td>4.51</td>
<td>1.42</td>
<td>5.01</td>
<td>1.40</td>
<td>4.90</td>
</tr>
<tr>
<td>2 Supervisory Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>a Support</td>
<td>5.58</td>
<td>1.49</td>
<td>5.88</td>
<td>1.48</td>
<td>5.78</td>
</tr>
<tr>
<td>b Team building</td>
<td>3.89</td>
<td>1.68</td>
<td>4.90</td>
<td>1.58</td>
<td>4.54</td>
</tr>
<tr>
<td>c Goal emphasis</td>
<td>4.79</td>
<td>1.75</td>
<td>5.65</td>
<td>1.44</td>
<td>5.10</td>
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<tr>
<td>d Help with work</td>
<td>4.61</td>
<td>1.91</td>
<td>5.51</td>
<td>1.64</td>
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<td>3 Peer Leadership</td>
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<td>a Support</td>
<td>4.63</td>
<td>1.56</td>
<td>5.32</td>
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</tr>
<tr>
<td>b Team building</td>
<td>4.39</td>
<td>1.58</td>
<td>4.92</td>
<td>1.80</td>
<td>4.90</td>
</tr>
<tr>
<td>c Goal emphasis</td>
<td>4.12</td>
<td>1.79</td>
<td>4.90</td>
<td>1.48</td>
<td>5.02</td>
</tr>
<tr>
<td>d Help with work</td>
<td>4.32</td>
<td>1.71</td>
<td>5.08</td>
<td>1.63</td>
<td>4.86</td>
</tr>
<tr>
<td>4 Group Process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>1.45</td>
<td>4.98</td>
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<td>4.60</td>
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<td>1.45</td>
<td>5.71</td>
<td>1.20</td>
<td>5.60</td>
</tr>
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<td>1.62</td>
<td>5.71</td>
<td>1.47</td>
<td>5.86</td>
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Table 8:2  Questionnaire results, expressed as indices for dependent variables, experimental treatment, Rounds 1, 2, 3
involvement and teamwork among the senior staff, improved staff relationships, and an improved atmosphere within the college. These observations reflect and confirm the quantitative data in variables 1a, 2b, 3a, 4a, 4b, and 5b. However, the participant - observed data supplements the quantitative data in a number of important dimensions. The largest and most far reaching changes observed were related to the Principal. Over the two year period the sarcasm and cynicism all but disappeared and a considerable amount of his power was re-distributed among other staff. Always supportive of his staff, he became more so, and over the period the college developed a sense of purpose and teamwork previously lacking. These changes, which I believe to have been central to the success of this particular intervention, are not well reflected in the quantitative data.

The individual questionnaire responses which relate specifically to the Principal are "buried" in the aggregated college wide results reported. However, this is not the reason why the impact on the Principal is not reflected in the quantitative results. Variables 2a, 2b, 2c and 2d all relate to the supervisory leadership of each sub-group. The results on these variables of all college sub-groups were subjected to analysis of variance and the Tukey - HSD procedure. Although some significant differences were recorded among sub-groups, these did not include the administrative sub-group's responses which related to the Principal. The explanation would appear to be that the specific questionnaire items did not tap the changes which were observed. There were no items which sought ratings of his geniality, his mode of communication, his valuing of others ideas, or his cynicism, and it was in these dimensions that the changes were observed.
There is also an apparent discrepancy between quantitative and qualitative data for variable 1c, "motivation". The quantitative data discloses a relatively large change (0.61 of an interval) between rounds 1 and 2, but minimal change, 0.19, between rounds 1 and 3. In contrast the qualitative data reveals a stimulated organization, actively seeking new outlets for its energies, and with a pride in its appearance and performance. Again it is possible that the particular questionnaire items (11 to 13), which were expressed in terms of the organization's impact on the individual's motivation, failed to record the synergistic impact of the organization as a whole.

A further apparent discrepancy in the data relates to variables 1a, "decision making practices", 4a, "planning together", and 4b, "quality of decisions", all of which recorded relatively large changes and all of which are concerned in some sense with involvement, participation, and consultation. The inference may be made that there was some redistribution of influence within the organization in the direction of equalization, and the inference draws strong corroborative support from the qualitative observations. However, the inference is not supported, or not to the same extent, by changes in variable 1d, "lower level influence". Organization numbers perceived their influence as having increased, but not to the extent that might have been expected in view of the other results.

**Intervention activities, subsequent organizational behaviours, and causal relationships** The appearance of certain organizational behaviours at various times after the intervention activities described in Chapter 5, and in particular their timing, suggests that a strong causal relationship existed between intervention activities and the subsequent organizational behaviours.
Between the first and second cycles of data collection-data feedback, a period of six months, positive changes occurred in every index about which the questionnaire collected data. Participant-observation confirmed the quantitative data. Changes were evident across the entire college, although they were not equally distributed across all indices, nor across all sections of the college. The intervention activities during this period included the data collection-feedback, workshops of varying lengths with five sub-groups of the college, and numerous consultations and discussions on group process across much of the college.

It could be argued that the data collection-data feedback cycle was in itself sufficient intervention activity to stimulate the changes recorded, much as Bowers (1973) concluded in his study. Some weight is lent to such a conclusion by the fact that although change was broadly evident across the college, the one sub-group which did not receive feedback appeared to be, if anything, even more demoralized than previously. Shortly before the second data collection cycle commenced I was approached by a delegation from this sub-group requesting that they take no further part in the intervention because of the complete lack of progress. (They did in fact respond to the questionnaires.) However, within that group other factors were clearly at work and it would be simplistic to attribute the apparent lack of positive change solely to the lack of data feedback.

There is other, more explicit evidence of a causal relationship. The initial administrative staff workshop emphasized two tasks, the improvement of college communication and of college facilities, and developed action plans to accomplish each task on an organization-wide basis. There is no question that in purely physical terms immediate changes
were made in both task areas and that these changes were sustained throughout the duration of the intervention. Noticeboards were installed where needed, and used. A college newsletter was commenced, compiled by the principal and librarian, and appeared to meet some of the college needs for both formal and informal communication. Memorandums appeared advising staff of significant events or proposals. Staff meetings were held, regularly and systematically, at every level of college operation. Changes were also apparent in the appearance and use of college facilities. Derelict car bodies and parts were removed, some work areas restructured, others noticeably tidied up, and a more equitable system of sharing the benefits of "live" work was devised. All of these changes, cosmetic though they may have been, were almost certainly the direct consequences of the initial administrative group workshop.

Similarly the other workshops conducted resulted in immediate and readily apparent physical change. The small group which drew up an action plan to improve their physical working relationships transformed the appearance (and operation) of their workplace during the next three months. The library group which action-planned increased mutual interaction between themselves and the rest of the college, experienced a considerable increase in the number of students using the library for directed research purposes. By the end of the intervention the audio-technician members of this group were engaged in making video productions at the request of, and in collaboration with, the teaching staff. Both outcomes were clearly indicative of the group's success in increasing mutual interaction.

Changes of the type listed in the above paragraphs can be explicitly related to the various action plans which were developed during the
first months of the intervention. Less explicit, but it is believed equally real in terms of causality, were the qualitative changes which followed certain particular elements of the intervention program. The first six months of the intervention emphasized the qualitative aspects of communication, including openness and receptiveness, the development of teamwork, and the development of broadly based problem solving processes. A large part of this effort was directed specifically at the administrative sub-group as an intact work group rather than towards the whole organization. However, the majority of the members of this group were "linking pins" (Likert, 1976) with the remainder of the college workforce and were therefore well placed to potentially allow a flow on of behaviours. Organizational behaviour in the college, both as measured through the second data collection and as observed, changed considerably in the specific areas noted above. The six largest changes in the questionnaire data, variables 2b, 2c, 2d, 4a, 4b, 4d, all relate to problem solving, decision making, the sharing of information, and team building behaviours by the team leader. These and similar changes were also noted during observation. In particular, at the many meetings attended by the consultant there appeared to develop greater participation, a fuller and franker discussion of issues, and a willingness of the group leader to listen receptively to ideas. Within specific groups, both the administrative and library groups exhibited greater enthusiasm and appeared to have a greater sense of efficacy with respect to their ability to contribute meaningfully to college affairs.

Overshadowing these changes, however, was the change in the college principal. In the period after the administrative workshop his behaviour changed dramatically, frequently in ways which related specifically to suggestions that had been made to him during and after the Johari
Window exercise. The principal's use of college resources for his own personal ends almost totally ceased. As a matter of what appeared to be deliberate policy he toured the college frequently and made time to speak personally and informally with almost every member of staff on these occasions. His cynicism and sarcasm, which previously were almost trade marks, abated considerably. These changes, almost all of which were evident from immediately after the intervention workshop, were to continue and develop during the remainder of the research period.

The second data collection-data feedback cycle, and the administrative workshop which followed almost immediately afterwards, saw similar examples of intervention activities followed by changed organizational behaviour. A prime focus of this workshop was "College governance". Much of the initiative for this focus came from the principal and he was a conspicuous contributor to the action-plan which emerged and which clearly carried his endorsement. The action-plan formalised trends towards a more democratic governance which had become apparent from the conduct of senior staff meetings since shortly after the first administrative workshop. Following the second workshop, and working from the action plan, the administrative group plus designated members of the non-administrative staff assumed the policy making functions of the college. The same action-plan provided for adequate and rapid communication of new policies to all members of staff and made provision for staff to object to changes and to have their objections heard. The college principal, deputy principal, and the two most senior administrative staff, together carried out the executive functions of the college. After an initial period of heightened activity during which existing college "policies" (generally miscellaneous statements taken from a variety of college sources and which collectively lacked rationality and logic) were identified, scrutinized, modified where necessary,
and codified, the governance mechanisms rapidly became an integral and effective element of the college organization. The second major focus of the same workshop was "Future directions of the college". The action-plan developed emphasized interaction with the college's environment and in particular meeting the needs of that environment. The same action-plan also emphasized the need to develop an additional clientele, both as part of the servicing of industry's needs more effectively, but also to counter a projected heavy decline in enrollments from traditional industry sources. The outcomes of the action-plan were two major curriculum initiatives, the development of an extensive program of short courses responsive to industry's needs and the development of a transition education program, both of which are fully described in subsequent sections of this chapter and both of which followed within eight months of the workshop.

Less tangible, and more difficult to establish as a direct outcome of the intervention activities, was the change in attitudes within the college. Although it is not well reflected in the questionnaire results, the atmosphere in most of the college was perceptibly different. The physical changes, which have been listed above, were accompanied by attitudinal changes, changes which this thesis would argue were necessary to sustain the physical change. Thus the changes in the college appearance were accompanied by an apparent sense of pride in the college appearance. Similarly, the "future directions of the college" were accompanied by attitudes which appeared to positively encourage the exploration of change and which raised the status of being prepared to work long additional hours for no additional tangible reward. The new governance mechanisms were supported by attitudes which continued to develop in the direction of openness, receptivity, participation and co-operation.
The preceding paragraphs provide considerable evidence to support the contention that there was a direct causal relationship between particular intervention activities and subsequent organizational change. However, in spite of the evidence a question remains as to what extent these organizational activities and changes might have occurred if there had not been an organization development intervention. In particular there is the enigma of the college principal. Without question he was the central figure in the events which took place, but in many ways it is difficult to believe that the apparently radical changes which were observed in his attitudes and behaviours derived solely from the intervention activities. On more than one occasion the distinct impression was gathered that the changes being observed were simply manifestations of energies and attitudes that had always been present, but dormant. Nevertheless, as best as could be ascertained, such changes had not commenced before the intervention and nor did there exist any other external factors which might have obliged, or even stimulated, such changes. At the very minimum it can be concluded that the intervention provided the catalyst and vehicle through which the changes were brought about.

Discussion of the intervention results

The basic minimum requirement for the results of any experimental treatment to be interpretable is that it should have internal validity. Or, as Campbell and Stanley (1963) pose the question, did in fact the experimental treatments make a difference in this specific experimental instance?
The lack of a control group requires caution in attributing any results to the intervention design and activities, however, after careful examination it does appear likely that the changes reported did not result from extraneous variables. Rather the changes appear to have been marked, and broadly consistent with the theory underlying organization development methodologies such as survey feedback, laboratory training, and process consultation, all of which were used in this intervention.

Campbell and Stanley (1963) list eight classes of extraneous variables which might operate to confound the effects of the intervention. With respect to these eight extraneous variables, four of them, instrumentation, statistical regression, selection, and selection-maturation interaction, do not enter as potential influences on the results recorded. However, the remaining four extraneous variables cannot be completely excluded as potential influences. In terms of experimental mortality, as reported in Table 6:1 there was a turnover of staff over the two years, and although, as has been argued, the size and nature of the turnover combined with the nature of the variables measured render it unlikely that experimental mortality influenced the results, nevertheless it cannot be definitely excluded.

Similarly the research design does not exclude the effects of history or maturation. The research design is a modified time series which may be represented schematically as \(0_1, X, 0_2, 0_3\) where \(0\) is an observation and \(X\) is the treatment. The data collected using this design indicate, in a very general sense, a considerable change in the dependent variables between \(0_1\) and \(0_2\), and a maintenance or slight regression of this change between \(0_2\) and \(0_3\). However, what the data does not show is what was happening in the dependent variables before \(0_1\).
Figure 8:1 plots the general trend of observations \(0_1\), \(0_2\), and \(0_3\) as points A, B, and C respectively, and shows a considerable increase in results from \(0_1\) to \(0_2\), and a very slight decline in these between \(0_2\) and \(0_3\). The figure also plots three hypothetical results D, E, and F which may possibly have applied in the organization pre - \(0_1\). The potential effects of history and maturation as extraneous variables is clearly evident. If condition D had existed, then it may be argued that A is an aberration recorded at \(0_1\), a product of some historical event between \(0_H\) and \(0_2\), and that therefore ABC represents a return to normalcy unrelated to the intervention. Similarly, if condition F had existed, then it may be argued that FAB simply represents a maturation effect, again, unrelated to the intervention design. The intimate knowledge of the organization developed by the researcher during the intervention causes him to discount both these situations as explanations of the changes recorded, however the research design does not eliminate either and both remain as plausible explanations.

![Figure 8:1 Modified time-series research design, \(0_1\), X, \(0_2\), \(0_3\) and hypothetical pre-research data.](image)

(--------- actual data; ------- hypothetical data)
A more serious threat to internal validity is posed by the testing effect. There is little question that the questionnaire affected the behaviour of each respondent. Among others, that was a specific function of the instrument. Further, organizational members almost certainly developed an understanding of the kinds of behaviours that the consultant valued and may have consciously or unconsciously slanted their answers in this direction, thereby reporting organizational behaviours that did not exist. In the light of the qualitative report drawn from the participant-observation data this does not appear likely, but the possibility can not be excluded. The effects of the intervention on the respondents' perception of the meaning and dimensions of each questionnaire item may also be a source of error. Every effort was made to ensure optimal clarity and specificity for each item and each pair of points of the eight point response scale was anchored to a behavioural descriptor. Nevertheless, as Golembiewski et al (1976) have argued, an organization development intervention may alter the very frame of reference by which participants view the organization and its functioning, and even clear, specific items and behaviourally anchored scales may prove unreliable measures. If the frame of reference may alter, as suggested, then the changes reported previously become more problematic. A change recorded in the set of variables from one set of observations to another may mean a real movement of the magnitude and in the direction recorded. However, if the frame of reference has altered then there may in fact have been a change in the same direction, but of greater magnitude, or there could have been a change in the opposite direction. The participant-observation data suggests that respondents' perceptions of the characteristics they were rating may have changed from one round of data collection to another. Observed changes in some variables appeared considerably greater than the changes indicated from the questionnaire data alone.
A final threat to the internal validity of the reported results is the possibility that some kind of Hawthorne effect was present. Members of the college concerned were acutely aware that the college was under close observation and were also aware that their college was one of the first (with one other) to undertake an organization development intervention within the TAFE system. As a result of the attention they may have felt compelled to perform, in spite of having been given every reassurance as to the confidentiality of the data collected and of the outcomes of the intervention. The possibility of such an effect cannot be rejected, but if it existed it was not in evidence in the results of the other institution which underwent an intervention at approximately the same time. Results at that college, which exercised its prerogative in refusing to be a subject for this research study, were extremely mixed.

RESULTS OF THE SECOND ORDER CHANGE

The second order change was the implementation of a planned change initiated by the organization. As indicated previously, a rigorous research design for the collection of data was not possible because there was no planned change which had been recently completed nor one which was in process when the intervention was commenced. It is therefore necessary to rely on a number of measures, both direct and indirect, which together afford reliability through the potential to corroborate each other. These measures include a questionnaire, an adaptation of the "Levels of Use" interview methodology, an external, independent report on the college, and documentary evidence obtained from TAFE records combined with participant-observation.

The Questionnaire results These are reported in Table 7:3 as a mean and standard deviation for the entire college population for each quest-
ionnaire item. The difference scores between the first and second, second and third, and first and third questionnaire rounds are also reported. As with the questionnaire results from the first phase of this study, and for the same reasons, there are no statistical tests of significance which can be applied to the data, although again it is contended that this does not prevent meaningful analysis and the drawing of conclusions.

Thirty two separate items, categorized and sub-grouped under eleven of the previously defined determinants of the implementation process, are listed in Table 8:3. Of these thirty two items, three were measured as having changed in a direction the literature would suggest was negative, one item was essentially unchanged, while the remaining twenty eight items all changed in a positive direction.

These changes indicate a marked change in the perceptions of organization members across a broad range of the determinants of the implementation process. In terms of compatibility, variable 1d, the changes adopted by the college were seen to be more appropriate to its problems (item 92, change 0.75 of one interval) and to fit more neatly into the organization's structure and operations (108, 0.73). Concurrently the organization's members saw themselves as considerably more willing to manage the resocialization problems, variable 1c, associated with change.

Most determinants from the "strategies" category also recorded favourable change from the first to the third observation. Participants believed that greater effort had been made to ensure in-service training (variable 2a) in relation to change projects (103, 1.12) and that this had resulted in a clearer understanding of exactly what was supposed to happen in the new projects (97, 0.58). It is of interest that participants recognized the increased in-service effort at $0.5^2$, before recognizing what is
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<td>84</td>
<td>4.76</td>
<td>4.85</td>
<td>4.45</td>
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<td>-0.31</td>
</tr>
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<td>87</td>
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<td>4.44</td>
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<td>89</td>
<td>4.97</td>
<td>4.78</td>
<td>4.80</td>
<td>-0.19</td>
<td>-0.17</td>
</tr>
</tbody>
</table>

Table 8.5  Questionnaire results, "determinants of implementation", rounds 1, 2, 3.

Round 1, n = 86;    Round 2, n = 71;    Round 3, n = 72.
believed to be the outcome of the effort at $O_3$, an order and and time scale which reinforces the common understanding that organizational change is effected over a lengthy time scale.

Results in relation to feedback mechanisms (variable 2c) present a mixed picture. On the one hand communication problems from $O_1$ to $O_3$ were perceived to be less likely to limit solutions to problems (88, 1.08) and feedback re the success or failure of change efforts had improved (107, 0.45), but participants believed that discussion with respect to emerging solutions, before implementation, had fractionally declined (89, -0.17). Similar mixed results were recorded in variable 2d, participation. Staff believed that they had been more widely involved in solving problems and identifying alternatives (85, 0.66) and to a lesser extent had been provided with mechanisms and procedures for identifying problems/change areas (83, 0.27), however, they also perceived a decline in formal opportunities to participate as a group in solving problems and crystallising new ideas (86, -0.49). Further analysis of this item by sub-groups within the college revealed a significant difference in perception by those included within the administrative group compared to other members of the college staff. The administrative group recorded a positive change of 1.90 intervals from $O_1$ to $O_3$ (ANOVA, significantly different at the .001 level of confidence), a substantial change noted also in the participant-observation.

The final "Strategies" determinant about which data were collected, variable 2e, planning, revealed consistently positive changes. In response to the broad general item of whether changes were well planned, participants perceived a relatively small positive change from $O_1$ to $O_3$ (98, 0.32), however, larger positive changes were recorded in a number of operational aspects of planning. As unwanted side effects
appeared they were seen to be more effectively dealt with (109, 0.75),
greater efforts were made to evaluate the effectiveness of the new
programs (111, 0.84), and there was a lesser tendency to discontinue
planned changes undertaken (110, 0.75).

Data collected on the characteristics of the organization similarly
revealed positive changes within a broad sweep of determinants. Most
marked among these were the changes associated with variable 3a,
adoption process, where positive gains were associated with each quest-
ionnaire item at each successive 0. The largest gain recorded by any
item across the college reflected the belief that the college was exper-
riencing greater success in recognizing and identifying its problems
(80, 1.26), and that there was a lesser tendency for innovations to
be undertaken because of the prestige or status attached to them (94,
1.05). There was also a perception that the innovations which were
finally implemented were being increasingly suggested at the grass
roots level rather than from the administration, (106, 0.85).

Items related to organizational climate, variable 3b, reveal a percept-
ion of more action, rather than simply talk about change (100, 0.57),
a marked change in the willingness to confront the "real" changes
required, rather than the trivial (93, 1.22), and a belief that the
college was both more willing and more able to handle the more serious
problems identified (81, 0.51). Concurrently staff felt a greater
responsibility to initiate discussion on new ideas and possible solu-
tions (91, 0.66) although they felt only slightly less reluctant to
actually discuss these ideas with others (90, 0.36). However, staff
apathy was seen as less likely to inhibit significant change (96,
0.64). Responses also indicated that environmental support, variable
3c, identified as a key determinant in the literature, moved in a
positive direction over the duration of the study. Regardless of the
type of a particular change effort, staff indicated that increasingly
they had accepted what was being attempted (102, 0.48). Attempted
sabotage of change efforts by staff was seen to have diminished (101,
0.49), and the general level of support for the implementation of change
had considerably increased (99, 1.0).

Finally, in the items associated with variable 3e, peer and authority
relationships, there occurred the only results which might be described
as generally negative. Staff perceived themselves as participating
less in the identification of problem areas (84, -0.31) and also saw
virtually no difference in the source from which potential solutions
to college problems were initiated, (87, 0.08).

LEVELS OF USE (LoU)

The LoU procedures and methodology were used to provide a measure of
the implementation of a specific planned change voluntarily introduced
into the college.

The particular planned change, the introduction of a non-vocational
transition education program, represented a radical departure from
the existing purely vocational orientation of the college. The planned
change was also substantial. Within two years of commencement it
accounted for 20 per cent of the total teaching hours within the college.
Finally, the planned change was also exceedingly complex. The major
elements of the change, which have been identified and listed in the
previous chapter as 'critical' and 'related' criteria, included sub-
stantial elements of all five dimensions of planned change identified
by Fullan and Pomfret (1977) and previously discussed in Chapter 2.
The critical criteria were the focus of the LoU interview schedule and consequently of the implementation configuration, however, informal interview data pertaining to the related criteria were also obtained from the interviewees' reactions to the basic LoU interviews. These informal data are the basis of the related criteria configuration.

The LoU interviews were conducted at T_{26} and the results are recorded in Table 8:4 and Table 8:5. Although, as explained previously, the LoU interview methodology used was adopted or modified in two ways, nevertheless it is the belief of the author that the results provide evidence of a planned change which had been implemented to the stage of at least routine usage across most of its major dimensions, and by most of its users.

Of the three critical criteria, which in effect constitute the most central elements of the planned change, each was being implemented by five or more of the staff involved at a LoU of at least IVA, that is, of routine usage.

The first of the critical criteria, the flexible scheduling of classes, was clearly not being implemented nor its intention understood, by two of those interviewed, subjects c and f. However, of the remaining six, three had reached a level of stable, routine use (subjects b, g,h); two, based on their experiences with this requirement, were seeking refinements to increase the impact and effectiveness of flexible scheduling, (subjects a,e); the eighth interviewee, subject d, was actively exploring means of co-ordinating a total "package" across the entire college to optimize the total benefit to students. The latter subject had been given the administrative responsibility for
the entire program and, as the LoU data indicates, was consistently in front of his colleagues on almost all dimensions of the planned change.

The second critical criteria, openness and receptiveness to student problems, had for the most part achieved either a level of routine usage which was satisfactory and from which they showed no apparent concern to change, (4 users), or alternatively were struggling towards this point (2 users). Of the other two, one was the program co-ordinator who throughout the interview gave evidence that he had adopted or taken on the role of principal advocate for the planned change, and implied that he must be seen to set the example, while the other was the only female in the group and consistently exhibited what appeared to be concerned maternal behaviour toward the students. The transcript of her interview is littered with observations such as "the poor wee darlings....". Further, the same interviewee also indicated that she was an immigrant, that she had experienced a period of unemployment on her arrival, and that her husband had recently been unemployed. The interview transcript contains numerous expressions of the interviewee's empathy with the plight of the young unemployed and part of her openness and receptiveness towards students appears to be derived from her own experiences.

The third critical criteria, valuing the development of self esteem in students, was rejected by one interviewee, who, although aware of student difficulties with self-image and self-esteem (".... it is a terrible situation these kinds find themselves in that they can't get employment and want it ..."), nevertheless maintained an exclusively vocational orientation in his attitude. Of the remaining seven, two users were undergoing the trials and problems associated with coming
to grips with the issues themselves, while the remaining five had not only internalized the values, but were actively refining or modifying the concept and its implications. The internalization of the attitudes and values associated with the planned change was probably the most salient characteristic displayed during the interviews.

A further fourteen characteristics of the planned change were identified as related criteria, again using Fullan and Pomfret's (1977) five dimensions as a framework. Two of these characteristics were associated with subject matter/materials and provided a stark contrast in the level of implementation. One, liaison with industry, was non-existent, was not widely understood to be a program characteristic, or where understood showed no signs nor tendency towards involvement. As was remarked by one of those who understood it to be a desired program characteristic, but who had not become involved, ".... the problem is finding the time when you could become involved". The other characteristic, utilizing work oriented materials, was systematically adopted and used by all eight interviewees, two at a stable, routine level and the other six actively exploring creative variations in their own use of materials.
<table>
<thead>
<tr>
<th>CRITICAL CRITERIA</th>
<th>CRITERIA</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>g</th>
<th>h</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANIZATION STRUCTURE</td>
<td>1 flexible scheduling of classes</td>
<td>IVb</td>
<td>IVa</td>
<td>0</td>
<td>V</td>
<td>IVb</td>
<td>0</td>
<td>IVa</td>
<td>IVa</td>
</tr>
<tr>
<td>ROLE/BEHAVIOUR</td>
<td>2 displays openness and receptiveness to student problems</td>
<td>IVa</td>
<td>III</td>
<td>IVa</td>
<td>VI</td>
<td>IVa</td>
<td>V</td>
<td>III</td>
<td>IVa</td>
</tr>
<tr>
<td></td>
<td>3 values development of self esteem in students</td>
<td>IVb</td>
<td>0</td>
<td>VI</td>
<td>IVb</td>
<td>IVb</td>
<td>VI</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>RELATED CRITERIA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBJECT MATTER/MATERIALS</td>
<td>4 liaised with industry</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ORGANIZATION STRUCTURE</td>
<td>5 utilized work oriented materials</td>
<td>IVb</td>
<td>IVb</td>
<td>IVb</td>
<td>IVb</td>
<td>IVa</td>
<td>IVb</td>
<td>IVa</td>
<td>IVb</td>
</tr>
<tr>
<td></td>
<td>6 students involved in community</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7 interaction with students from other programs</td>
<td>III</td>
<td>I</td>
<td>IVa</td>
<td>IVa</td>
<td>III</td>
<td>IVb</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td></td>
<td>8 integrated into ongoing college activity</td>
<td>IVa</td>
<td>V</td>
<td>III</td>
<td>IVb</td>
<td>III</td>
<td>IVb</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>ROLE/BEHAVIOUR</td>
<td>9 teacher team effort</td>
<td>IVa</td>
<td>III</td>
<td>V</td>
<td>IVb</td>
<td>IVb</td>
<td>IVb</td>
<td>IV</td>
<td>IV</td>
</tr>
<tr>
<td></td>
<td>10 accept student contribution to course design/content</td>
<td>III</td>
<td>II</td>
<td>0</td>
<td>IVa</td>
<td>III</td>
<td>IVa</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>KNOWLEDGE/UNDERSTANDING</td>
<td>11 advise on student personal issues</td>
<td>IVa</td>
<td>0</td>
<td>VI</td>
<td>V</td>
<td>IVa</td>
<td>IVb</td>
<td>IVa</td>
<td>IVb</td>
</tr>
<tr>
<td></td>
<td>12 understand student backgrounds</td>
<td>IVb</td>
<td>IVb</td>
<td>III</td>
<td>V</td>
<td>IVa</td>
<td>IVb</td>
<td>III</td>
<td>III</td>
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<tr>
<td></td>
<td>13 differences in social and moral values</td>
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<td>IVb</td>
<td>III</td>
<td>V</td>
<td>IVa</td>
<td>IVb</td>
<td>III</td>
<td>III</td>
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<tr>
<td></td>
<td>14 personal development orientation of program</td>
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<td>0</td>
<td>0</td>
<td>V</td>
<td>IVa</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>VALUE INTERNALIZATION</td>
<td>15 commitment to individual students</td>
<td>IVb</td>
<td>III</td>
<td>IVb</td>
<td>IVb</td>
<td>IVa</td>
<td>IVb</td>
<td>III</td>
<td>IVb</td>
</tr>
<tr>
<td></td>
<td>16 surrogate parent role</td>
<td>IVb</td>
<td>0</td>
<td>IVb</td>
<td>V</td>
<td>IVa</td>
<td>IVb</td>
<td>0</td>
<td>IVa</td>
</tr>
<tr>
<td></td>
<td>17 a &quot;home&quot; within college</td>
<td>III</td>
<td>0</td>
<td>III</td>
<td>IVb</td>
<td>III</td>
<td>IVb</td>
<td>0</td>
<td>III</td>
</tr>
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</table>

Table 8.4 Levels of Use interviews, results by subject, conducted at T26
Level 0 - non-use          Level III - mechanical    Level V - integration
Level I - orientation      Level IVa - routine      Level VI - renewal
Level II - preparation     Level IVb - refinement
<table>
<thead>
<tr>
<th>IMPLEMENTATION CRITERIA</th>
<th>CRITICAL</th>
<th>RELATED</th>
</tr>
</thead>
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<tr>
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<td>Non-use</td>
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<td>1 1 6 2 2</td>
</tr>
<tr>
<td>Orientation</td>
<td>I 1</td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td>II 1</td>
<td></td>
</tr>
<tr>
<td>Mechanical Use III</td>
<td>2 2 4 4 1 4 2 2 2 4</td>
<td></td>
</tr>
<tr>
<td>Routine</td>
<td>IVA 3 4 2 2 1 3 1 3 2 3 1 1 2</td>
<td></td>
</tr>
<tr>
<td>Refinement</td>
<td>IVB 2 3 6 1 2 2 2 3 2 5 3 2</td>
<td></td>
</tr>
<tr>
<td>Integration</td>
<td>V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>Renewal</td>
<td>VI 1 2</td>
<td></td>
</tr>
</tbody>
</table>

Table 8:5  Levels of Use distribution across identified implementation criteria

N = 8
This outcome is not surprising, given the vocational orientation of a TAFE college and probably represents typical behaviour by the users, but with a different clientele.

Five related criteria are grouped under the second dimension of implementation, "organization structure". Of these, the criteria "students involved in community" is conspicuous by its total non-use. All staff interviewed were unaware that the involvement of students in the broader community was an intended outcome of the program. Further, when the issue was raised during the course of the interview none of them displayed an interest in pursuing the matter. The three other criteria from organizational structure, the interaction with students from other programs, the integration into ongoing college activity, and a teacher team effort, displayed similar implementation profiles to each other. With the first two of these three in particular, half of those interviewed were still struggling with the day to day complexities of managing the program, although the integration into ongoing college activities had in general achieved a higher level of implementation. Three staff were actively seeking means of creatively extending the level and nature of integration. The third criteria, teacher team involvement, appeared to have reached an early plateau with four of the users apparently content with a routine, stabilized level of team effort and contact.

The two criteria included under role/behaviour present a contrast. Seven of the eight users had experienced no real difficulty in expanding their role to include the counselling of students on personal issues and had either found a comfortable level of routine involvement (four users) or were seeking refinement and modification beyond this (three users). Only one interviewee recorded non-use. However, the acceptance of student contribution to course content and structure was the cause of
some difficulties. The interviewed group included a non-user, a reluctant starter preparing to use, and four users struggling with their conscience in order to systematically include student contribution in program design.

The fourth dimension of implementation, knowledge and understanding, incorporated three criteria. Two of these, understanding student backgrounds, and, the acceptance by users of the need to respect the social and moral values of the students, (which were frequently vastly different to those of the user), both produced very similar implementation profiles. In each case there was a minimum of mechanical usage, but also a number of users who were seeking to apply their knowledge and understanding of these attributes beyond mere acceptance. However, the other criteria in this dimension, the personal development orientation of the program, was the major subject of controversy and dissension. Six of those interviewed rejected the notion that the program was designed primarily to equip unemployed youth with life skills which would enable them to come to terms with their unemployment. "Some people have the idea that we have to teach them to be unemployed, but I don't accept that", and, "We're trying to educate these people to make them part of our workforce, to make them acceptable" are two views which exemplify the rejection of personal development as the primary orientation of the program. In contrast, two users, including the program co-ordinator, found no difficulty in accepting the primacy of the personal development orientation, and in the case of the co-ordinator to use it as a stimulator or initiator of new directions.

Finally, the set of criteria categorized under value internalization reflected further significant levels of implementation. Without exception every user interviewed exhibited commitment toward his individual
students, with five of the eight seeking ways to build on this commitment beyond mere acceptance. Similarly the role of surrogate parent was internalized by six users, although the two other staff chose to deliberately reject the notion. The notion that the college should provide a "home" for these students was also explicitly rejected by these two, while four other users struggled with the concept and its implications. Only two users whole-heartedly endorsed the "home" concept and its implicit values, but through their efforts significant progress had been made towards providing a home environment.

The interviews also provided numerous pieces of evidence which support the inference that the organization development intervention influenced the implementation of the new program in a positive direction. Unsolicited comments referred either directly or obliquely to organizational qualities which the intervention had sought to instill: teamwork; the sharing of ideas; the intrinsic worth of each staff member; problem solving and decision making procedures; feedback mechanisms; an open, trusting climate; and, mutual supportiveness. Thus one interviewee contributed that

"meetings constantly sound out what everyone has found out"

and described the total program, from the college's perspective, as

"..... a kind of family thing".

Another interviewee alluded to the Principal's supportiveness as,

"..... very sympathetic .... sees that we all get copies of any information that comes into the college, or from anywhere".
Another interviewee, referring to the group's cohesiveness and communication reported that it was

".... a comfort to find that other people have the same feelings and go through the same agonies"

and referred to the

"mutual support ..... (and) sympathetic shoulder to lean on".

Another interviewee referred to behaviours developed at meetings where

"we swap the chair ..... we all have a turn ..... (and to the) forceful open communication".

The same interviewee described the new program from the organization's point of view:

"A lot of enthusiasm and a lot of effort have gone into it from a college point of view. People have pulled together to make this work".

Yet another interviewee remarked on how other staff had

"practically bent over backwards"

in seeking to assist and be supportive.

In aggregate the levels of usage achieved indicate considerable success in the implementation of this particular planned change. All three critical criteria, or the primary program goals, were being implemented by a substantial majority of the sample to at least a level of routine usage; seven of the fourteen related criteria, or secondary program goals, were being implemented to at least a level of routine usage by a substantial majority of those interviewed; in four of the related criteria, four of those interviewed were still grappling with the problems
and difficulties of day to day usage (Level III) while some of the other interviewees had not yet achieved this level; and finally, in only three of the related criteria was there a level which was essentially one of non-use.

The results might also be interpreted as reflecting on the nature of the planned change. Transition education, at the time of this study, was a collection of widely diverse ideas and understandings bound together by the program title as much as anything else. Although it was possible for the central office staff to identify the critical and related criteria of the planned change, nevertheless there was no written syllabus nor written guidelines for classroom organization and management or of a recommended pedagogical approach. It was a program very much in a state of evolution, literally in search of itself, and one which was evolving through an almost continuous interaction of those involved. Therefore, it is not really surprising that for particular criteria the level of usage varied on occasion from non-use through to active adaptation and integration. However, it should be remembered that the data presented represents only a single point in time, and that relatively early (16 months) in the life of the program. It might be expected that with the passage of time and the development of a more comprehensive theory-in-use a greater uniformity of practice would emerge.

External, independent report  In addition to the author's research at the college, another independent study and report was made on the college's attitude towards planned change. The report, *A synopsis of attitudes and opinions of college staff towards change* (Marsden, 1981), was focussed on the same planned change program that was the subject of the Levels of Use interviews conducted by this author. *Marsden's report*
was based on interview data collected from a broad cross-section of college staff.

From her study Marsden reported considerable prejudice against the program from among staff not directly involved, some grave reservations about the effectiveness of the program, again from staff not directly involved, and a considerable degree of cynicism that the funding of the entire program was politically motivated in the sense that it removed young people from the unemployment list. More significant from this study's point of view were her conclusions with respect to planning, that

"the introduction and implementation of the (Transition) courses has not been well planned, in fact there appears to have been a significant absence of pre-planning. This has undoubtedly had a detrimental effect on the implementation of the course".

(Marsden, 1981, p.5)

However, in addition to the above, the study also reported numerous attitudes and behaviours which are regarded as favourable to planned change implementation. The report notes that,

"staff now perceive that the prevailing college atmosphere is supportive of planned change and staff cooperation".

(Marsden, 1981, p.2)

and that although staff did not believe that the college had dramatically changed in its attitude toward planned change over the past few years, nevertheless,

"over the past year or so a greater awareness of the necessity for change has evolved".

(Marsden, 1981, p.2)
With respect to the specific planned change, the report states

"The unfamiliarity, indecision and doubts which initially beset the course appear to have been largely allayed and staff now seem more prepared to treat these courses with .... foresight, consideration and effort".

(Maraden, 1981, p.4)

that, in spite of the lack of planning

"lecturers are very much aware of these past deficiencies, and consequently ..... have gotten together to work out detailed plans and syllabus".

(Maraden, 1981, p.5)

while finally, it refers to the

"growing enthusiasm and acceptance of (Transition) courses".

(Maraden, 1981, p.6)

Documentary evidence from TAFE records and participant observation The final set of data relating to the implementation of planned change is drawn from a number of relatively small changes which in aggregate constitute a substantial change which proceeded both during and after the organization development intervention.

Part of the brief of each TAFE college is to cater for the needs of industry and commerce within the immediate community. Traditionally this has been achieved by maintaining a close liaison with representatives from industry and commerce to ensure that the content of initial training programs for tradesmen and technicians is both relevant and realistic. Through these mechanisms an attempt is made to service the needs of industry and commerce with respect to initial training and
qualification. In addition most TAFE colleges provide formal programs which lead to advanced qualifications. However, as well as these formal programs which are offered on a regular scheduled basis, and which take anywhere between one and three years of full time study to complete, TAFE colleges may also offer "short courses". These short courses are intended to meet the immediate needs of industry, they may be offered at any time and in any desired configuration, and both the content and the configuration are determined by the specific needs rather than by some set formulae. As the accompanying Table 8.6 indicates, prior to 1979 the provision of these courses was very limited.

This limited provision of retraining/updating courses was commented upon frequently by staff during the data collection phase of the intervention and was described as a weakness of the existing college operation. The reasons for its relative absence were not difficult to establish. Short courses which catered specifically to industry's needs required much additional work and a mode of operation which was largely alien to existing behaviours. They required staff to leave the campus, to interact closely with industry, to identify particular updating/retraining priorities, and to design and present courses to meet these needs. Further, industry almost invariably was interested in the most recent technology, the most recent developments, and to meet these needs required staff who were fully conversant with and skilled in these changes. In effect, each new course presented by a college required many hours of additional effort. The reward was only a minor additional extrinsic reward, plus whatever intrinsic rewards each individual extracted from the effort.
<table>
<thead>
<tr>
<th>Year</th>
<th>No. of short courses provided</th>
<th>No. of equivalent staff employed</th>
<th>% of college worktime</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977</td>
<td>6</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1978</td>
<td>5</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1979</td>
<td>8</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
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<td>2.0</td>
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</tr>
<tr>
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<td>49</td>
<td>3.5</td>
<td>6.6</td>
</tr>
<tr>
<td>1983</td>
<td>n.a.</td>
<td>4.2</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Table 8:6  College provision of short courses and employment of college staff on short courses, 1977-83.

The question of how to respond better to industry's immediate retraining/updating needs and the role of short courses was one of the 'real issues' confronted during the training phase of the intervention. The college as a whole resolved to become more responsive to industry's needs, re-allocated college resources to assist this process, and determined on an action plan. From Table 8:6 it is evident that since the commencement of the intervention there has been a very substantial increase in the number of courses offered and in the relative importance of short courses within the college.

What the raw data do not show is the extent to which this has been an innovation by the college. The behaviours are new to the college,
represent an answer to a problem identified by the college itself, and have required very substantial changes in attitude and dedication to implement. The author acted as a participant-observer throughout the two years of the intervention and had the opportunity to observe the initiation and implementation of both the short course program and the transition education program. In a broad sense the processes at work in both programs were remarkably similar although for different reasons. Both commenced with a strong advocacy group, the short course group with a number who believed that the college was simply not fulfilling its mission, while the transition education group, which included the Principal, believed that the college was ideally situated to fulfill what they saw as social obligations. The short course program involved very few college staff directly in its implementation, and was accepted as part of a moral obligation by the college staff as a whole. Nevertheless, it was with considerable difficulty that active participants were attracted. Somehow the prospect of all that work and effort seemed insurmountable.

The transition education program also involved relatively few staff directly, at first, but attracted widespread opposition instantly. Most of those who participated volunteered quickly and willingly, but the majority of the remainder of the staff rejected the project as alien to the college's purpose.

In the months after each project was introduced, each appeared regularly on the agenda of different meetings, at both a senior staff and specialist sub-group level, as the college wrestled with the implementation of each change. The author's role at these meetings was that of process consultant, but the service was rarely required. There was an excellent two way flow of feedback, frank and open communication, and good use
of problem solving and decision making techniques. The major problem confronted in the short course project was how to convert a theory-of-action, in which everyone expressed belief, into a theory-in-use, which people actually did. It was a process partly achieved through the re-allocation of resources, but more importantly through the college developing a shared understanding that there was a considerable moral reward involved in participation. To the observer it appeared that the college as a whole was increasing the instrumentality of the individual's intrinsic reward, although the change was slow and subtle. It was accompanied by the emergence and growth of a distinctive entrepreneurial flair as members of the college staff began to almost aggressively market their product.

The problem with the transition education project was somewhat different, in that it sought to work from a small committed group, initially to gain the support of those few who had been drafted into assisting the program on a part-time basis, and later to gain acceptance of the program, if not open support, from the remainder of the college staff. The group initially involved in the project was uncertain itself of exactly what the project required and although the "inner", full time group all worked enthusiastically, it was with relatively little commonality. In the months which followed its introduction there was intensive social interaction within this small group, much give and take, and the gradual emergence of a shared understanding, or theory-in-use. At the same time the remainder of the college was kept fully aware of what was happening and by a process of communication from both directions the college as a whole gradually came to an accommodation of what was, at the conclusion of the intervention, a very significant sized part of the total college operation.
Discussion - changes in implementation capability

An assessment of what changes took place in the college's ability to implement planned change is more speculative than the assessment of the organizational changes, or first order change, which resulted from the intervention itself. Bluntly stated, there is no direct statistical evidence that the particular college exhibited any changes in its ability to implement planned change. There is, however, evidence from four distinct sources which relates to the implementation of planned change or to the determinants of planned change. Together, and to the extent to which the evidence from these sources triangulates, there is support for the suggestion that the college did enhance its ability to implement planned change during the period of the intervention.

First the questionnaire results from the times $T_0$, $T_6$, and $T_{15}$ indicated changes in attitudes and behaviours which have previously been identified as determinants of implementation (chapter 2) and in directions from which one can infer an enhanced implementation capability. In the absence of a control group these findings are subject to the identical caveats expressed in the earlier section of this chapter and require the same caution in attributing the results to the intervention design and activities. Nevertheless, an analysis of the data supports the conclusion that changes occurred in perceptions of attitudes and behaviours that have been shown to act as determinants of the implementation of planned change. Second, the LoU interviews and analysis, conducted at $T_{26}$, are indicative of a substantial capacity to implement change at that time. Whether or not the same capacity existed at $T_0$ or at some earlier period cannot be inferred from the LoU data alone.

However, the numerous, unsolicited comments made during the course of the LoU interviews support the contention that there was a linkage
between implementation behaviours and organizational characteristics listed as implementation determinants. These included teamwork, the sharing of ideas, the intrinsic worth of individual staff members, decision making procedures, mutual supportiveness, a supportive Principal, and an open, trusting climate. These characteristics all changed in a positive direction during the intervention period, as recorded through both the questionnaire and participant-observation.

The third set of evidence appears to also confirm the relationships suggested above. Marsden's (1981) report on attitudes towards change, while noting adverse comments particularly in relation to planning, nevertheless is strongly supportive of the notion that college staff had developed a greater awareness of the need for change, had developed teamwork and the sharing of ideas as a means of enhancing implementation, had developed a renewing capacity of examining past and existing deficiencies, and of acting constructively on these, and had developed an enthusiasm and acceptance of the changes being implemented. These perceptions of attitudes and behaviours reflect many of the organizational attributes identified as determinants of implementation, as well as lending further support to the questionnaire and LoU interview data.

The evidence derived from college records and participant-observation adds similar confirmation. It strongly supports the contention that the college was able to identify and plan a desired direction of change and to successfully implement this. The short courses planned change was not subjected to a LoU analysis nor to an independently commissioned report, but the very strong impression gained by the author in his role of participant-observer was that essentially the same organizational processes were at work in both the 'short course' and the 'transition education' projects.
Mutual sharing and supportiveness among direct participants, an open and honest appraisal of past and present practices, environmental support, particularly attitudinal, from those not directly involved, a supportive Principal, and a positive level of encouragement for participation by those in the formal hierarchy, were all to be observed.

In summary, when the evidence from the different sources is aggregated, it lends strong support to the conclusion that at $T_{26}$ the college was able to substantially implement planned change, as recorded in two distinct cases, and that this capability was accompanied by considerable positive changes in participants' perceptions of their attitudes and behaviours across a number of key variables which have been identified as determinants of the implementation process. Although the relationship established is essentially correlational, nevertheless from the perspective of a participant observer it is possible to draw a causal relationship, that one set of events positively influenced a second set of outcomes. There is almost no doubt that a substantial organizational change did occur as a result of the experimental intervention activities, and strong support, because of the regular recurrence of these organizational changes as factors associated with the implementation of change, that these organizational changes enhanced the organization's implementation capability.
CHAPTER 9

DISCUSSION AND CONCLUSIONS

INTRODUCTION

In this study planned change was seen as a process frequently undertaken by educational institutions, but with outcomes which might best be described as generally disappointing. The causes of these outcomes are manifold, however, in recent years attention has come to focus on a particular stage of the planned change process, implementation, as the major cause of concern.

Implementation is the process of putting an idea into practice. In essence it involves resocialization, or the changing of attitudes and behaviours of those involved in the planned change. Resocialization occurs principally through social interaction and to this extent the implementation process may be viewed as resting heavily on social interaction.

Based on previous research and theory the key determinants of this process were identified and categorized into four sets of elements. These included the characteristics of the innovation, the strategies employed to bring about implementation, the characteristics of the organization undertaking the planned change, and the characteristics of the organization's macro-environment. While all determinants were recognized as being of importance, acceptance of the centrality of social interaction to the process led to an emphasis in this study on
the set of determinants labelled "characteristics of the adapting unit".

If the determinants of implementation which this study identified are valid, and if the characteristics of the organisation are the most important among these in the first instance, then it follows that by a process of restructuring these variables the process of implementation by the organization could be enhanced. This fundamental proposition constitutes the basic thrust of this research study. It was hypothesized that the restructuring of organizational variables in a direction defined as favourable, labelled "first order change", would result in an enhanced ability of the organization to implement a planned change initiated by itself, labelled "second order change".

Previous research and theory suggested that there was a strategy, generally referred to as organization development, which was capable of bringing about the changes desired. The strategy is built around the use of reflexive examination and the development of systematic long range programs to induce organizational change in the direction of enhanced organizational effectiveness and an enhanced quality of life within the organization. Organization development is by its very nature rooted in change through social interaction within an organizational context. Further, it seeks among its ultimate outcomes an organization which is both reflexive and self-renewing, properties which infer a successful change process, including implementation.

In this chapter the first order change, organization development, and the results relating to it will be considered first, followed by a consideration of the results related to second order change, the ability of the organization to implement a planned change initiated by itself. The relationship between these two orders of change will then be examined,
to be followed in turn by an examination and discussion of a number of secondary research objectives of the study. Finally, the chapter will seek to summarize the preceding, to examine constraints of the study, and to list and discuss the conclusions and implications that can be drawn from the study.

FIRST ORDER CHANGE - ORGANIZATION DEVELOPMENT INTERVENTION AND RESULTS

The specifics of the methodology used have been previously listed. It is believed that the methodology falls within the mainstream of organization development theory and practice, specifically into a pattern of data collection, feedback, diagnosis, organizational training.

There can be little question that the intervention was successful in bringing about changes across a wide range of organizational variables. Each one of the twenty two variables about which quantitative data were collected recorded a measured change in a direction regarded as favourable. Qualitative data which were collected through participant-observation throughout the intervention similarly indicate that a broadly based change occurred across the organization. Together the two sets of data corroborate each other and confirm that a broadly based change did occur.

The extent of the change is more conjectural. The quantitative data indicate changes which, when related back to the items and behavioural indices from which they were originally gathered, are frequently quite small. For example, persons in leadership roles were seen to change from supportive to marginally more supportive; motivation changed from good to marginally better; the ability to meet unusual work demands, high, become slightly higher. There are no dramatic changes indicated. Indices which were originally measured as relatively high or low remained
relatively high or low after the third round of data collection. The rank order of scores from the first to the third round of the questionnaire shows very little variation. The qualitative data on the other hand suggest that considerably greater changes were recorded by the participant observer.

Parallel with this conjecture over the magnitude of the change is a concern with the pattern of the change across time. In broad terms the quantitative data indicate an initial surge of change in the first period of the intervention, $T_0$ to $T_6$, followed by a marginal decline in a number of the variables between $T_6$ and $T_{15}$. This again is somewhat in conflict with the evidence of the qualitative data which suggest that there was an initial burst of interest and enthusiasm followed by momentary decline at about the three to four month period. After that, the college then exhibited an almost continuous change across the full range of organizational variables until the end of the study.

Nevertheless, in spite of these two aberrations, there is sufficient confirmation from the two sets of data to conclude that the immediate objectives of the intervention were achieved in that broadly based changes did occur.

SECOND ORDER CHANGE - PLANNED CHANGE IMPLEMENTATION AND RESULTS

The study's concern was to measure changes in the organization's ability to implement planned change. It was not particularly concerned with the nature of the specific planned change(s), nor concerned at all with the ultimate effects of the planned change, although that is not to suggest that either are unimportant.
To assess an organization's ability to implement planned change on different occasions would present methodological difficulties under the best of circumstances, but in the case of this study the problem was compounded by the complete absence of any significant planned change project either at the time that this study commenced, or in the period immediately before the study commenced. The methods adopted by this study in an attempt to overcome this critical deficiency are detailed elsewhere. Briefly they included a questionnaire, a structured interview, evidence taken from another study of the subject college, and some documentary evidence obtained from college records combined with observations made during the intervention.

The data obtained from the questionnaire indicate that the organization members changed their perception of the organization's behaviour and attitudes across a wide range of variables which have been identified as determinants of the implementation process. The changes were, with three exceptions, in a direction regarded as favourable, however, as with the previous questionnaire data there is some question as to the magnitude of the change.

Two of the other sources of data, the structured interviews and the documentary/observation evidence, both strongly support the conclusion that the organization was able to successfully implement change at least at the time that the data was collected. The interviews indicated that the levels of usage for a planned change concerned with "transition education" were most satisfactory and indicative of successful implementation. The documentary/observation data support the conclusion that a second, and completely separate planned change concerned with the servicing of the college's environment had also been successfully implemented.
Given that the implementation process is multi-variable and multi-dimensional, there is a considerable conceptual leap involved in deducing that two successful planned changes are indicative of some general capacity to implement change. Nevertheless, given the context and nature of the evidence, and the further support lent by Marsden's (1981) study, it does not seem unreasonable to conclude that by the end of the intervention the college possessed organizational characteristics which in some general sense constituted an implementation capability.

The critical question then is whether this implementation capacity was enhanced during the period of the intervention, and as has been argued in the preceding chapter, the evidence suggests that it was. The association of organizational factors with the implementation of change was frequently observed by the author in his role of participant-observer, was freely offered as unsolicited comment by interviewees during the LoU data collection, and was noted frequently in Marsden’s study. The factors mentioned are essentially the same organizational factors which were measured as having changed favourably in data collected by the questionnaire. Therefore, although the evidence is indirect and somewhat circuitous, nevertheless there is sufficient correlation and corroboration to support the conclusion that the college's implementation capacity was enhanced over the period of the intervention.

THE RELATIONSHIP OF FIRST ORDER AND SECOND ORDER CHANGE

It was hypothesized that change induced in certain organizational variables, first order change, would enhance the ability of an organization to successfully implement planned change that it had initiated itself, second order change. There is little question that the first order
change occurred. All of the evidence points to a successful organization development intervention. Similarly, evidence from a variety of sources supports the conclusion that the organization enhanced its capability to successfully implement planned changes during the period of the intervention.

These changes occurred in parallel, but there is much to suggest that the parallel activities were more than simply coincidental. This can be illustrated from the two second order changes which have reported in one form or another in this study. In the first, the transition education program, interviewees frequently passed unsolicited comments on what they perceived as important influences on the implementation of their program. As expressed previously, these included teamwork; the sharing of ideas; decision making procedures; feedback mechanisms; an open, trusting climate; and, mutual supportiveness. These were all characteristics explicitly addressed, along with others, as part of the intervention strategy, and lend support to the contention that the first order change strongly influenced the second order change.

The other second order change reported lends similar support to the contention, but adds a further perspective or dimension. This change, a substantial shift in the mode of catering to industry and commerce's immediate retraining/updating needs, was an immediate and direct outcome of the first order change. It was one of the problems identified by the college to be worked on during the intervention. As such, the project was inextricably part of the process of college renewal and, particularly as the planned change was being developed through its philosophical, conceptual, and planning stages, it was subject to all the inputs of open communication, mutual supportiveness from peers, support from authority, and exemplary problem solving and decision
making practices that the intervention could bring to bear. Although this intensive level of input did not continue over the long period during which the change was developed and implemented, nevertheless, there was no doubt in the mind of this observer that these elements continued to apply and influenced the process.

However, it must be noted that this process of causality was not simply one-way. While the implementation of the college's revitalized approach to "short courses" appears to have benefitted substantially from changes in organizational conditions, at the same time the initial stages of this planned change were deliberately structured to provide a vehicle for organization development. It was a vehicle which met the basic criteria of constituting a real and relevant problem to the organization, and it does suggest that organization development might be approached from a problem solving perspective, identifying a significant potential planned change, and working intensively through this to bring about organizational change.

OTHER OBJECTIVES OF THE STUDY

In addition to the relationship of first and second order change, this study also sought to examine in detail the conceptual and theoretical basis of implementing planned change, to examine the suitability of organization development as an organizational improvement strategy within an Australian TAFE context, and to provide a well documented study of an organization development intervention. The first and third of these appear in preceding chapters.
In the case of the concept and theory of implementation, the perspective adopted was that implementation is a process of mutual adaptation and there is little doubt that that was the process observed during both of the planned changes reported. The planned change was adapted, shaped, and moulded to fit the perceived environment, while people reshaped, or resocialized, through an intense social interaction, power plays and politics, and of a changing theory-in-use. The fact that both planned changes were successful as measured by the criteria of this study, however, is not sufficient to conclude that mutual adaptation is the only means to successful implementation. Recent work by Crandall (1983) and Loucks (1983) suggests that a fidelity perspective of implementation is attainable. That perspective was not attempted nor investigated in this study and no conclusions are drawn as to its applicability under any conditions. What is concluded is that in this particular study the processes observed were those of mutual adaptation and in this particular instance they were successful.

With respect to the suitability of organization development as an improvement strategy in Australian TAFE, there is little doubt that in this particular case study the strategy was successful. There are, however, a number of reservations or caveats to its application. When the use of organization development was first proposed in TAFE there was considerable immediate resistance. Without having experienced an intervention, but having either heard or read of others who had experienced an intervention, the strategy was rejected as yet another example of a fancy, foreign (and particularly American) behavioural science technology by a number of senior people within the Central Office. In an attempt to minimize or eliminate this resistance the name "College Renewal" was adopted for the process, and every attempt was made to promote college ownership of their own, unique strategy. This appears to have
been successful, although in this case study and in other interventions the problem has continued to re-surface from time to time.

A second reservation concerns the replicability of the treatment in other TAFE colleges. At the same time as the intervention that is the subject of this case study commenced, a second college also commenced a similar program. That college was not included in this study because its members specifically rejected participation in a formal research project. In this second college, in spite of the use of an almost identical intervention methodology, the results were not as uniformly favourable as in the college which was the subject of this study.

The final reservation concerns the question of costs. The intervention required a large investment of money, time, and effort. Although college members have often expressed pride in what they achieved and appear to have been quick in proselytizing the methodology among colleagues from other colleges, they have also often commented on the personal costs involved. When TAFE colleges are confronted with enormous environmental pressures to meet the needs of their community, it may be argued that the money, time and effort involved in organization development is a luxury they cannot afford. And of course the argument may be reversed. If the college is not responsive to these pressures, or if it is unable to successfully implement required changes, can the college afford the luxury of not undertaking an organizational improvement program?

CONSTRANTS OF THE STUDY

The constraints of this study result from the limitations of the research design and its context, from the multi-element nature of the inter-
vention, from the lack of detailed knowledge of the progression over time of the organization's development, from a lack of understanding of the extent of the organizational changes, and a lack of detailed information on the roles played by individuals and/or sub-groups in the process.

The research design presents numerous problems. In the first instance, the research was a case study and therefore it may be claimed that it lacks generalizability. That is not a concern of this study in that there was no intention by the author to generalize from the results. Again, as has been argued by Eisner (1981), Stake and Easley (1978), Kennedy (1978), and others, case studies may well provide data which ultimately will provide the basis for grounded theory or for particular applications. Nevertheless, the general constraint exists that no immediate generalization is possible. More important, however, are the design constraints of causality and context. Did, in fact, the first order changes cause the enhanced ability to implement second order change? Given the insistence of the participants that complete anonymity extend to all questionnaire data there is no means of generating even simple correlation statistics between the first order, organization development, data and the second order, determinants of implementation, data. There is considerable qualitative evidence of a close relationship, but this would have been considerably enhanced if it had been accompanied by quantitative data. Had correlation data of this nature been available it would have provided confirmation of a relationship rather than causality. It is evident from the design of the intervention, and it has been commented upon before, that it is very likely that there was a two-way relationship between first order change and the implementation of the revamped short course program. Although the two-way nature of the relationship was more evident in the case of the
short course program, nevertheless its existence in other planned change situations cannot be dismissed. In that sense it constrains the results reported.

While some part of these problems derive directly from the causal model adopted, in part they derive also from the context in which the research was conducted. So far as the subject college was concerned, the aim of the intervention at all times was to enhance the effectiveness of the college across a broad spectrum of organizational variables. While the college was prepared to allow the results of the intervention to be used for research purposes, nevertheless research was assigned a clear secondary role. The college proceeded with the intervention only on the understanding the college could exercise control and initiative over the direction of the intervention at all times. There were two direct effects of this research context. One was a refusal to allow a fourth round of questionnaire data collection. Members of the college were fully aware of the strong desire of the author to carry out an additional round of the data collection, but in their collective judgment they concurred that the college would gain nothing from the exercise and therefore it did not proceed. The second direct effect of subject autonomy was the considered refusal by a second college to participate in the research study, or to allow the results from an intervention into their college, which proceeded at the same time as for the subject college, to be used in this study. Given that college autonomy was an agreed basic principle under which the interventions were conducted it is difficult to see an answer to the problem, but it did limit the quantitative analysis both longitudinally and in design.

The multi-element nature of the intervention also acted as a constraint to the study. The intervention was designed to maximize the organiz-
ation's development across a number of organizational variables and as such it was comprehensive, or broad, in its use of tactics. A comprehensive approach of this nature is in accord with widely recommended organization development practice (Fullan et al., 1981). That the organization changed as a result is not questioned, but which particular elements of the intervention brought about what changes is not known. It may have been cumulative from the entire process, but on the other hand the changes may have resulted substantially from a single one of those elements. Questions which arise include, how important was the consultant/interventionist to the whole process, and to what degree was timing a critical factor? Questions such as these are important. If the particular interventionist/consultant was critical to the process, or if timing was a critical factor, it would indicate that in part at least the organization development process was based on art rather than science, and for that reason it would be all the more difficult to replicate the intervention.

Similarly, the roles of individuals or sub-groups in the process were not specific objects of study. There is considerable doubt in the author's mind whether or not the intervention would have proceeded as it did had it not had the Principal's overt blessing. At certain times his support appeared critical, although on other occasions it appeared less so. Almost as important appeared to be the stability of the organization. Total turnover of staff was relatively small and compared to some other interventions in which the author has been involved this appeared to have been of some importance. However, as with the role of Principal, or other individuals or sub-groups, this was not an aspect specifically investigated and the absence of information must act as a constraint on the interpretation of the outcomes.
The last two constraints listed, the degree of change and the sequence of change, may be considered together. There is the question, posed before, of how much change did actually occur in the organization. There are no absolute standards to act as reference points, although observations made from within the organization led to the qualitative conclusion that they were substantial. But how much actual change occurred, and how much of this change was necessary to bring about the desired second order changes, is conjectural. Similarly, the timing of the changes which occurred within the organization is conjectural. Conventional wisdom concurs that organizational change takes a "long period" (Fullan et al, 1981). The intervention in this study was somewhat arbitrarily set at two years, although in fact the consultant maintained close contact for a further six months. However, the process was not a simple function of change across the two years. Although there was a period of excitement and some tension in the first two to three months, the "real" changes began to be felt somewhere around the nine to twelve months period. The longer period is more consistent with what one might speculate is the sort of time period needed for substantial variation to the theory-in-use, but it remains speculation. There would appear to be some scope for the use of longitudinal data and statistical testing, such as confirmatory factor analysis, to establish the timing and magnitude of change which occurred in an intervention. Meanwhile, it remains as one more constraint to this study.

CONCLUSIONS AND IMPLICATIONS

Based on the results of this case study the author is confident that: a comprehensive and carefully executed organization development intervention was a feasible means of bringing about organizational improvement in this particular TAFE college; the process of second order
change, the implementation of a planned change initiated by the college, was substantially influenced and enhanced through the first order change, organization development; and, that the second order change which was based on mutual adaptation, did involve significant resocialization which was achieved through intense social interaction and change to the college's theory-in-use over an extended period.

The study has implications with respect to future research. The preceding paragraphs of this chapter, particularly those included under "constraints of the study" have indicated numerous prospective directions for new research, but from the perspective of this author, quantitative research into what was happening inside an organization as an organization development intervention unfolded would be most useful. Research of this nature would serve to support (or refute) the qualitative data which is presently available from sources such as participant-observation.

The implications of the study outside of potential research directions are not so clear-cut, particularly with respect to organization development. Some researchers, notably Derr (1976) and Blumberg (1976), have suggested that organization development has no future in schools. The success of this particular intervention does not disprove their contention. This intervention was successful within a very specific context. It was a context within which the educational institution concerned faced tremendous environmental pressure to manage change, but the institution also possessed considerable autonomy in how it might respond to that pressure. Combined, these two characteristics provided the potential for the organization to set specific and tangible goals for the intervention, and it is believed that these "real" problems were an important factor in the ultimate success of the intervention.
Whereas the same conditions exist for other TAFE colleges, and thereby create the potential for the replication of this study, the same is not true for all schools in Australia, and therefore there is no implication that the intervention methodology which was successful in this study may be replicated where similar school environments do not exist.

On the other hand organization development is an immensely versatile strategy. This particular intervention was concentrated entirely on the human-processual side of the organization. There is no particular reason why an intervention should be confined to this area. The entire techno-structural side of organizations is open to intervention, as are the many other permutations of the human-processual side. It is possible that from among these a strategy appropriate to an educational institution that lacks the autonomy of a TAFE college may be developed. As Fullan et al have stated, for successful organizational development

"The values and the conceptual bases which underly O.D. are far more important than its technology and techniques".

\[(1981, p.54)\]

and it is the belief of this author that the principles listed in Chapter 4 of this study provide a conceptual basis which will support a wide variety of approaches to organization development.

There is less ambivalence with the findings of this study with respect to the implementation process. The implementation process in all planned changes which were observed and reported, both first and second order, was one of mutual adaptation. The planned change was adapted to fit the environment while simultaneously the environment was adapted to accommodate the planned change. This adaptation of environment involved
extensive resocialization, intense social interaction, and change to theory-in-use. The success of implementation based on mutual adaptation, as in this study, does not exclude the possibility of other approaches, such as fidelity-based, but what it does indicate is the value of providing environmental conditions which support the processes of resocialization and social interaction. For this study, in this college, and at this particular time, those conditions were largely provided deliberately through the use of organization development.
APPENDIX A

ORGANIZATIONAL CLIMATE

- Communication flow: Subordinates know what's going on; superiors are receptive; subordinates are given information to do jobs well.

- Decision-making practices: Subordinates are involved in setting goals; decisions are made at levels of accurate information; persons affected by decisions are asked for their ideas; know-how of people of all levels is used.

- Influence on department: From lower-level supervisors and from employees who have no subordinates.

- Technological adequacy: Improved methods are quickly adopted; equipment and resources are well managed.

- Motivation: Differences and disagreements are accepted and worked through; people in organization work hard for money, promotions, job satisfaction, and to meet high expectations from others and are encouraged to do so by policies, working conditions, and people.

SUPERVISORY (MANAGERIAL) LEADERSHIP

- Support: Friendly; pays attention to what you are saying; listens to subordinates' problems.

- Team building: Encourages subordinates to work as a team; encourages exchange of opinions and ideas.

- Goal emphasis: Encourages best efforts; maintains high standards.

- Help with work: Shows way to do a better job; helps subordinates plan, organize, and schedule; offers new ideas, solutions to problems.

PEER LEADERSHIP

- Support: Friendly; pays attention to what others are saying; listens to others' problems.

- Goal emphasis: Encourages best efforts; maintains high standards.

- Help with work: Shows ways to do a better job; helps others plan, organize, and schedule; group shares with each other new ideas, solutions to problems.

- Team building: Encouragement from each other to work as a team; emphasis on team goal; exchange of opinions and ideas.

GROUP PROCESS

- Planning together; coordinating efforts.

- Making good decisions; solving problems.

- Knowing jobs and how to do them well.
- Sharing information.
- Wanting to meet objectives.
- Having confidence and trust in other members.
- Ability to meet unusual work demands.

SATISFACTION

With other workers, superiors, jobs, this organization compared with others, pay, progress in the organization up to now, chances for getting ahead in the future.

Construct of the organizational functioning used as the model for the survey-feedback instrument used in this study.

(Likert and Likert, 1976, pp 73-74)
SURVEY OF COLLEGE STAFF

This questionnaire is part of a study designed by your college in conjunction with the Staff Development section.

It's function is to collect data on how the collegeworks, and to use the data to improve the work situation.

To gain maximum value from the data it is important that you answer each question as thoughtfully and frankly as possible. There are no right or wrong answers.

Each individuals responses will be anonymous and therefore completely confidential. To ensure this please do not write your name anywhere on this questionnaire, and return the completed questionnaire through the courier mail system, addressed to

J.C. HENDERSON, STAFF DEVELOPMENT,
TECHNICAL EDUCATION DIVISION.

Acknowledgement is made to the earlier work of the Institute for Social Research, Michigan, and R.J. Coughlan, Northwestern University, Ill., from which a number of items in this questionnaire have been adapted.
INSTRUCTIONS

Each question, except Q's 112-113, is followed by an eight point scale, with a verbal description of the meaning of each pair of points. Please circle the appropriate number of your response to each question.

For example,

<table>
<thead>
<tr>
<th>rarely</th>
<th>occasionally</th>
<th>frequently</th>
<th>very frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

An answer marked as above would indicate that you believed that the event occurred on the "high" side of occasionally, but less than frequently.

The last questions, Q112,113 invite you to make a written response to issues which you feel may have been overlooked in the questionnaire. Space is provided but if this is insufficient please feel free to append further pages.

Time is quite limited for responding to this questionnaire. It will be necessary to commence processing the data by the Tuesday of the second week of second term, i.e., by June 5.

THEREFORE, WOULD YOU PLEASE MAKE EVERY EFFORT TO COMPLETE THE QUESTIONNAIRE AND HAVE IT RETURNED TO ME BY FRIDAY, JUNE 1.

Finally, to assist in the processing of the information it is necessary that you indicate the Department that you work in.

Department

J.C. Henderson,
Staff Development.
<table>
<thead>
<tr>
<th>Question</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this college, to what extent are decisions made at those levels where the most adequate and accurate information is available?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>To what extent is information widely shared so that those who make decisions have access to all available know-how?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>When decisions are being made, to what extent are alternatives considered?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>To what extent are new ideas tested before a final decision is made?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>To what extent are teachers involved in making decisions which affect them?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>How open is the communication in your department?</td>
<td>Very guarded</td>
<td>Quite guarded</td>
<td>Quite open</td>
<td>Very open</td>
</tr>
<tr>
<td>To what extent are you kept informed of what is going on?</td>
<td>Very little</td>
<td>Some</td>
<td>Considerable</td>
<td>Fully informed</td>
</tr>
<tr>
<td>To what extent do you keep others informed of what you are doing?</td>
<td>Very little</td>
<td>Some</td>
<td>Considerable</td>
<td>Fully informed</td>
</tr>
<tr>
<td>How accurately is information communicated within your department?</td>
<td>Generally inaccurate</td>
<td>Often inaccurate</td>
<td>Frequently accurate</td>
<td>Generally accurate</td>
</tr>
<tr>
<td>To what extent is the information flow one way, downwards, in this college?</td>
<td>One way, downwards</td>
<td>Mostly one way, downwards</td>
<td>Two ways, between department head and staff</td>
<td>Multidirectional, vertical and horizontal</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
To what extent are you clearly aware of the aims and objectives of your department?

<table>
<thead>
<tr>
<th>almost unaware of them</th>
<th>some awareness</th>
<th>considerable awareness</th>
<th>fully aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

rarely

<table>
<thead>
<tr>
<th>rarely</th>
<th>occasionally</th>
<th>frequently</th>
<th>very frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

How clearly conveyed to you are the departments' expectations about the standard of work you are to produce?

<table>
<thead>
<tr>
<th>unclear, ill defined</th>
<th>minimal clarity</th>
<th>clear</th>
<th>very clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

In general, how much influence do you have on what goes on in your department?

<table>
<thead>
<tr>
<th>negligible</th>
<th>very little</th>
<th>some</th>
<th>quite influential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

How difficult/easy is it for you to introduce meaningful changes into your teaching methods?

<table>
<thead>
<tr>
<th>very difficult</th>
<th>difficult</th>
<th>easy</th>
<th>very easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

How difficult/easy is it for you to introduce meaningful content changes into the syllabus?

<table>
<thead>
<tr>
<th>very difficult</th>
<th>difficult</th>
<th>easy</th>
<th>very easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

What degree of influence have you on your department's goals?

<table>
<thead>
<tr>
<th>negligible</th>
<th>some</th>
<th>considerable</th>
<th>very great</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

To what extent do recommendations made by you to the department head result in important changes?

<table>
<thead>
<tr>
<th>rarely</th>
<th>occasionally</th>
<th>frequently</th>
<th>very frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

To what extent is this department generally quick to use improved work methods, content, and ideas?

<table>
<thead>
<tr>
<th>very slow</th>
<th>sluggish</th>
<th>quite quick</th>
<th>very quick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Question</td>
<td>Very Little</td>
<td>Some</td>
<td>Considerable</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------</td>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>How friendly and easy to approach is your department head?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>What extent is your department head willing to listen to your problems?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Does the department head take a strong interest in the professional development of staff?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>What extent does the department head take consideration of the problems you face?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Does your department head do things to make it more pleasant to be on staff?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>What extent does your department head encourage you to work as a team?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>What extent does your department head encourage you to exchange opinions and ideas with other staff members?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>What extent does the department head encourage teachers to contribute suggestions about running the department?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Question</td>
<td>Scale Options</td>
<td></td>
<td></td>
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<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent does the department head encourage staff to initiate</td>
<td>very little</td>
<td>some</td>
<td>considerable</td>
</tr>
<tr>
<td>criticism?</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do your departmental staff meetings provide a useful forum to exchange</td>
<td>rarely</td>
<td>occasionally</td>
<td>frequently</td>
</tr>
<tr>
<td>ideas?</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How much does your department head encourage staff to give their best</td>
<td>very little</td>
<td>some</td>
<td>considerable</td>
</tr>
<tr>
<td>effort?</td>
<td>encouragement 1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How high are your department head's goals for the department?</td>
<td>very low,</td>
<td>low</td>
<td>quite high</td>
</tr>
<tr>
<td>non-existent</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How clearly do the goals of your department define what is expected of</td>
<td>very little</td>
<td>some</td>
<td>considerable</td>
</tr>
<tr>
<td>staff?</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent does the department head set an example by working hard?</td>
<td>very little</td>
<td>some</td>
<td>considerable</td>
</tr>
<tr>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent are you offered help/ideas by your department head for</td>
<td>very little</td>
<td>some</td>
<td>considerable</td>
</tr>
<tr>
<td>solving job related problems?</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent have you been assisted by the department head in</td>
<td>rarely</td>
<td>occasionally</td>
<td>frequently</td>
</tr>
<tr>
<td>improving your performance?</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In what extent does your department head provide support for you to try</td>
<td>very little</td>
<td>some</td>
<td>considerable</td>
</tr>
<tr>
<td>new ideas?</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Scale</td>
<td>Response Options</td>
<td></td>
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<tr>
<td>-------------------------------------------------------------------------</td>
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<tr>
<td>To what extent does your department head take an interest in specific</td>
<td>very</td>
<td>some</td>
<td></td>
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<tr>
<td>problems you may have?</td>
<td>little</td>
<td>considerable</td>
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<tr>
<td>To what extent are you encouraged by comments from other members of</td>
<td>rarely</td>
<td>occasionally</td>
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<tr>
<td>your department?</td>
<td></td>
<td>frequently</td>
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<tr>
<td>To what extent do other staff take consideration of problems faced by</td>
<td>very</td>
<td>some</td>
<td></td>
</tr>
<tr>
<td>you in your work?</td>
<td>little</td>
<td>considerable</td>
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</tr>
<tr>
<td>To what extent do other staff members in your department do things to</td>
<td>rarely</td>
<td>occasionally</td>
<td></td>
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<tr>
<td>make it more pleasant to be on staff?</td>
<td></td>
<td>frequently</td>
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<tr>
<td>To what extent are persons in your department willing to listen to</td>
<td>very</td>
<td>some</td>
<td></td>
</tr>
<tr>
<td>your problems?</td>
<td>little</td>
<td>considerable</td>
<td></td>
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<td></td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>How much confidence and trust do members of your department have in</td>
<td>very</td>
<td>some</td>
<td></td>
</tr>
<tr>
<td>each other?</td>
<td>little</td>
<td>considerable</td>
<td></td>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
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<td></td>
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<td></td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Are there teachers in this department who are antagonistic to the</td>
<td>most</td>
<td>many</td>
<td></td>
</tr>
<tr>
<td>rest of the staff?</td>
<td>are</td>
<td>are</td>
<td></td>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
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<td></td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>How much of an effort do the teachers of this department make to work</td>
<td>very</td>
<td>considerable</td>
<td></td>
</tr>
<tr>
<td>as a team?</td>
<td>great</td>
<td>some</td>
<td></td>
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<td>8</td>
<td></td>
</tr>
<tr>
<td>How much do persons in your department emphasise a 'team goal'?</td>
<td>very</td>
<td>some</td>
<td></td>
</tr>
<tr>
<td></td>
<td>little</td>
<td>considerable</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>To what extent do teachers in your department encourage each other to</td>
<td>very</td>
<td>some</td>
<td></td>
</tr>
<tr>
<td>exchange opinions and ideas?</td>
<td>little</td>
<td>considerable</td>
<td></td>
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<td></td>
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<td>8</td>
<td></td>
</tr>
</tbody>
</table>
To what extent are objectives set by consensus in this department?

<table>
<thead>
<tr>
<th></th>
<th>very little</th>
<th>some</th>
<th>considerable</th>
<th>very great</th>
</tr>
</thead>
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<tr>
<td></td>
<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

To what extent do persons in your work group encourage each other to give their best effort?

<table>
<thead>
<tr>
<th></th>
<th>very little</th>
<th>some</th>
<th>considerable</th>
<th>very great</th>
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<td></td>
<td>1</td>
<td>2</td>
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</tbody>
</table>

To what extent do the members of your department expect each other to work hard to achieve the goals that have been established?

<table>
<thead>
<tr>
<th></th>
<th>very little</th>
<th>some</th>
<th>considerable</th>
<th>very great</th>
</tr>
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<td>3</td>
<td>4</td>
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</tbody>
</table>

How often do other members of your department give you the feeling that your work is important?

<table>
<thead>
<tr>
<th></th>
<th>rarely</th>
<th>occasionally</th>
<th>frequently</th>
<th>very frequently</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>1</td>
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<td>4</td>
</tr>
</tbody>
</table>

To what extent have teacher's in your department helped you find a better way of doing your job?

<table>
<thead>
<tr>
<th></th>
<th>very little</th>
<th>some</th>
<th>considerable</th>
<th>very great</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
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<td>4</td>
</tr>
</tbody>
</table>

To what extent are you offered help/ideas by members of your department for solving job related problems?

<table>
<thead>
<tr>
<th></th>
<th>very little</th>
<th>some</th>
<th>considerable</th>
<th>very great</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

To what extent do members of your department provide support for you to try new ideas?

<table>
<thead>
<tr>
<th></th>
<th>very little</th>
<th>some</th>
<th>considerable</th>
<th>very great</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Do staff of the department welcome opportunities to meet together?

<table>
<thead>
<tr>
<th></th>
<th>none do</th>
<th>a few do</th>
<th>most do</th>
<th>all do</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

To what extent does your department plan together and co-ordinate its efforts?

<table>
<thead>
<tr>
<th></th>
<th>very little</th>
<th>some</th>
<th>considerable</th>
<th>very great</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
<td>Question</td>
<td>rarely/never</td>
<td>occasionally</td>
<td>frequently</td>
<td>very frequently</td>
</tr>
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<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>How frequently do teachers in your department sit down together to co-operatively evaluate department progress?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>To what extent does your department make good decisions and solve problems well?</td>
<td>very poorly</td>
<td>poorly</td>
<td>quite well</td>
<td>very well</td>
</tr>
<tr>
<td>To what extent do you feel free to discuss department problems with other staff members?</td>
<td>very constrained</td>
<td>constrained</td>
<td>free</td>
<td>very free</td>
</tr>
<tr>
<td>How much influence do you think constructive criticism/discussion has on what actually happens in the department?</td>
<td>very little</td>
<td>some</td>
<td>considerable</td>
<td>very great</td>
</tr>
<tr>
<td>How do you rate the criticism/discussion which takes place in your department?</td>
<td>most destructive</td>
<td>usually destructive</td>
<td>usually constructive</td>
<td>mostly constructive</td>
</tr>
<tr>
<td>How appropriate are your department's aims and objectives?</td>
<td>quite inappropriate</td>
<td>inappropriate</td>
<td>appropriate</td>
<td>quite appropriate</td>
</tr>
<tr>
<td>When it comes to doing your job well, to what extent does trying hard make any difference?</td>
<td>almost little</td>
<td>a little</td>
<td>considerable</td>
<td>great difference</td>
</tr>
<tr>
<td>To what extent do other staff members keep you informed of what is going on?</td>
<td>very little</td>
<td>some</td>
<td>considerable</td>
<td>fully informed</td>
</tr>
<tr>
<td>To what extent does your department really want to meet its objectives successfully?</td>
<td>very little concern</td>
<td>some concern</td>
<td>considerable concern</td>
<td>determined</td>
</tr>
<tr>
<td>Question</td>
<td>Very Little</td>
<td>Some</td>
<td>Considerable</td>
<td>Very Great</td>
</tr>
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</tr>
<tr>
<td>To what extent do other staff expect high standards from you on your job?</td>
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<td>2</td>
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<td>4</td>
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<td></td>
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<td>6</td>
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<td>8</td>
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<tr>
<td>To what extent do the teachers of your department work hard to achieve goals?</td>
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<td></td>
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<td>8</td>
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<tr>
<td>To what extent do you have confidence and trust in the persons in your department?</td>
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<td>2</td>
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<td></td>
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<td>7</td>
<td>8</td>
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<tr>
<td>How friendly and easy to approach are the persons in your department?</td>
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<td>2</td>
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<td>4</td>
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<td></td>
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<td>7</td>
<td>8</td>
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<tr>
<td>To what extent is your department able to respond to unusual work demands placed on it?</td>
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<td>4</td>
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<td></td>
<td>5</td>
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<td>8</td>
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<tr>
<td>To what extent does doing your job well give you a feeling of personal satisfaction?</td>
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<td>2</td>
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<td></td>
<td>5</td>
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<td>7</td>
<td>8</td>
</tr>
<tr>
<td>To what extent does doing your job well lead to things like recognition and respect from those you work with?</td>
<td>1</td>
<td>2</td>
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<td></td>
<td>5</td>
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</tr>
<tr>
<td>To what extent does doing your job well lead to things like disapproval and rejection?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td></td>
<td>5</td>
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<td>8</td>
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<tr>
<td>To what extent is there a feeling of &quot;lets get things done&quot; among staff in the department?</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<td></td>
<td>5</td>
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<tr>
<td>Question</td>
<td>Rating Options</td>
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<tr>
<td>How would you rate the morale of staff in this department?</td>
<td>very low  low  considerable  very great</td>
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<td>1  2  3  4  5  6  7  8</td>
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<tr>
<td>How proud are staff of the reputation of this department?</td>
<td>very little  some  considerable  very great</td>
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<td>1  2  3  4  5  6  7  8</td>
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<tr>
<td>To what extent do teachers go about their work with enthusiasm?</td>
<td>very little  some  considerable  very great</td>
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<td></td>
<td>1  2  3  4  5  6  7  8</td>
<td></td>
<td></td>
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<tr>
<td>How much &quot;school spirit&quot; is evident among teachers in your department?</td>
<td>very little  some  considerable  very great</td>
<td></td>
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<td>1  2  3  4  5  6  7  8</td>
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<tr>
<td>What is the attitude of teachers in your department toward their teaching?</td>
<td>very negative  negative  positive  very positive</td>
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<td></td>
<td>1  2  3  4  5  6  7  8</td>
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<tr>
<td>The administration and/or staff of this college have recognized and properly identified a large proportion of the problems in the college.</td>
<td>strongly agree  agree  disagree  strongly disagree</td>
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<td>1  2  3  4  5  6  7  8</td>
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<tr>
<td>The administration often has been unwilling or unable to cope with the serious problems that have been identified.</td>
<td>strongly agree  agree  disagree  strongly disagree</td>
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<td>1  2  3  4  5  6  7  8</td>
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</tr>
<tr>
<td>A majority of the staff has participated in identifying and defining problems.</td>
<td>strongly agree  agree  disagree  strongly disagree</td>
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<td></td>
<td>1  2  3  4  5  6  7  8</td>
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</tr>
<tr>
<td>The college has provided the staff with procedures and mechanisms for evaluating the work situation and/or identifying problems.</td>
<td>strongly agree  agree  disagree  strongly disagree</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>1  2  3  4  5  6  7  8</td>
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</tbody>
</table>
Although staff have participated in identifying college problems, most problems have been identified by the administration.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
<tbody>
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<td>1</td>
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</table>

Very few staff members have participated in the solving of problems and the identifying of new alternatives.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
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</thead>
<tbody>
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<td>1</td>
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</tbody>
</table>

Special meetings and group sessions have been conducted to provide the staff with an opportunity to solve problems and crystallise new ideas as a team.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
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<tbody>
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</table>

Generally solutions to problems have been generated by the administration rather than the staff.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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</table>

The problem solving capabilities of this college are limited because of poor communication.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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</tbody>
</table>

When solutions to problems have emerged in this college they have been communicated to and discussed with most staff members.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
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<tbody>
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<td>1</td>
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</table>

Staff members have been reluctant to discuss their ideas with other people in this college.

<table>
<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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</tbody>
</table>

Staff of this college have felt that it is their responsibility to make other staff members aware of new ideas and possible solutions to existing problems.
<table>
<thead>
<tr>
<th>Statement</th>
<th>strongly agree</th>
<th>agree</th>
<th>disagree</th>
<th>strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>New programmes and solutions that have been chosen for adoption have usually been unsatisfactory answers to the problems of the college.</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most new ideas or innovations undertaken here are trivial and fail to tackle the real problems of the college.</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a tendency for new ideas or innovations to be undertaken because of the prestige or status attached.</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solutions to problems or new ideas can only be attempted with the approval of the college administration.</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apathy on the part of the staff has minimized the probability that significant changes will be made in this college.</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By the time a new idea or programme has been put into practice staff members have had a very clear idea of exactly what is supposed to happen.</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In this college the actual implementation of new ideas generally has been well planned for.</td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Regardless of whether or not solutions and ideas were successfully implemented, the staff has generally supported the proposed changes.</td>
<td>1 2 3 4 5 6 7 8</td>
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<tr>
<td>Number</td>
<td>Statement</td>
<td>Scale</td>
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<tr>
<td>100</td>
<td>Most new ideas around the college have never progressed past the talking</td>
<td>strongly</td>
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<td></td>
<td>stage.</td>
<td>agree</td>
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<td>disagree</td>
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<td></td>
<td>disagree</td>
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<tr>
<td>101</td>
<td>For one reason or another new programmes have often been sabotaged by</td>
<td>strongly</td>
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<tr>
<td></td>
<td>people in this college.</td>
<td>agree</td>
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<td>disagree</td>
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<td>disagree</td>
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<tr>
<td>102</td>
<td>Though it has not necessarily been obvious, staff members have often</td>
<td>strongly</td>
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<tr>
<td></td>
<td>disliked many of the changes made in this college.</td>
<td>agree</td>
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<td>disagree</td>
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<td>agree</td>
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<td></td>
<td>disagree</td>
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<tr>
<td>103</td>
<td>When new programmes have been put into practice, staff members have</td>
<td>strongly</td>
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<td></td>
<td>received training they might need concerning new roles and procedures.</td>
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<td>disagree</td>
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<td>disagree</td>
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<td>104</td>
<td>New programmes have often led to unwanted and unanticipated side effects.</td>
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<td>agree</td>
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<td>disagree</td>
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<tr>
<td>105</td>
<td>Change in this college often creates problems because many individuals</td>
<td>strongly</td>
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<tr>
<td></td>
<td>are unwilling to change their habits.</td>
<td>agree</td>
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<td>disagree</td>
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<td></td>
<td>disagree</td>
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<tr>
<td>106</td>
<td>Most of the innovations implemented in this college have been suggested</td>
<td>strongly</td>
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<td></td>
<td>by the administration rather than by the staff.</td>
<td>agree</td>
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<td>disagree</td>
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<td>disagree</td>
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.../13
Most new ideas or programmes soon fit neatly into the standard college procedures.

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As unwanted side effects of new programmes have appeared these problems have been effectively dealt with.

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For one reason or another, many new programmes and innovations have been discontinued.

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Attempts have been made to evaluate, either formally or informally, the effectiveness of new programmes.

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Are there any particular organizational factors, within the control of the college which influence the effectiveness of the college and/or your department and which have not been covered by the previous questions?
Are there any other factors, besides those included in questions 80 - 111, which are particularly important to the manner in which administration and/or staff are involved in the decision and change processes in this college?
APPENDIX C

LEVELS OF USE INTERVIEW

1. Could you describe for me how you go about your teacher's role in Transition Education?

2. What do you see as the strengths and weaknesses of Transition Education? (Have you made any attempt to do anything about weaknesses.) (Probe for philosophical understanding.)

3. Are you currently seeking more information about Transition Education or ways of coping with it? What kind? For what purpose? What use have you made of any past information?
4 How do you work in with the other staff in Transition Education? Do you meet on a regular basis? Have you made any changes in your approach to Transition Education because of this co-ordination? (If "yes", go to question 6.)

5 If "no" to (4). Do you ever talk with others about Transition Education? What do you tell them?

6 Have you considered any alternatives or different ways of working with Transition Education? Are you doing any evaluating that might affect the way you go about the job? Have you received any feedback from students that affect the way you go about the role? What have you done with the information you have received?
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